



## COPING MECHANISMS OF NOVICE JUNIOR HIGH SCHOOL MATHEMATICS TEACHERS

**Jose Andrey O. Lumbre<sup>i</sup>**

Head Teacher I,  
Tanauan School of Craftsmanship  
and Home Industries,  
Tanauan, Leyte,  
Philippines

### **Abstract:**

The study investigated the stressors and the coping mechanisms of selected junior high school novice mathematics teachers in the Division of Leyte, eastern Philippines. It employed a descriptive-correlational research design to describe the study variables and if they statistically associated. Findings revealed that research respondents suffer from stressors such as lack of sleep, paperwork, large class size, lack of resources and behavioural problems of students. It also show that teachers have the tendency to ignore their stressors or get angry whenever they are in the state of being stressed. Meanwhile, activities like self-reflection, relaxation, diversion, curriculum knowledge, behaviour management, family support, peer support and supervisors' support were effective coping mechanisms of stressors of the novice teachers. It is concluded that lack of sleep, paperworks, class size, lack of resources and behavioural problems of students have bearing on junior high school novice teachers' level of stress. Even if teachers tend to ignore the stressors, anger would most likely prevail which often result to their lack of focus and frustration in the delivery of the teaching-learning services. Self-reflection, relaxation, diversion, behaviour management, curriculum knowledge, family support, peer support and administrators' support have crucial bearings towards effective coping mechanisms to address stressors. It is hereby recommended that the junior high school mathematics mathematics teachers find ways and means to continue their professional development. The authorities of the basic educational system should implement the prescribed number of students per class to ensure effective delivery of the teaching-learning process by concerned teachers and other stakeholders. Novice teachers should have minimal paper works so as not to be stressed, they should be provided with adequate and relevant instructional materials.

**Keywords:** novice teachers, stressors, coping mechanisms, mathematics teachers

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<sup>i</sup> Correspondence: email [joseandreylumbre@gmail.com](mailto:joseandreylumbre@gmail.com)

## 1. Introduction

Teaching is considered as a noble profession as it bears crucial impact on the lives of student learners. Teachers are considered modern heroes on the present society, they impart the knowledge crucial for the academic and social development of students in basic education, high school teachers play important role in molding the young minds of their student learners (Abocejo and Padua, 2010). They largely contribute towards the development of knowledge, attitudes and values of students and serve as second parents in the formative years of school life and experience of their mentees. Teachers face the daily challenges and commitments to bring ahead the learning process in the cognitive and social development of student learners (Jolejole-Caube, Dumlao and Abocejo, 2019). For hundreds of years of existence, the teaching profession is considered, not only challenging but emotionally taxing and potentially frustrating (Lambert, O'Donnell, Kusherman and McCarthy, 2006). It is considered as a high stress occupation (Griffith, Steptoe and Cropley, 1999; McCormick, 1997). Statistics show that about 33 to 37 percent of teachers are intrinsically stressed with their teaching profession (Chan and Hui, 1995). With teaching becoming a stressful profession, its attrition rate obviously become a problem which hold true in some countries worldwide (Kyriacou and Kunc, 2007).

Mrozek (2005) reported that one-third of the teachers population consider its profession as extremely stressful, resulting into the utmost turnover rate annually. The annual turnover rate among other professions is at 11 percent, while of that of the teaching profession is 15.7 percent. This is corroborated by McCarthy et al. (2015) who agreed that teaching is a career that is so stressful and it can even cause teachers' burnout resulting into massive departure of teachers.

Coping is commonly known as dealing with problems in a peaceful and quiet mental state. The psychological well-being and the physiological response of teachers are greatly affected by the way they try to cope with their stressors in the school environment (Griffith, Steptoe and Cropley, 1999). For teachers to overcome their stressors and achieve their expected deliverables, they need coping behaviours and mechanisms which can be in the form of physical, psychological, social or material factors (Blasé, 1982). Teachers coping with stress is essential so that they would experience a quality and happy life both personally and professionally while they are working towards the attainment of their educational goals (Guglielmi and Tatrow, 1998).

This study argues that examining the coping mechanisms will bring about holistic assessment of junior high school novice teachers' exposures to stress at the classroom setting and field level. Determining the various teaching stressors open doors for better options on how to address the stress issues which often impede novice teachers in effectively discharging their teaching functions, duties and responsibilities. Knowing the different novice teachers coping mechanisms can enlighten policy makers, basic education administrators and curriculum designers put in place effective safety nets which prevent the negative effects of stress on teaching performance and services delivery.

### **1.1 Study Objectives**

The study determined the stressors and the coping mechanisms of the novice Junior High School Mathematics Teachers in Area 1 of the Leyte Division, Leyte province in the central-eastern part of the Philippines. The study specifically (1) examined the profile of the Novice Junior High School Mathematics Teachers as to age, sex, educational attainment, teaching experience, grade level currently teaching, and class size; (2) assessed the teachers' personal, professional, social and institutional stressors; (3) evaluated the teachers' physical, psychological, emotional and task response to stress; (4) determined their coping mechanisms in dealing with stress and (5) explored the relationship between the teachers' coping mechanisms and their profile, stressors and how they response to stress. The study tested the null hypotheses of no significant relationship between the coping mechanisms of the novice teachers and their profile; stressors; and response to stress.

## **2. Review of Literature**

Teaching has gradually become the most stressful profession (Hepburn and Brown, 2001). At present, teaching becomes more stressful since teachers face several deadlines to meet and they are burdened with many other responsibilities (Rodriguez and Abocejo, 2018). Such responsibilities and deadlines to meet include careful planning of what to teach, the accountability for whatever students perform in the class, and the conduct and monitoring of extracurricular activities in school (National Union of Teachers [NUT], 2010). Identifying teachers' stressors would be a great help in providing the right and appropriate coping schemes towards productive and fruitful life as a teacher (Guglielmi and Tatrow, 1998).

Because stress has been identified as a factor affecting retention and attrition for both the teachers (Petty, Fitchett and O'Connor, 2012) and students, dissecting teachers' reported coping strategies bears relevance in understanding how alternatively certified teachers manage stress. Buckley, Abbott and Franey (2017) provided a national snapshot that outlined teachers' sources and manifestations of stress and suggested ways of coping. The top five sources of stress were: number of duties and responsibilities, needy students, lack of time for relaxation, unmotivated students and pressure for accountability Buckley et al. (2017). Some authors (Feltoe, Beamish and Davies, 2016) further confirmed the usefulness of social support as one coping strategies in addition to humor, solitude, problem-solving, and positive attitude.

One way to support teachers is through intensive induction programs (Kearney, 2016). Lussier and Forgione, Jr., 2010 and Kearney (2016) posited that the key to retention of highly qualified teachers is a comprehensive induction program, lasting for a minimum of two years. Lambeth (2012) further synthesised the research supporting effective practices such as teacher induction programs, with mentoring as a means of lowering attrition rates (Fernandez and Abocejo, 2014), including the acknowledgement that beginning teachers in urban settings may require differentiated strategies that reflect

the diverse socioeconomic, racial, and ethnic groups of the communities where they serve (Pañares and Abocejo, 2019).

Petty, Fitchett and O'Connor (2012) also corroborated the importance of administrative support in retention, but they did not find it to be the best consideration for teachers' desires to stay or leave. Not only do teachers need the direct support of their administrators, but also need administrators to support collaboration (Trazo and Abocejo, 2019). Darling-Hammond and Rothman (2011) described the practices of school leaders in Finland who provided time during the school day for novice teachers to collaborate on curriculum and assessments.

Social support as coping mechanism minimise the effect of stress on teachers' personality, occupation's fulfillment, and its tendency to be at risk of suffering illness. Support may come their family, friends, and co-workers (Cuñado and Abocejo, 2018). Teachers tend to seek for advice and guidance, someone to share and discuss their feelings, and emotional support. With more care and support, teachers are likely to experience less stress in their work (Griffith, Steptoe, and Cropley, 1999). Collaborative planning helps teachers to make their mind less stressful and remain focus on their job. The process of involving everyone to take part in developing a plan, coming up with strategies and decisions which will keep their attention in steps with students are appropriate coping mechanisms to discharge stressors (Griffith, Steptoe, and Cropley, 1999).

Another coping mechanism is called the Administrative Support. Prather-Jones (2011) defined administrative support based on the perceptions of the types of support that led to teachers' career decisions. She found out that teachers want principals to enforce consequences for misconduct. There should be a conducive environment which provide opportunities for shared decision-making (Abocejo, 2017; Vivar, Salvador and Abocejo, 2015) and to facilitate the development of relationships with other teachers in the school.

In addition to support with managing student behaviors and developing collegial relationships, teachers also need to feel respected and appreciated (Rodriguez and Abocejo, 2018; Prather-Jones, 2011). Inclusion in decision-making and appropriate handling of disciplinary issues (Andaya and Abocejo, 2019) played key roles in feelings of support and enabled teachers handling learner's with emotional and behavioural problems to stay in the profession (Prather-Jones, 2011). Maring and Koblinsky (2013) provided more specific areas in which teachers, especially in high violent crime areas, need administrative support. Teachers need to undergo training and development which are related management of behaviour, effective school leadership, improved school safety, peer mediation programs, psychological services, and parental support (Maring and Koblinsky, 2013).

In addition to administrative support, early career, urban teachers also need peer support (Shernoff et al., 2011). Peer support can include instructional coaching, professional development, and participation in professional learning communities, like those of women groups or gender based professional organisations (Abocejo et al., 2012). These activities play key roles in helping teachers resolve the hindrances affecting their

success and their desire to remain in urban, high-need schools. Battersby and Verdi (2015) suggested online professional learning communities as a potential strategy for retention. In addition, Gaikhorst, et al., (2015) supported the idea of professional development outside the school in the form of networking with teachers from other schools to exchange experiences in urban environments.

Peer support is also another coping mechanism used to deal with teacher stress. Often teachers, especially early in their careers, suffer in isolation with issues related to classroom management, building school-community relationships, and use of instructional resources. School systems have attempted to foster this type of support through the development of teacher mentoring programs that provide the kind of clinical supervision (Alvarez, Ong and Abocejo, 2017) that help teachers avoid feelings of isolation, especially those approaching nearly retirement age (Almazan et al., 2018; Inabangan, Garcia and Abocejo, 2019).

Mentoring programs can work in different ways (Trazo and Abocejo, 2019), offering support in peer relationships or offering support by providing an example of potential teacher leadership roles (Pañares and Abocejo, 2019) for those aspiring for professional opportunities in the field. Because lack of leadership can lead to additional attrition, mentoring can be especially important to those teachers who consider leaving the profession due to lack of professional growth (Fulton, Yoon, and Lee, 2005).

In order to address the need for better prepared and well supported teachers, the College of Teacher Education and Leadership (CTEL) of Arizona State University, partnered with the well-known *Teach for America* (TFA) alternative teacher preparation program to prepare teachers to work in urban districts in Phoenix, Arizona (Heineke, et al., 2010). This program represented a dual approach to support, as teachers received support from a dedicated staff member at TFA and a full-time non-tenure track faculty member. The faculty members not only visited and supported the teachers in their classrooms but also taught university course work. The TFA staff member provided professional development and collaborated with the faculty member to support the overall growth of the teacher.

The effectiveness of such a partnership was not confirmed in the review of the literature, but Heineke et al. (2010) suggested more researches that included survey data from principals, school achievement data, evaluation and field notes of university faculty and TFA staff to determine the effectiveness of the model. Evans (2010) further supported the importance of this type of collaboration in his assertion that, alternatively, certified middle school teachers should receive more professional development in their Mathematics content knowledge from the schools in which they teach and the coursework they are enrolled in.

## **2.1 Theoretical Background**

This study anchored its theoretical framework on the Ecological Systems Theory (EST) advocated by Bronfenbrenner (1994) which explained the inherent qualities of an individual and the characteristics of the external environment which interact to influence how a person grows and develops. The EST proposes to answer the question on how the

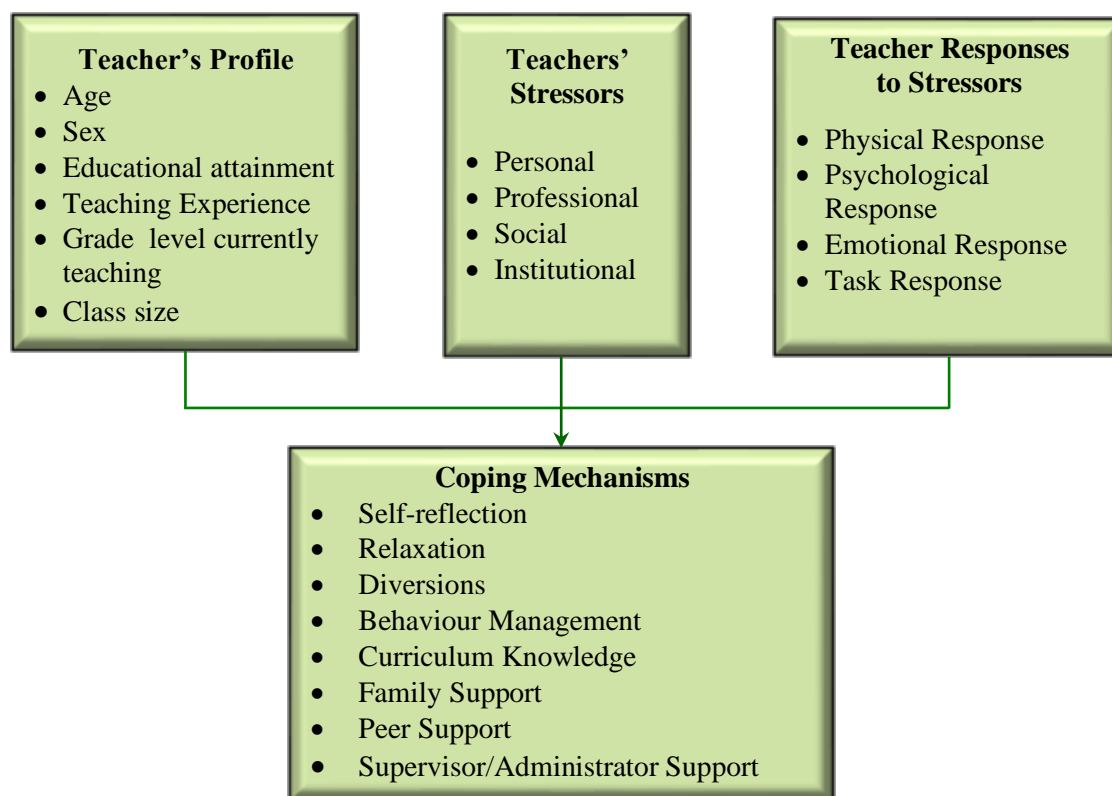
development of a people is affected by their social relationships and the world around them. Essentially, the main concept of the EST is focused on the human development as influenced by his/her social relationship with his/her environment.

Another theory from which this study is anchored on is the Self-Efficacy Theory (SET) advanced by Bandura (1997) which argues that people's beliefs and practices are important in their motivations and actions which also affect their behaviour. Bandura (1997) claimed that SET pertains to individual's capacities which elicit appropriate respond to particular circumstances. Self-efficacy is one's belief about what and individual is capable of doing and accomplishing in relation to the skills that a person possesses (Snyder and Lopez, 2007). Moreover, the SET presumes that an individual will most likely engage in activities where he/she is highly efficient and competitive (Van der Bijl and Shortridge-Baggett, 2002). Accordingly, the SET is grounded on the assumption that psychological processes, regardless of structure, serve as means in generating and intensifying efficacy of an individual (Bandura, 1997).

Based on the SET concept, teachers with low self-efficacy perceived their surroundings as dangerous and focused on their inability to cope. Self-efficacy influences the degree to which people expect to be successful and how much they persevere to achieve success. Self-efficacy can impact negatively when a person repeatedly fails.

Some studies (Stanley, 2011; Rodriguez and Aboejo, 2018; Trazo and Aboejo, 2019) affirmed that teachers self-efficacy have bearing on how teachers cope with stresses in their desire to dwell with profession. Teachers with strong self-efficacy cope with challenges by using problem-solving behaviours, often through religious, spiritual, or mystical experiences (Stanley, 2011). Teacher efficacy can come from a variety of individual and contextual factors that have been associated with retention. Eckler (2018) noted that individual factors such as learning as you go, receiving feedback, and observing master teachers were important in physical education teachers' efficacy in their beginning years. These factors were found to positively or negatively affect efficacy depending on the extent to which they were present.

Figure 1 shows how the stressors were explored in assessing and evaluating the coping mechanisms of the newly-hired junior secondary school teachers in Mathematics. The study considered the novice Junior High School Mathematics teachers profile in view of their age, sex, educational attainment, teaching experience, grade level currently teaching, and class size. They were also assessed in the four domains of personal, professional, social and institutional stressors. The study evaluated the physical, psychological, emotional and task responses of the teachers to stress. Their coping mechanisms pertaining to self-reflection, relaxation, diversions, behaviour management, curriculum knowledge, family support, peer support and supervisor or administrator support were explored. The relationship among these variables were determined and analysed.



**Figure 1:** Conceptual Framework of the Study

### 3. Methodology

#### 3.1 Research design

The study employed a descriptive-correlational research design. Mathematics. It involves data gathering procedure which aim to describe, organise, tabulates, and depicts events (Glass and Hopkins, 1984). Moreover, it utilised graphs and charts to aid the reader in understanding the data distribution. This method is best suited in describing the perceived stressors of teachers, teachers' response to stress and the coping mechanisms to address the teachers' stress.

#### 3.2 Research respondents

Fifty-two (52) novice teachers from all of the twenty-five secondary schools of Area I of the Leyte Division which cover the municipalities of Alangalang, Babatngon, Palo, San Miguel, Sta. Fe, Tanauan and Tolosa, Leyte, Philippines were totally enumerated as respondents of this study.

#### 3.3 Research instrument

The research instrument used in the study was survey questionnaire that were filled-out by the newly-hired junior secondary teachers in Mathematics in the schools under the Area 1 of the Leyte Division. In the preparation of the research instrument, the researcher

adapted the instruments from the studies of Faltado and Faltado (2014), Stanton (2017), Fisher (2014) and Harvey (1999).

### 3.4 Data gathering procedure and treatment of data

The researcher sought endorsement from the School's Division Superintendent by recommending the participation and cooperation of the novice secondary Mathematics teachers of Area 1. Thereafter, the researcher conducted an orientation on his study with the teachers and distributed the survey instruments to the latter. To answer all research questions, all data were processed using the Statistical Package for Social Sciences (SPSS). The statistical tools used in the study are percentage, mean, and the Pearson Product – Moment Correlation Coefficient.

## 4. Results and Discussions

### 4.1 Demographic profile of novice teachers

The study shows that out of the total 52 respondents, 50 or 96 percent are 20 to 34 years old and most of them are female. This affirms the claim that the teaching profession is dominantly occupied by female workers. Participation of women is evident in the teaching profession and in many areas of productive social services employment. Majority of these novice teachers are just bachelor's degree holder with about 1 or 2 years of teaching experience. It is also noted that junior high school novice teachers are assigned to grades 7 and/or 8 classes with more than 50 students.

**Table 1:** Demographic profile of novice junior high school teachers

Demographic Profile		Frequency	Percent (%)
<b>Age</b>			
	20 – 34	50	96
	35 – 49	2	4
<b>Sex</b>			
	Male	23	44
	Female	29	56
<b>Educational Attainment</b>			
	Master's degree holder	1	2
	With Master's unit	17	33
	Bachelor's degree holder	34	65
<b>Teaching Experience</b>			
	Less than 1 year	9	17
	1 to 2 years	32	62
	More than 2 years	11	21
<b>Grade Level Currently Teaching</b>			
	Grade 7	21	40
	Grade 8	20	39
	Grade 9	9	7
	Grade 10	2	4
<b>Class Size</b>			
	40 – 49 students	5	20
	50 ≥ students	47	90



## 4.2 Stressors of junior high school novice teachers

Among the professional stressors, doing paper works is a very high stressor for novice teachers. Moreover, large class size, lack of resources and lesson planning are among the high stressors dominantly identified by the research respondents. There are still several stressors confirmed by the research respondents as inherent to their professional works as novice teachers (Table 2). Many junior high school novice teachers cannot get enough sleep because they need to spend more time in preparing their instructional materials and lesson plans for the next day. Evidently, handling large class sizes with insufficient resources, and to some extent, undesirable behaviours of the students contribute a lot of their being in a stressful state. Their stressful situation is compounded with family responsibilities, lack of household helpers and the time spent travelling to school, all these become dominant personal stressors among junior high school novice teachers. These corroborate with the findings of Blasé (1986) which identified first order stressors such as student apathy, student disruption or discipline, poor student attendance, high student to teacher ratios (large classes), paperwork, preparation work, irresponsible colleagues, obtrusive supervisors, lack of effective leadership such as assistant principals or principals, and seemingly non-supportive parents directly interfere with the teacher effort.

**Table 2:** Stressors of junior high school novice teachers

Stressors	WM	SD	Description
Personal Stressors	2.63	0.41	High Stressor
Professional Stressors	2.87	0.39	High Stressor
Social Stressors	2.70	0.41	High Stressor
Institutional Stressors	2.62	0.62	High Stressor
Grand Mean	2.71		High Stressor
Overall SD		0.47	

WM – weighted mean, SD – standard deviation

Ranges for the weighted mean	Description
1.00 - 1.75	Low Stressor
1.76 - 2.50	Moderately High Stressor
2.51 - 3.25	High Stressor
3.26 - 4.00	Very High Stressor

## 4.3 Novice teachers' response to stress

Ignoring the stress and anger are the occasional responses of novice teachers to their stressors. This means that they have the tendency of ignoring their stressors rather than dwelling on it. The result also reveals that the respondents had the inclination to get angry whenever they experienced emotional stress. This implies that despite of the stressful nature of work of the teaching profession, the novice teachers were trying to perform at their best to efficiently and effectively deliver teaching-learning process. This parallels with the findings of Rodriguez and Abocejo (2018) whose study focused on the effectiveness of pre-service teachers.

**Table 3:** Response to stress of junior high school novice teachers

Response to Stress	WM	SD	Description
Physical Response	1.75	0.47	Seldom
Psychological Response	2.29	0.57	Seldom
Emotional Response	2.29	0.69	Seldom
Task Response	2.29	0.58	Seldom
Grand Mean	2.16		Seldom
Overall SD		0.57	

WM – weighted mean, SD – standard deviation

Ranges for the weighted mean    Description

1.00 - 1.75	Never
1.76 - 2.50	Seldom
2.51 - 3.25	Occasional
3.26 - 4.00	Often

#### 4.4 Novice teachers' coping mechanism to address stress

Two (2) out of the three (3) activities on self-reflection such as going to church and mediation are effective coping mechanisms. The results show that the novice teachers were inclined to utilise spiritual activities as their means in coping with their stressors. It also shows that relaxation such as sleeping, dancing, and singing are effective coping mechanisms. This shows that novice teachers had the tendency to sleep or engage in dancing or singing whenever they were on the state of being stressed.

On the diversions, results show that watching television, reading, sports game, taking care of plants, shopping, engaging in digital games, and engaging in household chores are effective coping mechanisms. This implies that novice teachers were employing these activities to divert their attentions instead of paying attention to their stressors. Meanwhile, on behavior management, activities such as timeouts, and controlling aggression and positive attitude are effective coping mechanisms. This can be inferred that all the indicators showed as behaviour management were all effective way of coping mechanisms to address stress specifically employing positive attitudes in handling stressors.

On curriculum knowledge, out of the three activities identified, mastery of the content is the most effective coping mechanism. Similarly, equipped with teaching strategies and confidence in instruction are likewise effective coping mechanism. The results show that the novice teachers find the activities under curriculum knowledge as effective in coping with stress.

On family support, the respondents considered all of the five activities such as sharing of thoughts, positive advice, discussion of feelings, sympathy and understanding and recreational activities are very effective coping mechanisms. It indicates that family support is clearly a significant factor that can be of help to address stress among novice teachers.

**Table 4:** Coping mechanisms to address stress of junior high school novice teachers

Stressor	WM	SD	Description
Self-reflection	2.76	0.67	Effective
Relaxation	2.70	0.56	Effective
Diversions	2.86	0.50	Effective
Behaviour Management	3.03	0.62	Effective
Curriculum Knowledge	3.38	0.66	Effective
Family Support	3.37	0.60	Effective
Peer Support	3.01	0.59	Effective
Supervisor/Administrator Support	2.83	0.53	Effective
Grand Mean	2.99		Effective
Overall SD		0.60	

WM – weighted mean, SD – standard deviation

Ranges for the weighted mean	Description
1.00 - 1.75	Not Effective
1.76 - 2.50	Moderately Effective
2.51 - 3.25	Effective
3.26 - 4.00	Very Effective

On peer support, all of the five activities identified that include watching movies, visiting beautiful places, instructional coaching, participation in learning communication, and professional development through networking with friends and participation in professional learning communication are effective coping mechanisms. This shows that the respondents find the activities under peer support as effective in coping with stress.

Finally, on supervisor’s/administrator’s support, results reveal that of the five activities, four are effective coping mechanisms and these include individual conference, mentoring, words of encouragement and inclusion in decision-making. This implies that administrators greatly contribute to the novice teachers as far as handling of stressors is concern.

#### 4.5 Relationships between the coping mechanism and selected respondents’ profile

The study reveals that age was significantly correlated with self-reflection coping mechanism. The correlation coefficient was 0.336 with a corresponding p-value of 0.015; hence, the relationship was significant at the .05 level of significance. The direction of the linear relationship is positive indicating that the extent to which self-reflection mechanisms were employed increases with age. That is, as the teacher becomes older, he or she is inclined to employ more of self-reflection in coping with stressors. This also means that older teachers found self-reflection more effective way of coping stress. Conversely, younger teachers had lesser tendencies to employ this mechanism to cope with stressors. Indeed, older teachers are more experienced in their job. It is understood that they have already encountered several stressors related to their work. As such, they have tried such coping mechanism and found it effective.

The findings revealed that grade level was significantly correlated to peer support. The correlation coefficient equal to 0.293 with p–value of 0.035 was significant at the 0.05

level of significance. The direct relationship suggests that a novice teacher handling higher grade level tends to seek for peer support in coping with their stressors. Correspondingly, those teachers assigned to lower grade levels have the lesser tendency to seek for peer.

**Table 5:** Relationship between coping mechanism and demographic profile of junior high school novice teachers

Coping Mechanism	Demographic Profile					
	Age	Sex	Educational Attainment	Teaching Experience	Grade Level	Class Size
Self-reflection	0.336*	(0.208) <sup>ns</sup>	0.177 <sup>ns</sup>	0.095 <sup>ns</sup>	0.015 <sup>ns</sup>	0.480 <sup>ns</sup>
Relaxation	(0.125) <sup>ns</sup>	0.015 <sup>ns</sup>	(0.038) <sup>ns</sup>	(0.268) <sup>ns</sup>	(0.138) <sup>ns</sup>	0.237 <sup>ns</sup>
Diversion	(0.190) <sup>ns</sup>	(0.053) <sup>ns</sup>	0.170 <sup>ns</sup>	(0.059) <sup>ns</sup>	(0.209) <sup>ns</sup>	0.187 <sup>ns</sup>
Behaviour management	(0.025) <sup>ns</sup>	(0.058) <sup>ns</sup>	0.132 <sup>ns</sup>	0.026 <sup>ns</sup>	0.070 <sup>ns</sup>	(0.011) <sup>ns</sup>
Curriculum knowledge	(0.141) <sup>ns</sup>	0.169 <sup>ns</sup>	0.077 <sup>ns</sup>	0.007 <sup>ns</sup>	0.167 <sup>ns</sup>	0.135 <sup>ns</sup>
Family support	(0.123) <sup>ns</sup>	(0.117) <sup>ns</sup>	(0.018) <sup>ns</sup>	(0.017) <sup>ns</sup>	(0.086) <sup>ns</sup>	0.152 <sup>ns</sup>
Peer support	(0.210) <sup>ns</sup>	(0.096) <sup>ns</sup>	(0.087) <sup>ns</sup>	(0.146) <sup>ns</sup>	0.293*	0.248 <sup>ns</sup>
Administrator's Support	0.039 <sup>ns</sup>	(0.126) <sup>ns</sup>	0.198 <sup>ns</sup>	(0.018) <sup>ns</sup>	0.002 <sup>ns</sup>	0.103 <sup>ns</sup>

Values inside parentheses are inversely correlated

ns - not significantly correlated

\* - Correlation is significant at  $\alpha < 0.05$

#### 4.6 Relationship between coping mechanisms and stressors

The study shows that personal stressor was significantly associated with behaviour management. This is manifested by the correlation coefficient value of 0.366. This had a corresponding p-value of 0.008 which meant that the relationship was significant at the 0.01 significance level. This further implies that the relationship had a very dependable or very high degree of relationship. The direction of the relationship was positive. This implies that the respondents tend to employ behaviour management coping mechanisms as they agree more or experience more personal stressors. Conversely, the lesser they agree on or experience personal stressors the less likely they employ such coping mechanism.

As shown in Table 6, the professional stressor was significantly associated with self-reflection coping mechanism with an r-value of 0.348 and a corresponding p-value of 0.011. The result suggest a sufficient evidence to reject the null hypothesis. In like manner, social stressor was significantly correlated with peer support as indicated the r-value of 0.489 and a corresponding p-value of 0.000. These results indicate that respondents tend to employ peer support as coping mechanisms when they experience social stressors. In essence, the lesser the novice teachers experience social stressors the less likely they employ such coping mechanism.

It was also revealed that social stressor was significantly associated with peer support. Evidence was provided by the correlation coefficient value of 0.489. This had a corresponding p-value of 0.000 which meant that the relationship was significant at the 0.01 alpha level. This further implies that the relationship had a very high degree of relationship. The direction of the relationship was positive. This implies that the

respondents tend to employ peer support coping mechanisms as they experience more social stressors. Contrariwise, the lesser they experience social stressors the less likely they employ such coping mechanism.

The result showed that institutional stressor was significantly associated with behaviour management coping mechanism. This is supported by the correlation coefficient equal to 0.348. This had a corresponding p-value of 0.011 less than 0.05 significance level; hence it was found to be significant at this level of significance. The result signified that there was sufficient evidence to prove that the claim of significance of the relationship was true; hence, the null hypothesis stating the non-significance of the relationship was rejected.

**Table 6:** Relationships between coping mechanism and stressors of junior high school novice mathematics teachers

Coping Mechanism	Stressors			
	Personal Stressors	Professional Stressor	Social Stressors	Institutional Stressors
Self-reflection	0.195 <sup>ns</sup>	0.348*	0.036 <sup>ns</sup>	0.184 <sup>ns</sup>
Relaxation	(0.019) <sup>ns</sup>	0.198 <sup>ns</sup>	0.088 <sup>ns</sup>	0.253 <sup>ns</sup>
Diversion	0.008 <sup>ns</sup>	0.099 <sup>ns</sup>	0.233 <sup>ns</sup>	0.197 <sup>ns</sup>
Behaviour Management	0.366**	0.258 <sup>ns</sup>	0.171 <sup>ns</sup>	0.348*
Curriculum Knowledge	0.065 <sup>ns</sup>	(0.033) <sup>ns</sup>	0.171 <sup>ns</sup>	0.064 <sup>ns</sup>
Family Support	0.170 <sup>ns</sup>	(0.034) <sup>ns</sup>	0.051 <sup>ns</sup>	0.142 <sup>ns</sup>
Peer Support	0.114 <sup>ns</sup>	0.252 <sup>ns</sup>	0.489**	0.232 <sup>ns</sup>
Administrator's Support	(0.078) <sup>ns</sup>	(0.038) <sup>ns</sup>	(0.049) <sup>ns</sup>	0.099 <sup>ns</sup>

Values inside parentheses are inversely correlated

ns – not significantly correlated

\* Correlation is significant at  $\alpha < 0.05$

\*\*Correlation is highly significant at  $\alpha < 0.01$

#### 4.7 Relationship between coping mechanism and response to stressors

It can be said that there were significant relations between psychological response of the novice teachers towards relaxation, diversion, behaviour management, and peer support. The correlation coefficients for respondents' psychological response with relaxation, diversion, behaviour management, and peer support were 0.305, 0.466, 0.345, and 0.296, respectively, with respective corresponding p-value of 0.028, 0.001, 0.012 and 0.033. The positive coefficients indicate that the more often psychological responses like repression, depression and anxiety, the greater was their tendency to employ relaxation, diversion, behaviour management, and peer support as their coping mechanisms. This implies that novice teachers find these coping mechanisms effective in dealing with their stressors.

It was also revealed that there were significant relationships between emotional response and some of the coping mechanism like self-reflection, relaxation, diversion, curriculum knowledge, and peer support. This is supported by the respective correlation coefficients of 0.295, 0.355, 0.488, 0.357, and 0.452 with corresponding p-value of 0.034, 0.010, 0.000, 0.009 and 0.001. The direction was positive, which means that the more often they experience the variable under emotional response such as anger, crying, self-blame

and being irrational, the greater was their tendency to employ self-reflection, relaxation, diversion, curriculum knowledge, and peer support coping mechanisms. It implied that the more the respondents were experiencing emotional response to stress, the greater their tendency to seek self-reflection, relaxation, diversion, curriculum knowledge, and peer support.

The results show that there were significant relationships between task response and the following coping mechanisms: relaxation, diversion, behaviour management, family support, and peer support. The respective correlation coefficients for task response with relaxation, diversion, behaviour management, family support and peer support were 0.433, 0.464, 0.320, 0.274, and 0.405 with corresponding p-value of 0.000, 0.001, 0.021, 0.049, and 0.003. This signified that the more often the task response such as irrational behaviour towards students, lack of focus, frustration, and complaints, the greater the respondents employ relaxation, diversion, behaviour management, family support and peer support coping mechanisms.

**Table 7:** Relationship between coping mechanism and response to stressors of Junior High School novice teachers

Coping Mechanism	Response to Stressors			
	Physical Response	Psychological Response	Emotional Response	Task Response
Self-reflection	(0.217) <sup>ns</sup>	0.052 <sup>ns</sup>	0.295*	0.104 <sup>ns</sup>
Relaxation	0.109 <sup>ns</sup>	0.305*	0.355**	0.473**
Diversion	0.245 <sup>ns</sup>	0.466**	0.488**	0.464**
Behavior Management	0.143 <sup>ns</sup>	0.345*	0.253 <sup>ns</sup>	0.320*
Curriculum Knowledge	(0.133) <sup>ns</sup>	(0.032) <sup>ns</sup>	0.357**	0.098 <sup>ns</sup>
Family Support	(0.066) <sup>ns</sup>	0.114 <sup>ns</sup>	0.238 <sup>ns</sup>	0.274*
Peer Support	0.186 <sup>ns</sup>	0.296*	0.452**	0.405**
Administrator's/ Supervisor's Support	(0.187) <sup>ns</sup>	0.013 <sup>ns</sup>	0.273 <sup>ns</sup>	0.182 <sup>ns</sup>

Values inside parentheses are inversely correlated

ns – not significantly correlated

\* Correlation is significant at  $\alpha < 0.05$

\*\*Correlation is significant at  $\alpha < 0.01$

## 5. Conclusion and Recommendations

In the light of the study findings, it is concluded that lack of sleep, paperworks, class size, lack of resources and behavioural problems of students have bearing on junior high school novice teachers' level of stress. When in the state of stress, these novice teachers tend to suffer from illnesses. Notwithstanding they tend to ignore the stressors, anger would most likely prevail which often result to their lack of focus and frustration in the delivery of the teaching-learning services. Self-reflection, relaxation, diversion, behaviour management, curriculum knowledge, family support, peer support and administrators' support have bearings towards effective coping mechanisms to address stressors. Age are directly associated with self-reflection underpinning the fact that as teachers progress in age, they tend to employ more of self-reflection in coping with stressors. In like

manner, peer support are positively associated with grade level where novice teachers tend to more seek support to with stressors when teaching higher grade level. Correspondingly, those teachers handling lower grade levels have lesser tendency to seek for peer support as a way of stress coping.

Novice teachers need professional development to ensure their effectiveness and efficiency in instruction. Junior high school teacher novice teachers' curriculum knowledge needs to be enhanced to help them cope with stressors. They should undergo on trainings supportive to properly handle students with behavioural problems. The authorities in the educational system should implement the ideal number of students in a class for effective delivery of the teaching-learning process. Minimise the burden of paper works so that novice teachers can focus on the development of effective and efficient instruction. The school administration and leaders should provide adequate and relevant instructional materials to address the lack of resources in the public secondary schools. Novice teachers should maximise the utilisation of coping mechanisms like as self-reflection, relaxation, diversion, curriculum knowledge, behaviour management, family support, peer support and supervisor's or administrators support since they are found in this study to be the effective.

### **About the Author**

Jose Andrey O. Lumbré is a Head Teacher I of the Tanauan School of Craftsmanship and Home Industries (TSCHI) in Tanauan, Leyte, Philippines. He completed his Master of Arts in Education (MAED) with specialisation in Secondary Mathematics. At present, he is pursuing his Doctor of Philosophy (PhD) in Educational Program Management at the Eastern Visayas State University (EVSU). His academic engagements include developing Strategic Intervention Materials (SIM) in Mathematics and innovative projects geared towards the holistic growth of the learners. One of his valuable projects is to make education available to children in remote areas thereby saved them from dropping out due financial constraints. The project provides opportunities for out of school children return to school.

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