

# Influence of Work Values and Quality of Life on Self-Esteem of STEM Teachers in Public Schools

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**Abstract.** In an era where quality education is paramount, understanding the factors that empower and retain our most vital educators is crucial. This study examines the often-overlooked interplay between professional and personal well-being among STEM teachers, addressing a critical research gap: the specific influences on their well-being and retention in public schools, particularly how work values, quality of life, and self-esteem interact. This deficiency limits effective support strategies for these essential educators. This research investigated the relationship between work values, quality of life, and self-esteem among 300 permanent STEM teachers from Davao Oriental, selected through stratified random sampling. Findings revealed a very high overall level of work values (mean = 4.30), with self-esteem (4.44), self-realization (4.43), self-growth (4.40), social interaction (4.37), and security (4.36) rated highest, while health and transport (3.81) were rated lowest. These results emphasized that a supportive work environment is crucial for boosting self-esteem, aligning with Maslow's Hierarchy of Needs and Self-Determination Theory. The study concludes that fulfilling teachers' needs for autonomy, competence, and relatedness is vital for self-actualization. Therefore, school administrators should prioritize policies that promote professional development, financial security, and overall well-being to enhance STEM teachers' self-esteem and foster professional fulfillment, providing evidence-based insights for policy development.

**Keywords:** Quality of life; Self-esteem; STEM teachers; Work values.

## 1.0 Introduction

What truly sustains the passion and effectiveness of the educators shaping the world's future? In an era defined by rapid technological advancement, STEM (Science, Technology, Engineering, and Mathematics) educators are pivotal in cultivating students' abilities for innovation and global engagement. However, within public schools, these teachers often face unique professional hurdles—including heavy workloads, limited resources, and scarce professional development opportunities (National Academies of Sciences, Engineering, and Medicine, 2022)—which can significantly impact their instructional effectiveness and, crucially, their psychological health and self-esteem (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022).

Self-esteem, a cornerstone of successful teaching and retention (UNESCO, 2022), is profoundly influenced by work values—the guiding principles in the workplace—and quality of life, encompassing physical, emotional, and social well-being. While these concepts have been explored independently (García-Carmona et al., 2019), a critical gap remains in understanding their interplay in shaping the self-esteem of STEM educators, particularly within the demanding public school environment. This study aims to bridge this gap by investigating how work values

and quality of life collectively influence the self-esteem of public-school STEM teachers, thereby providing evidence-based insights for targeted interventions to enhance their well-being and professional fulfillment.

Within the realm of public education, the intricate relationship between work values and quality of life significantly shapes the self-esteem of Science, Technology, Engineering, and Mathematics (STEM) teachers. This, in turn, directly affects their professional efficacy and overall well-being, which are factors of paramount importance for achieving Sustainable Development Goal (SDG) 4, aiming to ensure inclusive and equitable quality education (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022). Empirical evidence indicates that educators whose intrinsic and extrinsic work values align with their professional experiences and who report a higher quality of life tend to demonstrate greater self-esteem (Van den Broeck et al., 2021). This elevated self-esteem is frequently linked to increased job satisfaction, enhanced motivation, and consequently, improved pedagogical outcomes for students (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022).

Furthermore, valuing and supporting teacher well-being aligns with SDG 8, which promotes decent work and economic growth within the education sector (International Labour Organization, 2019). A positive quality of life among STEM educators also contributes to SDG 3, good health and well-being, by mitigating stress and burnout, thereby cultivating a resilient and dedicated teaching force crucial for the successful realization of educational objectives and the attainment of broader sustainable development goals (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022). A considerable portion of existing research tends to concentrate on either general teacher populations (Collie et al., 2016) or professionals within corporate STEM fields (Wang et al., 2020), often overlooking the specific circumstances encountered by STEM teachers in public education.

This gap in targeted research leaves school administrators and policymakers with a limited understanding of how to support and retain these essential educators effectively. By investigating the influence of work values and quality of life on self-esteem within this particular group, the present study aims to address this deficiency and provide evidence-based insights for fostering teacher well-being and professional fulfillment. Ultimately, understanding these interconnections is crucial for creating supportive work environments that foster resilience, motivation, and long-term commitment among STEM teachers (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022). The findings of this study have the potential to inform the development of strategic interventions, policies, and practices designed to enhance not only teacher morale but also the overall quality of STEM education within public schools.

## **2.0 Methodology**

### **2.1 Research Design**

This study employed a quantitative descriptive-correlational design to investigate the relationships between work values, quality of life, and self-esteem among STEM teachers in public schools of Davao Oriental. Following Bhandari's (2013) description of correlational studies, the research examined the strength of associations between changes in one variable and changes in another, often utilizing independent and dependent variables where the impact of the former on the latter is observed without direct manipulation.

### **2.2 Research Participants**

The study was conducted among STEM teachers who specialized in teaching students in the subjects of Science, Technology, Engineering, and Mathematics. These educators frequently employ multidisciplinary approaches and real-world applications to make complex subjects accessible and relevant, thereby equipping students for the opportunities and challenges of a technologically advanced world in public schools in Davao Oriental, Region XI, Philippines. In this study, the respondents were 300 bona fide STEM teachers with a plantilla number in public schools of Davao Oriental, specifically in Cateel and Boston, using a stratified random sampling method.

### **2.3 Research Instrument**

The study meticulously developed and validated its instruments for Work Values, Quality of Life, and Self-Esteem. The Work Values questionnaire was adapted from Chin-Chih Ho (2012). Additionally, the Quality of Life questionnaire was based on Ziegler et al. (2005), and the Self-Esteem questionnaire was adapted from Michelle Allison Harris (2011). Each instrument was modified to fit the study's specific context and underwent rigorous expert validation by specialists, along with a pilot test to confirm suitability. A 5-point Likert scale was used for all measurements, with means ranging from 4.20 to 5.00 indicating "Very High" manifestation and 1.00 to 1.79

indicating "Very Low." Reliability analysis, utilizing Cronbach's alpha, affirmed a very high internal consistency for Self-Esteem ( $\alpha = 0.99$ ). The reported Cronbach's alpha values for Work Values (0.89) and Quality of Life (0.87) are also notably high, indicating strong reliability for these scales. Furthermore, the overall questionnaire's alpha value was 0.91, suggesting a high level of internal consistency across all constructs. This comprehensive validation process underscores the study's commitment to robust internal consistency and precise measurement of these key constructs.

## **2.4 Data Gathering Procedure**

Prior to data collection, the researcher secured permission from the Schools Division Superintendent, followed by the relevant District Supervisors and School Heads, to conduct the study with 300 STEM teachers. Upon receiving approval, the researcher personally distributed and administered the survey instruments for work values, quality of life, and self-esteem, ensuring a 100 percent retrieval rate. During the administration process, efforts were made to minimize disruption to classes, although unforeseen circumstances may have occurred, such as teacher respondents being temporarily unavailable. However, through the assistance of school heads and colleagues, the researcher successfully distributed and collected all questionnaires. Any questions or clarifications from respondents during the survey administration were addressed directly by the researcher. Upon completion of the questionnaires, all were retrieved, and subsequently, the collected data were collated and tabulated. Appropriate statistical tools were then employed to interpret and analyze the data. The entire data collection process lasted for approximately six weeks, from November to December 2024. The survey questionnaire was designed to be clear and comprehensible, and respondents were informed of the potential benefits of the study for the school through the informed consent process. This study, conducted with the approval of relevant school authorities and the consent of the respondents, is intended as a practical reference for future educational research. The researcher secured a certificate of appearance from the schools as proof that she conducted the study.

## **2.5 Data Analysis Procedure**

To interpret and analyze the data, the researcher utilized the following statistical tools: the mean was used to describe the levels of work values, quality of life, and self-esteem, addressing research objectives 1, 2, and 3. Pearson's  $r$  was applied to ascertain the significant relationships between work values and self-esteem, as well as between quality of life and self-esteem, addressing research objective 4. Finally, regression analysis was used to determine whether work values and quality of life significantly predicted the self-esteem of STEM teachers, addressing Research Objective 5.

## **2.6 Ethical Considerations**

Ethical considerations were paramount throughout the study. Prior to data collection, the researcher secured research ethics clearance from the University of Mindanao Ethics Review Committee (UMERC). Participation was entirely voluntary and anonymous to protect the privacy of the respondents, and information was provided to ensure informed consent. The confidentiality of all collected data was maintained by the law, and any identifiable information was omitted from the reporting of results. The researcher provided a detailed explanation of the study's purpose to the respondents and ensured their consent was given freely. Signed consent forms were obtained as evidence of voluntary participation. Furthermore, participants were informed of their right to withdraw from the study at any point during the research process should they experience any discomfort related to their participation, as their involvement was entirely voluntary and without any potential consequences or penalties. In addition, the researcher strictly adhered to the principles of privacy and confidentiality as outlined by the Data Privacy Act of 2012 of the Philippines (Republic Act 10173).

## **3.0 Results and Discussion**

### **3.1 Level of Work Values**

Work values encompassed the importance individuals placed on self-growth, self-realization, self-confidence, social interaction, security, economic stability, and health and transportation, reflecting their priorities in the work environment. Presented in Table 1, the overall mean level of Work Values among STEM teachers in public schools was found to be 4.30, which is described as very high. Among the indicators, Self-Confidence held the highest mean score (4.44), followed closely by Self-Realization (4.43), Self-Growth (4.40), Social Interaction (4.37), and Security and Economic (4.36), all of which were rated as very high. The lowest-rated indicator was Health and Transport (3.81), categorized as high.

**Table 1.** *Level of Work Values*

| Indicators            | Standard Deviation | Mean        | Interpretation   |
|-----------------------|--------------------|-------------|------------------|
| Self-Growth           | 0.40               | 4.40        | Very High        |
| Self-Realization      | 0.43               | 4.43        | Very High        |
| Self-Confidence       | 0.43               | 4.44        | Very High        |
| Social Interaction    | 0.41               | 4.37        | Very High        |
| Security and Economic | 0.50               | 4.36        | Very High        |
| Health and Transport  | 0.78               | 3.81        | High             |
| <b>Overall</b>        | <b>0.33</b>        | <b>4.30</b> | <b>Very High</b> |

The very high levels of Self-Confidence, Self-Realization, and Self-Growth indicate that STEM teachers found their work fulfilling and believed it contributed positively to their personal and professional development. This was corroborated with recent findings that highlighted the importance of self-confidence in enhancing teaching skills and work engagement among educators (Pathardikar & Srivastava, 2022). Additionally, the emphasis on Social Interaction ( $M = 4.37$ ) and Security and Economic ( $M = 4.36$ ) aspects signified that their relationships with co-teachers, students, and the school community were vibrant aspects of their professional satisfaction. This was supported by a study of Aquino (2024), which emphasized the role of work values in fostering teacher engagement and performance. However, the lower mean score for the Health and Transport indicator suggested that teachers may have had concerns about their physical well-being and commuting conditions, which could impact job performance and satisfaction.

Recent studies by Mrope, Santelli, and Grissom (2024) revealed that longer commuting distances have an undesirably negative impact on job satisfaction among teachers, leading to increased stress and turnover intentions. In consonance, addressing these practical concerns through improvements in support systems, such as providing better access to healthcare and facilitating more efficient transportation options, could boost overall job satisfaction and efficiency among STEM teachers.

### 3.2 Level of Quality of Life

Quality of life reflected the degree to which individuals' overall well-being was shaped by factors such as physical and psychological impacts, sex life, comfort with food, and dietary experience, in addition to the ability to participate in and enjoy life's events. Presented in Table 2, the overall mean score for the Quality of Life among STEM teachers in public schools was 3.51, classified as High.

**Table 2.** *Level of Quality of Life*

| Indicators            | Standard Deviation | Mean        | Interpretation |
|-----------------------|--------------------|-------------|----------------|
| Physical Impact*      | 0.87               | 3.86        | High           |
| Psycho-Social Impact* | 0.98               | 3.72        | High           |
| Sex Life*             | 1.38               | 3.29        | Moderate       |
| Comfort with Food     | 1.09               | 3.64        | High           |
| Diet Experience*      | 1.32               | 3.05        | Moderate       |
| <b>Overall</b>        | <b>0.62</b>        | <b>3.51</b> | <b>High</b>    |

\*Reverse coded

The high ratings in Physical Impact, Psycho-Social Impact, and Comfort with Food indicate that STEM teachers feel adequately supported in aspects related to their physical health and nutritional well-being. This is associated with Kamener (2023), who emphasized the importance of physical well-being in enhancing teachers' overall quality of life.

However, the moderate ratings in Sex Life and Diet Experience highlight areas that require intervention, suggesting that the demanding nature of teaching may impact work-life balance and lifestyle habits. To address these concerns, according to Kim and Park (2024), schools should consider implementing flexible scheduling, mental health support services, and initiatives that promote healthy dietary habits. Therefore, Lester (2023) suggested that by fostering a holistic approach to well-being, schools can enhance job satisfaction, reduce teacher burnout, and improve overall classroom effectiveness, ultimately benefiting both educators and students.

### 3.3 Level of Self-Esteem

High self-esteem among STEM teachers regarding their physical attributes and metacognitive skills aligns with findings linking self-esteem to effective teaching and leadership (Bolat, 2023). As shown in Table 3, the overall mean level of self-esteem among STEM teachers in public schools is 3.91, indicating a high descriptive level. This suggests that, on average, teachers possess a positive self-regard in their professional roles.

**Table 3.** *Level of Self-esteem*

| Indicators                                               | Standard Deviation | Mean        | Interpretation |
|----------------------------------------------------------|--------------------|-------------|----------------|
| Physical Characteristics                                 | 0.59               | 4.40        | Very High      |
| Achievements and Abilities                               | 0.73               | 4.05        | High           |
| Relationships and Social Interactions                    | 1.15               | 3.29        | Moderate       |
| Psychological Qualities, Beliefs, and Personality Traits | 0.24               | 3.34        | Moderate       |
| Metacognitive                                            | 0.42               | 4.47        | Very High      |
| <b>Overall</b>                                           | <b>0.40</b>        | <b>3.91</b> | <b>High</b>    |

The two indicators, Metacognitive (4.47) and Physical Characteristics (4.40), display a very high descriptive level, while the indicator Achievements and Abilities (4.05) shows a high descriptive level. In contrast, the Relationships and Social Interactions (3.29) and Psychological Qualities, Beliefs, and Personality Traits (3.34) got the lowest mean scores, falling into the moderate descriptive level. The very high ratings in Physical Characteristics and Metacognition suggested that STEM teachers had a strong sense of self-regard concerning their physical presence and reflective abilities. This study supports Bolat (2023), who found that teachers with high self-esteem are more likely to engage in effective teaching practices and exhibit leadership qualities.

Nevertheless, the moderate ratings in Relationships and Social Interactions, as well as Psychological Qualities, Beliefs, and Personality Traits, highlighted the need for targeted interventions to strengthen areas where teachers experienced lower confidence, particularly in relationships and social interactions. School administrators should foster a more collaborative and supportive environment by encouraging peer mentoring, team teaching, and structured professional learning communities (Johnson et al., 2022). These initiatives could enhance teachers' sense of belonging and professional identity, addressing the moderate self-esteem levels observed in social interactions. Thus, according to Ryan and Deci (2020), professional development programs should incorporate reflective practices and psychological resilience training further to develop teachers' metacognitive skills and psychological well-being.

### 3.4 Significance of the Relationship between Work Values and Self-Esteem

The significance of the relationship between work values and self-esteem among STEM teachers in public schools was examined using Pearson's  $r$ .

**Table 4.** *Significance of the Relationship between Work Values and Self-Esteem*

| Work Values           | Self-Esteem |         |          |         |         |         |
|-----------------------|-------------|---------|----------|---------|---------|---------|
|                       | PhyC        | AA      | RSI      | PQBPT   | MC      | Overall |
| Self-Growth           | 0.243**     | 0.230** | 0.229**  | 0.244** | 0.194** | 0.354** |
|                       | 0.000       | 0.000   | 0.000    | 0.000   | 0.000   | 0.000   |
| Self-realization      | 0.343**     | 0.341** | 0.188**  | 0.211** | 0.292** | 0.416** |
|                       | 0.000       | 0.000   | 0.000    | 0.000   | 0.000   | 0.000   |
| Self-Esteem           | 0.325**     | 0.358** | 0.124**  | 0.192** | 0.314** | 0.383** |
|                       | 0.000       | 0.000   | 0.032    | 0.000   | 0.000   | 0.000   |
| Social Interaction    | 0.321**     | 0.407** | 0.075    | 0.106   | 0.300** | 0.358** |
|                       | 0.000       | 0.000   | 0.198    | 0.067   | 0.000   | 0.000   |
| Security and Economic | 0.319**     | 0.435** | 0.142*   | 0.169** | 0.358** | 0.426** |
|                       | 0.000       | 0.000   | 0.014    | 0.003   | 0.000   | 0.000   |
| Health and Transport  | 0.079       | 0.080   | -0.186** | 0.242** | 0.150** | 0.006   |
|                       | 0.172       | 0.165   | 0.001    | 0.000   | 0.009   | 0.921   |
| Overall               | 0.374**     | 0.426** | 0.092    | 0.297** | 0.384** | 0.431** |
|                       | 0.000       | 0.000   | 0.111    | 0.000   | 0.000   | 0.000   |

Legends: \*\*Significant Relationship at 1%, \*Significant Relationship at 5%

The overall results, as portrayed in Table 4.1, revealed a significant positive relationship between overall work values and self-esteem, with a Pearson correlation coefficient of 0.431 and a  $p$ -value of 0.000, indicating a strong association. Specifically, the Self-Realization dimension of work values showed the strongest positive correlation with self-esteem ( $r = 0.416$ ,  $p < 0.001$ ), indicating its crucial role in boosting teachers' self-perception.

In contrast, Health and Transport showed no significant correlation with self-esteem ( $r = 0.006$ ,  $p = 0.921$ ), suggesting that these factors do not significantly impact self-esteem in this context. Given these findings, the null hypothesis, which posits no significant relationship between work values and self-esteem, is rejected. The significant positive correlations between various dimensions of work values—such as Self-Growth, Self-Realization, Self-Esteem, Social Interaction, and Security and Economic—and self-esteem indicate that teachers

who prioritize these values tend to have higher self-esteem. This aligns with previous research suggesting that intrinsic work values, including opportunities for personal growth and meaningful social interactions, are associated with enhanced self-esteem among educators (Tan, 2022). The strong association between Self-Realization and self-esteem highlights the importance of teachers feeling that their work allows them to achieve their full potential, which is consistent with findings that emphasize the role of self-fulfillment in professional satisfaction (Bolat, 2023). The lack of a significant relationship between the Health and Transport dimension and self-esteem suggests that external factors such as health benefits and transportation may not directly impact teachers' self-perception. This suggests that intrinsic factors may play a more significant role in shaping self-esteem among STEM teachers. Understanding these dynamics is crucial for developing effective interventions that enhance teacher well-being. By fostering an environment that supports self-growth, self-realization, and positive social interactions, educational institutions can promote higher self-esteem among teachers, potentially leading to improved job satisfaction and performance (García-Carmona et al., 2019).

The findings suggest that fostering positive work values, particularly Self-Realization, Self-Growth, Security, and Economic factors, can significantly enhance STEM teachers' self-esteem. This reinforces Self-Determination Theory (Ryan & Deci, 2020), which posits that fulfilling intrinsic needs for competence and autonomy leads to greater well-being and motivation. In practice, school administrators and policymakers should prioritize professional development programs, mentorship opportunities, and financial incentives that align with teachers' values and interests. Moreover, given the moderate relationship between Social Interaction and self-esteem, school environments should promote a sense of community through team-based teaching approaches and peer support networks (Wang et al., 2021). By addressing these key areas, educational institutions can create a more supportive work culture, ultimately improving teacher retention, job satisfaction, and instructional effectiveness.

### 3.5 Significance of the Relationship between Quality of Life and Self-Esteem

The analysis of the relationship between Quality of Life and Self-Esteem, as presented in Table 4.2, indicates several significant influences. Overall, a significant positive relationship was observed between Quality of Life and Self-Esteem ( $r = 0.192$ ,  $p < 0.001$ ). Upon examining specific dimensions of Quality of Life, the Diet Experience demonstrated the strongest positive correlation with overall Self-Esteem ( $r = 0.419$ ,  $p = 0.000$ ). This finding suggests a profound link between a teacher's dietary experiences and their self-esteem. Similarly, Sex Life also exhibited a strong, significant positive correlation with overall Self-Esteem ( $r = 0.318$ ,  $p < 0.001$ ). Additionally, Comfort with Food was significantly correlated with overall Self-Esteem ( $r = 0.270$ ,  $p = 0.000$ ). The Psycho-Social Impact dimension also showed a significant positive relationship with overall Self-Esteem ( $r = 0.157$ ,  $p = 0.007$ ).

These results highlight the significance of various aspects of a teacher's quality of life, including dietary habits, sexual well-being, and emotional and social factors, in influencing their self-esteem. While Physical Impact and Psycho-Social Impact displayed significant correlations with specific facets of self-esteem, their overall relationship with self-esteem was less pronounced compared to Diet Experience and Sex Life.

**Table 5.** Significance of the Relationship between Quality of Life and Self-Esteem

| Quality of Life      | Self-Esteem      |                  |                  |                  |                  |                  |
|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                      | PhyC             | AA               | RSI              | PQBPT            | MC               | Overall          |
| Physical Impact      | 0.193**<br>0.000 | 0.048<br>0.406   | 0.295**<br>0.000 | 0.042<br>0.469   | 0.140*<br>0.016  | 0.061<br>0.293   |
| Psycho-Social Impact | 0.348**<br>0.000 | 0.278**<br>0.000 | 0.184**<br>0.001 | 0.053<br>0.364   | 0.260**<br>0.000 | 0.157**<br>0.007 |
| Sex Life             | 0.032<br>0.586   | 0.096<br>0.096   | 0.575**<br>0.000 | 0.182**<br>0.002 | 0.069<br>0.233   | 0.318**<br>0.000 |
| Comfort with Food    | 0.019<br>0.744   | 0.014<br>0.803   | 0.474**<br>0.000 | 0.097<br>0.093   | 0.006<br>0.916   | 0.270**<br>0.000 |
| Diet Experience      | 0.055<br>0.340   | 0.083<br>0.152   | 0.652**<br>0.000 | 0.002<br>0.977   | 0.004<br>0.949   | 0.419**<br>0.000 |
| Overall              | 0.147*<br>0.011  | 0.018<br>0.755   | 0.506**<br>0.000 | 0.142*<br>0.014  | 0.148*<br>0.010  | 0.192**<br>0.000 |

Legends: \*\*Significant Relationship at 1%, \*Significant Relationship at 5%

The consistently significant p-values across multiple dimensions, such as  $p = 0.000$  for Diet Experience and Sex Life, further reinforce the strong predictive power of Quality-of-Life indicators on Self-Esteem. This finding supports studies indicating that teachers' psychological resilience and social engagement are more critical than physical health alone in maintaining high self-esteem (Kim & Kim, 2023). Furthermore, the significant but

moderate relationship between Diet Experience and self-esteem ( $r = 0.419$ ,  $p = 0.000$ ) suggests that nutrition and lifestyle choices can influence teachers' self-perception.

This finding aligns with a growing body of literature that highlights the intricate connection between diet, physical health, and mental well-being, which in turn influences self-esteem. The diet life of STEM teachers in public schools in the Philippines is often characterized by significant challenges that can impede healthy eating practices, as evidenced by recent research. Studies indicate a high frequency of skipped meals among teachers, particularly breakfast, which can lead to potential health risks (Angalan et al., 2024). The demanding nature of the teaching profession, marked by heavy workloads, long hours, and administrative burdens, leaves many educators with limited time for proper meal preparation or consumption. Moreover, the school environment itself may not always facilitate healthy eating. While some schools implement feeding programs for students, comprehensive support for teachers' nutrition is often less emphasized (Barnes et. al., 2021). Teachers may rely on readily available, often less nutritious, options from school canteens or nearby vendors due to time constraints and convenience. Financial limitations can also influence food choices, prompting teachers to opt for more affordable, processed foods over fresh, healthier alternatives (Angalan et al., 2024). These systemic and environmental factors contribute to a "diet life" that may fall short of optimal nutritional guidelines, potentially impacting their overall well-being and, as this study suggests, their self-esteem.

### 3.6 Significance of the Influence of Work Values and Quality of Life Indicators Towards Self-Esteem

The regression analysis, as presented in Table 5, provides compelling evidence that work values and quality of life are potent predictors of self-esteem among STEM teachers in public schools. This model effectively accounts for a substantial 40.3% of the variance in self-esteem ( $R^2 = 0.403$ ), indicating a robust and meaningful relationship. The overall statistical significance of the model ( $F = 39.7$ ,  $p < 0.000$ ) further underscores the strength of this predictive power, demonstrating that these factors collectively exert a significant influence on how STEM teachers perceive themselves. Digging deeper into the individual predictors, it is clear that certain elements stand out.

**Table 6.** *Significance of the Influence of Work Values and Quality of Life Indicators Towards Self-Esteem*

| Predictors             | Unstandardized Beta | SE     | Stand. Beta | t      | P-value |
|------------------------|---------------------|--------|-------------|--------|---------|
| Constant               | 2.3472              | 0.2220 |             | 10.57  | 0.000   |
| Self-realization       | 0.1541              | 0.0528 | 0.163       | 2.92** | 0.004   |
| Security and Economic  | 0.1644              | 0.0462 | 0.205       | 3.55** | 0.000   |
| Health and Transport   | 0.0607              | 0.0253 | 0.117       | 2.40*  | 0.017   |
| Psycho-Social Impact   | 0.1055              | 0.0217 | 0.256       | 4.86** | 0.000   |
| Diet Experience        | 0.1508              | 0.0163 | 0.493       | 9.27** | 0.000   |
| R = 0.635              |                     |        |             |        |         |
| R <sup>2</sup> = 0.403 |                     |        |             |        |         |
| F = 39.7               |                     |        |             |        |         |
| Sig. = 0.000           |                     |        |             |        |         |

Diet Experience ( $\beta = 0.493$ ,  $p = 0.000$ ) emerges as the most influential factor, wielding the most substantial impact on self-esteem. This suggests that a teacher's nutrition and lifestyle choices are not merely peripheral but play a crucial role in shaping their self-perception and overall well-being. This finding highlights a potentially overlooked, yet vital, aspect of teacher support. Furthermore, "Psycho-Social Impact" ( $\beta = 0.256$ ,  $p < 0.001$ ) and "Security and Economic factors" ( $\beta = 0.205$ ,  $p < 0.001$ ) also appear as significant contributors. This suggests that a teacher's emotional well-being and financial stability are not only important for their overall well-being, but also have a direct and significant impact on their self-esteem. When teachers feel emotionally secure and financially stable, their self-esteem appears to flourish. Finally, "Self-Realization" ( $\beta = 0.163$ ,  $p = 0.004$ ) and "Health and Transport" ( $\beta = 0.117$ ,  $p = 0.017$ ) show moderate yet significant relationships with self-esteem.

Despite that, there is a lack to a specific research data for Cateel and Boston, Davao Oriental STEM teachers remain elusive, the existing literature of Balunganon, (2024) indicates that public school teachers in Davao Oriental, including those in STEM fields, generally report an "extensive quality of work life" and "extensive job satisfaction". This suggests that many teachers in the province find satisfaction in aspects such as a strong sense of community, ethical professional relationships, and positive feedback from colleagues. Such positive indicators contribute significantly to their overall well-being and, consequently, their perceived quality of life. The willingness to utilize their skills and abilities, coupled with autonomy in planning and executing activities, also positively impacts their professional experiences. However, it is crucial to acknowledge that challenges persist, which can affect the quality of life for STEM teachers in these specific municipalities. Teachers in public schools, particularly in more rural and

remote areas like Cateel and Boston, often face challenges such as inadequate facilities, limited access to learning materials, and insufficient resources. Thus, in essence, when public school STEM teachers can find personal meaning in their work and have their basic needs and logistical concerns adequately addressed, their self-esteem benefits. The clear and significant results from this analysis provide valuable insights for developing targeted interventions and support systems that aim to enhance the self-esteem of STEM teachers in public schools. Prioritizing initiatives that address nutrition and lifestyle, psychological well-being, financial security, opportunities for self-realization, and access to health and transport could significantly improve their self-perception and, by extension, their effectiveness in the classroom.

The findings are anchored in Self-Determination Theory (Deci & Ryan, 2020), which posits that fulfilling intrinsic needs – such as self-realization and autonomy – enhances self-esteem and motivation. The strong influence of Diet Experience on self-esteem supported research suggesting that physical well-being has a significant impact on mental health and self-perception (Singh et al., 2021). Schools and policymakers should incorporate wellness programs that promote balanced nutrition and stress management, as teachers' lifestyle choices directly impact their confidence and job performance. Additionally, the significant role of Psycho-Social Impact highlighted the importance of supportive work environments, reinforcing previous findings that collegiality and emotional well-being enhanced teachers' professional identity and resilience (Kim & Kim, 2023). The positive relationship between Security and economic factors and self-esteem suggests that financial stability plays a vital role in teachers' confidence, which aligns with studies emphasizing that job security and adequate compensation improve work motivation and self-worth (Wang & Hall, 2022). Schools should consider improving salary structures and financial incentives to enhance teachers' well-being and professional satisfaction. Furthermore, the moderate influence of Self-Realization and Health and Transport implied that investing in professional development opportunities and ensuring adequate support for transportation, psychological, and lifestyle factors is necessary to create a more fulfilling teaching environment.

#### 4.0 Conclusion

Based on the study's results, the critical importance of fostering a supportive environment for STEM teachers was highlighted, revealing that their high levels of work values and self-esteem are closely tied to a good quality of life. Additionally, the results showed that teachers who reported professional fulfillment, self-realization, and economic stability generally exhibited more positive self-regard. However, underlying concerns, such as health and transportation issues, indicate that external factors significantly influence teachers' confidence and overall job satisfaction. Furthermore, leadership, collaborative relationships, and communication, as well as interpersonal skills, were identified as significant predictors of the sense of community, accounting for a substantial portion of its variance. These findings underscore that a holistic approach to teacher well-being is essential, resonating with established psychological theories of Maslow's Hierarchy of Needs and Self-Determination Theory, which emphasize that meeting both intrinsic (e.g., professional growth, autonomy) and extrinsic (e.g., financial security, supportive relationships) needs is paramount for fostering higher self-esteem and, consequently, greater engagement and effectiveness in the classroom.

To enhance the well-being and self-esteem of STEM teachers, particularly in areas such as Cateel and Boston, Davao Oriental, schools and policymakers must implement targeted interventions. Schools should prioritize improving access to nutritious and affordable food, potentially through local partnerships or subsidized healthy canteens, acknowledging the significant impact of diet on overall well-being. Furthermore, advocating for improved public transportation to remote schools and ensuring access to affordable health services, possibly through school-based clinics, is crucial for addressing concerns related to health and transportation. Cultivating a supportive professional environment through regular team building, mentorship programs, and peer support networks will also foster social interaction and bolster self-esteem among educators. Policymakers should utilize these findings to develop comprehensive teacher support programs that extend beyond professional development to encompass the holistic well-being of teachers. This includes integrating policies that address the practical challenges of diet, health, and transportation, alongside initiatives that foster strong social connections within the teaching community. Future research could investigate the long-term impact of such integrated interventions, delve deeper into the specific nutritional challenges faced by teachers in different regions, and assess the effectiveness of various social support structures across diverse public school contexts to refine and optimize these support systems.

## 5.0 Contribution of Authors

Author 1 conceptualized the study, designed the research methodology, developed the instruments, collected and analyzed the data, and drafted the manuscript. Author 2 provided guidance throughout the research process, offered critical feedback on the study design and data interpretation, and reviewed and revised the manuscript for intellectual content. Both authors approved the final version of the manuscript and are accountable for its content.

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## 7.0 Conflict of Interest

The authors declare that there are no conflicts of interest regarding the completion and publication of this manuscript.

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