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Teachers' Learning Environment Management Skills and Students' Autonomy in Marilog District, Davao City

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Abstract. This study aimed to determine the significant relationship between teachers' learning environment management skills, and it was measure expected to improve the students' autonomy. In this study, the researcher selected 222 elementary school teachers in the Marilog District in Davao City as the respondents of the study. A stratified random sampling technique was utilized in the selection of the respondents. A non-experimental quantitative research design using a descriptive-correlational method was employed. The data collected were subjected to the following statistical tools: Mean, Pearson Moment Product Correlation, and multiple linear regression analysis. Findings revealed that teachers' learning environment management skills and students' autonomy in Marilog District in Davao City were described as extensive. Further, correlation analysis demonstrated a significant relationship between teachers' learning environment management skills and students' autonomy in Marilog District in Davao City. Evidently, regression analysis proved that teachers' learning environment management skills in terms of maintaining a positive classroom climate and encouraging an intellectually competitive environment were significant predictors of students' autonomy in Marilog District in Davao City. The study, therefore, was conducted to further utilize findings through publication in a reputable research journal.

KEY WORDS

1. educational management 2. teachers' learning environment
3. management skills

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1. Introduction

Vocational Education and Training (VET) prepares trainees for jobs that are based on manual and practical activities, traditionally non-academic and totally related to a specific trade, occupation, or vocation. It is the preparation of persons at the secondary level to enter employment in the area of occupation where students are trained and best suited. On the other hand, technical education prepares individuals who have gone through the secondary high school level in the areas of trade, agriculture, fishery and different kinds of technology to enter upon employment in the places they are trained and best suited. It was emphasized that technical and vocational training is relevant to the needs of the occupation, whose primary purpose is employment. More so, many of today's high school graduates and students are learning to be computer science professionals, chefs, graphic designers, mechanics, engineers, and so forth. While more and more students are entering the workforce with a degree, most lack the hands-

on skills necessary to just jump right in without additional on-the-job –training. A crucial component of technology vocational learning is developing students' autonomy, and how well schoolchildren manage their learning impacts their academic progress. Under the umbrella of learning autonomy, the abilities required for autonomy in educational environments, such as schools, have been researched. Independent learners actively set goals, select appropriate strategies, schedule their time, prioritize materials and information, and change their approach as needed. They also keep track of their progress by asking for feedback on their performance and making the necessary adjustments for upcoming learning activities. So, this study aimed to investigate how teachers' learning environment management skills affected students' learning autonomy. Some studies denoted that students with autonomy in learning perform better academically (Francis et al., 2018). Technology vocational livelihood students who are autonomous in learning are said to be active in the lesson in meaningful ways through involvement in classroom activities, teamwork with teachers and students, and personal reflection on learning, according to Attard (2013). Similarly, autonomous students would look for activities within or outside the classroom that would help them succeed in their learning, according to Ayub et al. (2016). More independent learners will learn more, retain more information, and store more knowledge in their brains than less autonomous students (Kim et al., 2015). On the one hand, Raba (2017) noted that effective learning environment management skills result in autonomous learning, thinking, collaboration, and regulation skills. Also, Le et al. (2017) highlighted that teachers' learning environment management skills can result in using the most beneficial kind of knowledge, which in turn will achieve good and fruitful learning outcomes. Effective learning environment management skills communicate high expectations, and teachers communicate high expectations for students' performance by giving them challenging assignments. Millis (2014) also pointed out that effective learning environment management skills manifest a student-centered classroom management approach. In a student-centered learning environment, the teacher gets to know their students and share their ideas, and their management approaches allow them and their pupils to see one another as people Earlier research demonstrated a connection between teachers' learning environment management skills and students' autonomy in learning. For instance, Wegner et al. (2014) discovered that when teachers apply several learning environment management strategies, students learn better and become more active participants in the learning process. Moreover, Abdulwahab et al. (2016) concluded that low scores benefited the most from the cooperative instructional technique and that students who were taught using it did better than their counterparts in the control group. According to Albeshtawi (2017), effective classroom tactics are related to the learners' participation in their preferred learning styles. Reports of the rapid change in the educational system created a problem for students who self-regulated their learning. According to the report by Otoo et al. (2018), teachers of elementary school students worldwide continue to struggle with students' lack of freedom in their learning. However, according to White's (2015) assessment, most students worldwide ignored modular activities and subjects because they lacked interest or desire, resulting in subpar academic performance across all subject areas. Moreover, McGlynn and Kozlowski (2016) said that misconceptions about fundamental concepts occur in a class where learners are not self-directed, resulting in learning challenges and reducing their desire to stick with challenging and demanding coursework. Taking things in the Philippine setting, Prudente (2011) reported that the deteriorating performance of Filipino students

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in the National Achievement Test (NAT) is already proof that there exists a problem with the learner's self-regulated learning. While there is a growing body of literature examining the relationship between teachers' learning environment management skills and students' autonomy, there remains a notable gap in understanding which domains of teachers' learning environment management skills significantly impact students' autonomy. Thus, in this context, the researcher felt the necessity to fill in this gap by conducting a study that evaluates the influence of teachers' learning environment management skills on students' autonomy using a quantitative approach. Specifically, the researcher made use of descriptive correlational design through regression analysis. The present study intends to contribute to the limited body of knowledge regarding the teachers' learning environment management skills and students' autonomy in Marilog District, Davao City.

1.1. Review of Significant Literature—This section discusses various aspects of teachers' learning environment management skills and students' autonomy, drawing on multiple authors' insights from books, journals, and electronic sources.

1.1.1. General Skills and Pedagogical Strategies—Hamzeh (2014) describes teachers' learning environment management skills as encompassing structured lesson plans and tactics to achieve instructional objectives. Saputra and Aziz (2014) emphasize long-lasting, adaptable, and meaningful learning outcomes. Raba (2017) highlights teaching methods that foster individual learning, critical thinking, and teamwork, requiring innovative methodologies like active, reflective, and problem-oriented approaches. Le et al. (2017) and Van Leeuwen et al. (2013) discuss the importance of practical skills in achieving fruitful outcomes and considering students' learning styles. Effective pedagogical strategies, according to Millis (2014) and Savolainen (2016), focus on student-centered approaches and cooperative learning.

1.1.2. Maintaining Positive Classroom Climate—Hamzeh (2014) defines maintaining a positive classroom climate as strategies to direct behaviors effectively. More and Miller (2015) view behavior management as crucial for teaching success. Blazar (2016) and Sun (2013) argue that positive classroom climates foster self-control and improve instruction. Rogers (2012) and Cakici et al. (2012) emphasize the importance of managing behavior for a conducive learning environment.

1.1.3. Encouraging Intellectually Competitive Environment—Hamzeh (2014) and Suyitno (2017) describe strategies for creating intellectually competitive environments as essential for cognitive development and problem-solving. Francois (2016) and Morin (2014) stress the significance of these strategies in facilitating information processing and skill acquisition. Krawec and Montague (2012) and Dunlosky et al. (2013) highlight the role of cognitive strategies in completing complex tasks and improving learning efficiency.

1.1.4. Respecting Individual Differences—Hamzeh (2014) emphasizes the humane approach of respecting individual differences in learning. Lerner et al. (2014) and Le et al. (2017) note that psychological and social competency training enhances students' abilities and success. Abramovich et al. (2019) support this view, indicating that early training helps in overcoming obstacles and managing stress.

1.1.5. Self-Directed Learning Skills—Ayyildiz and Tarhan (2015) define autonomy as skills enabling students to manage their learning effectively. Hall (2011) describes self-directed learners as responsible, curious, and efficient in time management. Tang and Tseng (2013) focus on self-concept in academic activities, while Izuchi and Onyekuru (2017) link self-concept to academic performance.

1.1.6. Motivational Strategies and Academic Achievement—Sil (2017) and Kabody

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(2013) assert that motivational strategies enhance student engagement and self-directedness. Varga (2017) and Rimm-Kaufman and Sandilos (2013) highlight the importance of positive teacher-student relationships. Dörnyei and Kubanyiova (2014) and Babaee (2012) emphasize motivation's role in achieving long-term goals. Pean (2014) and Lao (2015) discuss performance assessment's importance in developing higher-level thinking and problem-solving skills.

1.1.7. Interest in Learning and Responsibility—Ayyildiz and Tarhan (2015) define interest in learning as a critical aspect of autonomy. Bray and McCLaskey (2015) argue that personalized learning fosters engagement and critical assessment. Manavipour and Saeedian (2016) and Ng (2012) stress the importance of control beliefs for effective learning strategies. Abramovich et al. (2019) and Norton (2017) highlight the impact of motivation and other influences on engagement.

1.1.8. Decisiveness in Learning—Ayyildiz and Tarhan (2015) describe decisiveness as planning and goal-setting. Mbatha (2015) and Brown (2014) emphasize self-efficacy's role in task engagement and persistence. Harding (2019) and Alsaleh (2020) point out the benefits of cognitive skills for achieving learning goals. Panadero (2017) and Wegner et al. (2014) suggest that effective learning management strategies enhance students' independence and engagement.

1.2. Synthesis—Studies examining teachers' learning environment management skills and their impact on students' autonomy consistently highlight the importance of a supportive and well-structured classroom environment. Research consistently shows that a positive and well-managed classroom environment is essential for fostering student autonomy. Teachers who create an atmosphere of trust, respect, and collaboration tend to have students who feel more confident and empowered to take ownership of their learning. The synthesis of studies on teachers' learning environment management skills and students' autonomy underscores the significant role teachers play in creating a conducive atmosphere for autonomy to thrive. A positive, student-centered, and well-structured classroom environment, along with effective teaching strategies and supportive teacher-student relationships, are key factors in empowering students to take ownership of their learning. Ultimately, fostering autonomy can lead to more engaged, motivated, and independent learners. Also, the researcher was able to establish the conceptual framework of the study by explicitly discussing the nature of variables, the choice of population and the method to answer the research objectives identified.

1.3. Theoretical/Conceptual Framework—The study was anchored on three propositions: The proposition on the influence of pedagogical strategies on learning independence by Wegner et al. (2014) and the Proposition on professional development by Zakaria and Iksan (2012). According to Wegner et al. (2014), when teachers use several teaching techniques in the classroom, students learn better and become more active participants in the learning process. Students are more engaged when teachers apply teaching tactics in the classroom, and they always recall what they did rather than what they memorized. Knowledge was not merely conveyed when students were actively engaged in the learning process; it was also purposefully generated by the learner. More so, Zakaria and Iksan (2012) hypothesized that efficient learning management systems enable students to share resources, challenge one another's findings, and support their own arguments, all of which necessitate the application of higher-order thinking on the part of the learners. Students could practice communicating scientific concepts by using pedagogical tools. Students benefit from pedagogical practices in a variety of ways, which leads to deeper learning connections.

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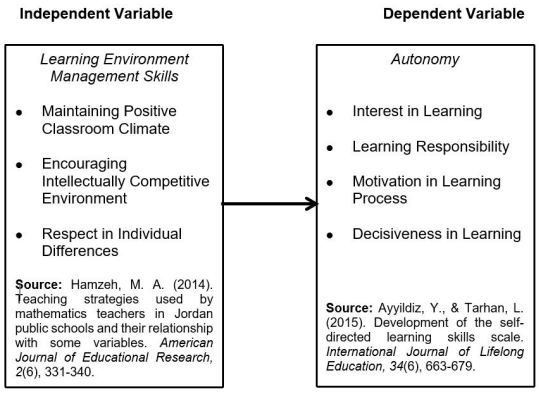

Fig. 1. The Conceptual Framework of the Study

As shown in Figure 1, the study consists of two variables. The independent variable is the learning environment management skills or the generalized plan for a lesson, which includes structure, instructional objectives, and an outline of planned tactics necessary to implement the strategies. According to Hamzeh (2014), the measures of teachers' learning environment management skills are maintaining positive classroom climate or the strategies that strictly direct behaviors which could be measured and noticed; encouraging an intellectually competitive environment or the group of techniques, principles or basis that are used to facilitate acquiring, processing, storing, and recalling information in a particular situation; and respect in individual differences or the approach calls for respecting a learner's abilities and humanizing the process of learning, it also calls for paying much attention to the learner's effectiveness state. The dependent variable was the students' autonomy or abilities that helped them determine their learning needs. As proposed by Ayyildiz and Tarhan (2015), the measures of students' autonomy were interest in learning or the importance given by the individual in learning; learning responsibility or one's responsibility for one's learning; motivation in the learning process or the motivation and eagerness towards learning; and decisiveness in learning or one's initiative to plan.

1.4. Statement of the Problem—The study was set to decipher which domains of teachers' learning environment management skills significantly influence students' autonomy in Marilog District, Davao City. Specifically, this study sought to answer the following questions:

(1) What is the extent of teachers' learning environment management skills in terms of:
    (1) maintaining a positive classroom climate;
    (2) encouraging an intellectually competitive environment; and
    (3) respect for individual differences?
(2) What is the extent of students' autonomy in terms of:
    (1) interest in learning;
    (2) learning responsibility;
    (3) motivation in the learning process; and
    (4) decisiveness in learning?
(3) Is there a significant relationship between teachers' learning environment management skills and students' autonomy in Marilog District, Davao City?
(4) Which domains of teachers' learning environment management skills significantly influ-

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ence the students' autonomy in Marilog District, Davao City?

1.5. Hypothesis—The following hypotheses were tested at a 0.05 level of significance: H01: There is no significant relationship between teachers' learning environment management skills and students' autonomy in Marilog District, Davao City. H02: None of the teachers' learning environment management skills domains significantly influence the students' autonomy in Marilog District, Davao City. Considering the cited problem, the researcher finds it timely to propose this study, which looks into the relationship between teachers' learning environment management skills and students' autonomy in Marilog District, Davao City. Hence, the researcher hopes that this study would be beneficial to identified sectors of the academe: Department of Education. Research in this area can inform the development of evidence-based education policies and guidelines that promote effective classroom management and student autonomy. Also, DepEd could allocate resources for teacher training and professional development programs focused on creating supportive learning environments that enhance student autonomy. Policy Makers. Research findings could help establish accountability measures for schools and educators to ensure that they prioritize effective classroom management strategies that empower students. School Principals. Principals could use research insights to create a school culture that values and supports effective classroom management and student autonomy, leading to a more positive learning environment. They can also identify areas where teachers may need additional support and training in classroom management skills that promote student autonomy, leading to improved teaching practices. Teachers. TLE teachers could benefit from research findings by enhancing classroom management skills, ultimately fostering a more autonomous and engaged student body. Understanding the link between classroom management and student autonomy could also help teachers create more effective and engaging learning environments, resulting in improved learning outcomes. Students. Students benefit from a classroom environment where teachers have strong management skills that encourage autonomy. They can become more self-directed learners, leading to improved academic and personal growth. More so, developing autonomy in school prepares students for lifelong learning and self-management, crucial skills in today's rapidly changing world. Future Researchers. Future researchers could build upon existing studies to validate findings, refine theories, and discover new strategies for enhancing classroom management and student autonomy.

2. Methodology

This chapter will outline the processes and steps involved in conducting the study. This will encompass selecting the study's design, identifying the respondents and the sampling method, choosing the research instruments for data collection, and delineating the data analysis process. The researcher employed artificial intelligence methods to meticulously proofread this work during its preparation. Artificial Intelligence (AI) enhanced the manuscript's quality, coherence, and precision. This methodology is being openly communicated to adhere to ethical norms in research. Leveraging AI for proofreading underscores a commitment to the responsible use of cutting-edge technologies and acknowledges AI's growing role and potential in professional and academic writing.

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2.1. Research Design—The study employed a non-experimental design utilizing the descriptive correlation technique of research to gather data, ideas, facts, and information related to the study. Quantitative research deals with numbers, logic, and objective stances. It focuses on numeric and unchanging data detailed, convergent reasoning, and the generation of various ideas about a research problem (Babbie et al., 2010). According to Myers and Well (2013), correlated design examines how the independent variable influences the dependent variable and establishes cause-and-effect relationships between variables. It enabled the researcher to observe two variables at a point in time and helped describe the relationship of the factors of both variables. Moreover, the study also looked into the relationship among two variables– teachers' learning environment management skills and students' autonomy. The study investigated which domains of teachers' learning environment management skills significantly influence students' autonomy in Marilog District, Davao City.

2.2. Research Respondents—The study's respondents were elementary school teachers in Marilog District, Davao City. In this study, 222 respondents were selected through a stratified random sampling technique. Stratified random sampling was a method of sampling that involved the division of a population into smaller sub-groups known as strata. In this study, specific inclusion criteria were implemented to determine the respondents. The primary consideration of this study was to choose respondents who could provide information to achieve the purpose of this study. Hence, only those permanent-regular elementary school teachers in Marilog District, Davao City, those who were not subjected to any complaints, and those who voluntarily signed the ICF were given the survey questionnaires. Moreover, the study was delimited only to the nature of the problem based on the research questions, and thus, it did not consider the performance rating of the teachers.

2.3. Research Instrument—The study used researcher-made survey questionnaires to suit the current investigation. The questionnaire is composed of two parts. The first tool concerns teachers' learning environment management skills as perceived by the students. This questionnaire was distributed among the three indicators: maintaining a positive classroom climate, encouraging an intellectually competitive environment, and respecting individual differences. The scale obtained a Cronbach's alpha value of 0.893 for maintaining a positive classroom climate, 0.730 for encouraging an intellectually competitive environment, 0.731 for respect for individual differences, and an overall value of 0.934. The questionnaire made use of a 5-point Likert scale and was determined based on the following ranges of means:

Range of Mean	Descriptive Level	Interpretation
4.20 - 5.00	Very Extensive	The teachers' learning environment management skills is always observed.
3.40 – 4.19	Extensive	The teachers' learning environment management skills is oftentimes observed.
2.60 – 3.39	Moderately Extensive	The teachers' learning environment management skills is sometimes observed.
1.80 – 2.59	Less Extensive	The teachers' learning environment management skills is seldom observed.
1.00 – 1.79	Not Extensive	The teachers' learning environment management skills is never observed.

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The second part of the instrument is about students' autonomy. This questionnaire indicated an interest in learning, learning responsibility, motivation in the learning process, and decisiveness in learning. The reliability of the original scale ranges from 0.80 to 0.90, which makes it reliable. The new scale obtained a Cronbach's alpha value of 0.892. The instrument made use of a 5-point Likert scale that was determined based on the following range of mean:

Range of Mean	Descriptive Level	Interpretation
4.20 - 5.00	Very Extensive	The students' autonomy is always manifested.
3.40 – 4.19	Extensive	The students' autonomy is oftentimes manifested.
2.60 – 3.39	Moderately Extensive	The students' autonomy is sometimes manifested.
1.80 – 2.59	Less Extensive	The students' autonomy is rarely manifested.
1.00 – 1.79	Not Extensive	The students' autonomy is never manifested.

2.4. Data Gathering Procedure—The researcher undertook the steps in conducting the study after validating the research questionnaire. Permission to Conduct the Study. The researcher obtained permission to conduct the study and received endorsement from the Dean of the Graduate School. The endorsement letter was attached to the permission letters, which were then endorsed by the school's division superintendent and the principals of the selected public schools in Marilog District, General Davao City. Distribution and Retrieval of the Questionnaire. After the approval to conduct the study, the researcher distributed the research instrument to the respondents. Upon distributing the questionnaires, the benefits of the survey were briefly discussed and explained to the identified respondents of the study. For the administration of the questionnaire, the study's respondents were given enough testing time for the questionnaires to be finished. After this, the data collected were subjected to quantitative analysis. Collation and Statistical Treatment of Data. After the questionnaire was retrieved, each respondent's scores were tallied to organize the data per indicator. After that, each score was subjected to descriptive and inferential analysis using SPSS.

2.5. Ethical Considerations—The researcher promptly observed the protocols deemed necessary as the standard guidelines in carrying out the research study following the study protocol assessment criteria, particularly in managing the population and data. The survey questionnaires with supporting authors were submitted for further evaluation. After the approval from the Ethics Committee, the researcher proceeded to the next phase of the study. Informed Consent. The researcher obtained the consent of respondents through written informed consent. They were properly informed about the purpose of the study, and ample explanations were provided so that they could better understand the reason for their participation and choose whether to participate. It was made clear that respondents' involvement in the study was voluntary. If they refused to participate, they were not forced by the researcher. Besides, the researcher was cautious in ensuring the respondents' psychological well-being. Written permission was secured from the respondents. The researcher informed the respondents that the study aimed to conduct a study on the factors that hinder/promote the students' autonomy about teachers' learning environment management skills and may contribute to the enhancement. Vulnerability of Research Participants. The study's respondents are teachers, so they are not considered vulnerable since all of them are of legal age and are not

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considered highly vulnerable psychologically. The researcher emphasized that the survey was set at the respondents' convenience. Also, the researcher protected the confidentiality of the information disclosed. Privacy and Confidentiality. This study observed the Data Privacy Act of 2012, wherein the researcher assured that the data could not be traced back to the respondents, who were the natural source of information, to protect the participants' identities. Moreover, the researcher assured that no personal data would be shared without the respondents' consent. Thus, access was limited to the researcher alone to ensure that no personal data would be exposed. To protect the privacy of the respondents, it was assured that the researcher was the only person who could access the data on the survey. After the necessary data was collected, the researcher permanently disposed of all the survey questionnaires and deleted the data results to ensure that data could not be traced back to the respondents, who were the natural sources of information. Risk, Benefits, and Safety - In administering the survey questionnaires, the researcher fully disclosed to the respondents the nature of their participation and explained thoroughly and adequately the purpose and benefits of the study and the confidentiality of their responses as stated in the online survey questionnaire. Without restrictions, the respondents could ask questions related to the study. Further, the researcher ensured that the respondents were not subjected to harm in any way whatsoever. Moreover, the questionnaire and interview guide used in this study did not contain any degrading or unacceptable statements offensive to the study's respondents. Likewise, this study is designed purely to collect academic information related to the study, and they were not asked for personal information. To minimize inconvenience, the researcher ensured the respondents were given ample time to answer the survey questionnaire. The respondents were given the freedom not to answer questions that made them feel any psychological or emotional distress, and they would be free to withdraw as respondents to the study if they felt that they could not discuss the information that was being asked of them. The researcher valued their participation and placed their welfare as the highest priority during the study.

2.6. Data Analysis—The following were the statistical tools utilized by the researcher in processing the gathered data: Mean. This was useful in characterizing the teachers' learning environment management skills and students' autonomy. This was used to supply the answer for objectives 1 and 2. Pearson Product Moment Correlation. It was used in this study to assess the significant relationship between independent (teachers' learning environment management skills) and dependent (students' autonomy) variables. It is a statistical measure of the strength of a linear relationship between paired data. In a sample, it is usually denoted by r. This was used to supply the answer for objective 3. Multiple Linear Analysis. It was applied to evaluate which domains of teachers' learning environment management skills significantly influence the students' autonomy. This was used to supply the answer for objective 4.

3. Results and Discussion

This chapter presents the results generated from the data gathered. It was sequenced based on the study's objectives, as presented in the first chapter. Thus, it presents the extent of teachers' learning environment management skills and students' autonomy in Marilog District in Davao City, the significant relationship between teachers' learning environment management skills and students' autonomy in Marilog District in Davao City, and the domains of teachers' learning

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environment management skills that significantly influence the students' autonomy in Marilog District in Davao City.

3.1. Teachers' Learning Environment Management Skills—

3.1.1. Maintaining a Positive Classroom Climate—Table 1 Teachers' learning environment management skills in Marilog District, Davao City, were assessed by the respondents as extensive with a category mean of 3.68, interpreted as oftentimes observed. The mean rating of the different items ranges from 3.25 to 4.19. On one hand, the item depending on criteria in evaluating the students has a mean rating of 3.42, described as extensive and interpreted as oftentimes observed by respondents. On the other hand, the item Providing students with information regarding the accuracy of the answers has a mean of 4.19, which is described as extensive and interpreted as oftentimes observed. The result implies that students and the teacher treat each other respectfully, valuing each individual's contributions, perspectives, and feelings. The result is congruent with the view of More and Miller (2015) that a positive classroom climate promotes trust, respect, and emotional safety. In such an environment, students are more likely to feel comfortable taking academic risks, asking questions, and actively participating in class. This, in turn, leads to improved learning outcomes as students are more engaged and motivated to learn. Adding more, the result supports the view of Cakici et al. (2012) that students' emotional and psychological well-being is positively affected, leading to reduced stress and anxiety, which can, in turn, improve their overall mental health.

Table 1. The Extent Teachers' Learning Environment Management Skills in Terms of Maintaining Positive Classroom Climate

No.	**Statement**	**Mean**	**Descriptive Rating**
1.	Providing students with information regarding the accuracy of the answers.	4.19	Extensive
2.	Training the students on distinguishing between the different characteristics of the same concept.	3.98	Moderately Extensive
3.	Using specific questions that have specific answers.	4.12	Extensive
4.	Helping students imitate desired models.	3.42	Extensive
5.	Awarding students for the right answers.	3.64	Extensive
6.	Using direct presentation to provide learners with information.	3.39	Moderately Extensive
7.	Depending on the criteria for evaluating the students.	3.25	Moderately Extensive
8.	Training students on learning simple behaviors till they reach the complicated behavior.	3.48	Extensive
	Overall Mean	**3.68**	**Extensive**

3.1.2. Encouraging Intellectually Competitive Environment—Results in Table 2 show that teachers' learning environment management skills are 3.73, which means that this domain of

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students' autonomy of public elementary school teachers in Marilog District, Davao City, is, oftentimes, manifested. The mean rating of the different items ranges from 3.24 to 4.15. Training learners to plan, observe, and evaluate their teaching activities reflects a mean rating of 3.24, described as moderately extensive and interpreted as an item sometimes observed. Meanwhile, the item, Encouraging learners to verify information and facts before giving judgment, shows a rating of 4.15, described as extensive and interpreted as an item oftentimes observed by the teachers in public elementary school students in Marilog District, Davao City.

Table 2. The Extent Teachers' Learning Environment Management Skills in Terms of Encouraging Intellectually Competitive Environment

No.	Statement	Mean	Descriptive Rating
1.	Presenting the main ideas of the topic at the beginning of the class.	3.93	Extensive
2.	Reaching-learning situation by connecting the lesson parts together.	3.29	Moderately Extensive
3.	Encouraging learners to verify information and facts before giving judgment.	4.15	Extensive
4.	Moving from the abstract to the examples.	4.05	Extensive
5.	Asking students to do a written or verbal summary of the information they get.	3.28	Moderately Extensive
6.	Training learners to plan, observe, and evaluate their teaching activities.	3.24	Moderately Extensive
7.	Training students on generating unified answers for the stimulator raised for them.	3.89	Extensive
8.	Helping students identify their own learning methods.	4.03	Extensive
	Overall Mean	**3.73**	**Extensive**

This means that teachers create a classroom atmosphere where students are motivated to excel academically, challenge themselves, and strive for excellence. They set high academic standards and expectations for all students, challenging them to reach their full potential. This finding is congruent with Suyitno's (2017) idea that students develop strong critical thinking and problem-solving skills, which are essential for success in higher education and the workforce. In addition, the result supports the view of Morin (2014) that a competitive environment can boost students' intrinsic motivation to learn and achieve as they seek to surpass their own and their peers' academic achievements. Students are actively engaged in their learning, challenged, and motivated to explore and understand complex topics.

3.1.3. Respect in Individual Differences— Specifically, teachers' learning environment management skills with respect to individual differences acquired a category mean of 3.64, described as extensive, which means that this domain of the student's autonomy is often observed in Marilog District, Davao City. The table 3 further reveals that the mean rating of the items ranges from 3.12 to 4.28. It is noteworthy that the item Encouraging students to

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interact positively amongst themselves has a mean rating of 3.12, described as moderately extensive, interpreted as an item that is sometimes observed. In contrast, item, Allowing students to have more clarifications and explanations on the specific stimulus, has a mean rating of 4.28, described as very extensive and interpreted as item always manifested. This implies that teachers create an inclusive and supportive learning environment that acknowledges and values each student's diverse backgrounds, abilities, learning styles, and perspectives. This finding is congruent with the view of Lerner et al. (2014) that teachers recognize that students have unique learning needs and preferences, and they tailor their teaching methods and materials to accommodate these differences. Moreover, this finding is congruent with Abramovich et al. (2019) that when students feel valued and respected for who they are, they are more likely to be engaged in their learning and motivated to succeed. An inclusive classroom environment leads to improved learning outcomes, as students can focus on their academic growth without the distraction of feeling marginalized or misunderstood.

Table 3. The Extent Teachers' Learning Environment Management Skills in Terms of Respect in Individual Differences

No.	Statement	Mean	Descriptive Rating
1.	Allowing students more clarifications and explanations on the certain stimulus.	4.28	Very Extensive
2.	Supporting students' sympathy toward others.	4.03	Extensive
3.	Helping learners have confidence in themselves.	3.18	Moderately Extensive
4.	Encouraging students to interact positively amongst themselves.	3.12	Moderately Extensive
5.	Taking part in improving students' ability to control their reactions.	4.15	Extensive
6.	Distributing different teaching-learning tasks to students.	3.28	Moderately Extensive
7.	Letting students have their conversations positively.	3.68	Extensive
8.	Training students to solve their problems in a comfortable way.	3.39	Moderately Extensive
	Overall Mean	**3.64**	**Extensive**

Lastly, Table 4 summarizes teachers' learning environment management skills in Marilog District, Davao City. It shows that the teachers oftentimes observe that the overall mean of learning environment management skills is 3.68, which is described as extensive. This means that students oftentimes observe teachers' learning environment management skills. More so, teachers' learning environment management skills in terms of encouraging intellectual competition acquired the highest mean score of 3.73, described as extensive and interpreted as oftentimes observed. In contrast, teachers' learning environment management skills in terms of re-

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spect in individual differences got the lowest mean score of 3.64 described as extensive and interpreted as teachers' learning environment management skills oftentimes observed by the teachers. This means that ability to create, organize, and maintain a positive and effective classroom environment that supports student learning and well-being is oftentimes manifested. The result is in agreement with the view of Raba (2017) that effective learning environment management skills contribute to improved academic performance as students are more focused, engaged, and motivated in well-organized classrooms. More so, the result agrees with Le et al. (2017) that teachers with strong management skills often experience better classroom behavior, with students understanding and adhering to established expectations and rules. Also, the result is congruent to the findings of Lafont et al. (2017) that teachers who manage the learning environment effectively often promote the development of social and emotional skills among students, including empathy, conflict resolution, and cooperation.

Table 4. Summary of Teachers' Learning Environment Management Skills in Marilog District, Davao City

Indicators	**Mean**	**Descriptive Equivalent**
Maintaining a Positive Classroom Climate	3.68	Extensive
Encouraging Intellectually Competitive Environment	3.73	Extensive
Respect in Individual Differences	3.64	Extensive
Overall Mean	**3.68**	**Extensive**

3.2. Students Autonomy—

3.2.1. Interest in Learning—Table 5 shows that students' autonomy was described by the students in Marilog District, Davao City, as extensive, with a category mean of 3.44. This means that the public elementary school students oftentimes manifest the students' autonomy. The mean rating of the different items ranges from 2.95 to 4.18. The item, Students believing that what they learn is more important than getting a passing grade, has a mean rating of 2.95, described as moderately extensive and interpreted as this item sometimes manifested by public elementary school students. Further, the item Students believing in the importance of playing an active role in learning has a mean rating of 4.18, described as extensive and interpreted as this item oftentimes manifested.

This implies that students are actively interested in their study subjects, curious about new concepts, and eager to participate in educational activities. This finding is congruent with the idea of Bray and McCLaskey (2015) that students who are genuinely interested in learning tend to perform better academically. Their motivation drives them to engage more deeply with the material and seek a deeper understanding. Moreover, this is congruent with the view of Ozerem and Akkoyunlu (2015) that high interest levels lead to greater engagement in classroom activities. Interested students are more likely to participate, ask questions, and actively contribute to discussions. Students who develop a strong interest in learning are more likely to carry this trait into adulthood, becoming lifelong learners seeking knowledge and

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Table 5. The Extent Students Autonomy in Terms of Interest in Learning

No.	Statement	Mean	Descriptive Rating
1.	Students reviewing notes during leisure time to be didactic.	3.08	Moderately Extensive
2.	Students prioritize time for learning while planning a new day.	3.56	Extensive
3.	Students believe in the importance of playing an active role in learning.	4.18	Extensive
4.	Students believe that what they learn is more important than getting a passing grade.	2.95	Moderately Extensive
	Overall Mean	**3.44**	**Extensive**

self-improvement.

3.2.2. Learning Responsibility—This domain of students' autonomy, as shown in Table 8, reflects a moderately extensive category mean of 3.23, which means that it is sometimes manifested. Notably, the mean ratings of the different items range from 2.98 to 3.56. The table further reveals that students took their time to learn related previous subjects well to learn a new subject without difficulty. has a mean rating of 2.98, described as moderately extensive and interpreted as an item sometimes manifested. Meanwhile, the item, Students be able to hold responsible for their learning, has a mean rating of 3.56, described as extensive and interpreted as the students' autonomy is oftentimes manifested.

Table 6. Students Autonomy in Terms of Learning Responsibility

No.	Statement	Mean	Descriptive Rating
1.	Students using the internet for learning purposes instead of having a good time.	3.26	Moderately Extensive
2.	Students should be held responsible for their learning.	3.56	Extensive
3.	Students took their time to learn related previous subjects well in order to learn a new subject without difficulty.	2.98	Moderately Extensive
	Overall Mean	**3.23**	**Moderately Extensive**

This means they can take ownership of their learning, set goals, manage their time effectively, and actively engage in learning. This finding supports the idea of Manavipour and Saeedian (2016) that students who take responsibility for their learning tend to perform better academically, as they are actively engaged in the learning process and motivated to achieve their goals. Learning responsibility fosters problem-solving skills as students proactively seek solutions to challenges they encounter in their studies. This result agrees with Abramovich et al.

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(2019), who found that self-directed learners often exhibit intrinsic motivation, which is more enduring and sustainable than external rewards. A classroom with students with high levels of learning responsibility often creates a positive and collaborative learning environment.

3.2.3. Motivation in Learning Process—As shown in Table 7, this domain has a category mean of 3.79, described as extensive and interpreted that this domain of students' autonomy is often manifested in Marilog District, Davao City. Adding on, the mean ratings of the different items range from 3.39 to 4.28. Specifically, the item, Students do not get bothered even if they could not solve the problems encountered, has a mean rating of 3.39, described as moderately extensive and interpreted as an item sometimes manifested by public elementary school students. The item, Students learning a lesson, no matter how complicated, reflects a mean rating of 4.28, described as very extensive and interpreted as always manifested. The result indicates that students' enthusiasm, drive, and desire to engage actively in their education are oftentimes manifested. It signifies that students are eager to learn, set goals for themselves, and are willing to put in effort to achieve those goals. This finding agrees with the proposition of Curtis (2017) that highly motivated students tend to excel academically as their motivation drives them to invest time and effort in their studies, resulting in better learning outcomes. Adding more, the result is in agreement with the view of Haughery (2017) that motivated learners often exhibit strong critical thinking and problem-solving skills as they actively engage with the material and seek to understand complex concepts. Motivated students are more likely to persist through challenges and setbacks, developing resilience and a growth mindset.

Table 7. Students Autonomy in Terms of Motivation in Learning Process

No.	Statement	Mean	Descriptive Rating
1.	Students learning a lesson, no matter how it is complicated.	4.28	Very Extensive
2.	Students are motivated to learn even in the presence of distracting factors.	3.42	Extensive
3.	Students do not get bothered even if they cannot solve the problems that they encounter.	3.39	Moderately Extensive
4.	Students plan what they should do instead of feeling despair when encountering a difficult subject.	4.07	Extensive
	Overall Mean	**3.79**	**Extensive**

3.2.4. Decisiveness in Learning—Specifically, students' autonomy in terms of decisiveness in learning acquired a category mean of 3.65, described as extensive, which means that this domain of the student's autonomy is oftentimes observed in Marilog, Davao City. Table 8 further reveals that the mean rating of the items ranges from 3.12 to 4.28. It is noteworthy that item, Students finishing homework at the last moment, has a mean rating of 3.12, described as moderately extensive, interpreted as item is sometimes observed while item, Students be able to solve the problems during learning based on cause-and-effect relationship, has a mean rating of 4.28, described as very exten-

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sive and interpreted as item always manifested. The result implies that students are proactive in setting goals, choosing learning paths, and taking action to achieve their academic objectives. The result is in agreement with Harding's (2019) view that decisive students tend to perform better academically because they make purposeful decisions about their studies and allocate resources effectively to meet their goals. Adding more, the result supports the argument of Alsaleh (2020) that decisiveness fosters self-regulation as students take control of their learning, monitor their progress, and adjust their strategies as needed. They excel in time management skills, ensuring sufficient time for studying, assignments, and other educational activities.

Table 8. Students Autonomy in Terms of Decisiveness in Learning

No.	**Statement**	**Mean**	**Descriptive Rating**
1.	Students be able to solve the problems during learning based on a cause-and-effect relationship.	4.28	Very Extensive
2.	Students organize study hours by making plans.	4.03	Extensive
3.	Students clearly and implicitly know the objectives of the new subject to be learned.	3.18	Moderately Extensive
4.	Students finish homework at the last moment.	3.12	Moderately Extensive
5.	Students review the previous knowledge that forms the basis for the new subject when they start to learn something new.	4.15	Extensive
	Overall Mean	**3.65**	**Extensive**

Lastly, as shown in Table 9, is the summary of students' autonomy in Marilog District, Davao City public elementary schools. As shown in the table, the summary of students' autonomy obtained an overall mean score of 3.53 with a descriptive rating of extensive and interpreted as oftentimes manifested by the students in Marilog District, Davao City. Adding more, results in Table 9 show that students' autonomy in terms of motivation in the learning process acquired the highest mean score of 3.79, described as extensive and interpreted as oftentimes manifested, while students' autonomy in terms of learning responsibility acquired the lowest mean score of 3.23 described as moderately extensive and interpreted as sometimes manifested. The result indicates that students have a sense of agency and are actively involved in decisions related to their education. This finding agrees with the view of Hall (2011) that autonomous students often perform better academically because they are actively engaged, motivated, and responsible for their learning. Also, this supports the view of Izuchi and Onyekuru (2017) that autonomous learners tend to exhibit strong critical thinking and problem-solving skills as they actively seek solutions and explore ideas. Autonomy in learning cultivates a love for learning and a commitment to self-improvement that extends beyond the classroom, contributing to lifelong learning. Likewise, the result agrees with the idea of Subramanian (2016) that self-

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directed learners find satisfaction and fulfillment in the learning process itself, fostering a sense of accomplishment and curiosity.

Table 9. Summary of Students' Autonomy in Marilog District, Davao City

Indicators	**Mean**	**Descriptive Equivalent**
Interest in Learning	3.44	Extensive
Learning Responsibility	3.23	Moderately Extensive
Motivation in the Learning Process	3.79	Extensive
Decisiveness in Learning	3.65	Extensive
	Overall Mean	**3.53**

3.3. Relationship Between Teachers' Learning Environment Management Skills and Students' Autonomy in Marilog District, Davao City—The results of the analysis of the relationship between teachers' learning environment management skills and students' autonomy in Marilog District, Davao City, are presented. Bivariate correlation analysis using Pearson product-moment correlation was used to determine the relationship between the mentioned variables. Table 10 shows that teachers' learning environment management skills have a significant positive relationship with the students' autonomy in Marilog District in Davao City with a p-value of .000 that is less than .05 level of significance (two-tailed) (r = 0.554, p ¡ 0.05). It means that as the extent of teachers' learning environment management skills changes, students' autonomy also changes significantly. Adding more, results on the table shows that teachers' learning environment management skills in terms of maintaining positive classroom climate; encouraging intellectually competitive environment; and respect in individual differences have significant positive relationship with the students' autonomy with a p-value of .000 that is less than .05 level of significance (two-tailed) (r = 0.411, p ¡ 0.05), (r = 0.526, p ¡ 0.05), and (r = 0.229, p ¡ 0.05), respectively. The findings agree with the proposition of Khalid et al. (2013) that teachers who create a growth mindset in the classroom emphasize the value of effort and persistence. This mindset encourages students to take initiative, embrace challenges, and view setbacks as opportunities for growth. Also, the findings agree with Ridwan et al. (2019) that teachers can teach students how to self-assess and evaluate their progress. When students learn to monitor their learning and set their standards, they become more autonomous in their educational journey. Adding more, the result agrees with the view of Albeshtawi (2017) that skilled teachers provide constructive feedback that helps students reflect on their work and make improvements. This feedback process encourages students to take an active role in assessing and refining their learning.

3.4. Influence of Teachers' Learning Environment Management Skills on the Students' Autonomy in Marilog District, Davao City—The significance of the influence of teachers' learning environment management skills on the student's autonomy in Marilog District, Davao City, was analyzed using linear regression analysis. Table 11 shows that when teachers' learning environment management skills in terms of maintaining a positive classroom climate, encouraging an intellectually competitive environment, and respect for individual differences are

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Table 10. Relationship Between Teachers' Learning Environment Management Skills and Students' Autonomy in Marilog District, Davao City

Variables	r-value	p-value	Interpretation	Decision
Maintaining a Positive Classroom Climate	0.411*	0.000	Significant	Reject H0
Encouraging Intellectually Competitive Environment	0.526*	0.000	Significant	Reject H0
Respect in Individual Differences	0.229*	0.001	Significant	Reject H0
Overall Teachers' Learning Environment Management Skills	0.554*	0.000	Significant	Reject H0

- Perfect Correlation for $r = 1.00$
- Strong Correlation for $0.7 \leq r < 1.00$
- Moderate Correlation for $0.3 \leq r < 0.7$
- Weak Correlation for $0.3 < r < 0.00$
- No Correlation for $r = 0.00$

considered predictors of students' autonomy, the model is significant, as evident in the F-value of 27.837 with p¡0.05. Therefore, teachers' learning environment management skills predict the students' autonomy in Marilog District, Davao City. Meanwhile, the computed adjusted R2 value of 0.351 indicates that teachers' learning environment management skills have contributed significantly to the variability of students' autonomy by 35.10 percent of the total variability. Therefore, the difference of 64.90 percent was credited to other factors not covered in this study. In addition, the table shows that there are domains of teachers' learning environment management skills that significantly influence the students' autonomy in Marilog District, Davao City. This table also indicates that teachers' learning environment management skills in maintaining a positive classroom climate and encouraging an intellectually competitive environment are significant when the predictors are considered. This means that the extent of students' autonomy increases by 0.161 and 0.295 for each unit increase in teachers' learning environment management skills. Thus, this leads to rejecting the null hypothesis that none of the domains of teachers' learning environment management skills significantly influence the students' autonomy in Marilog District, Davao City.

The findings align with the study of Zakaria and Iksan (2012), which states that practical management skills involve setting clear expectations and guidelines for classroom behavior and academic performance. Students can better plan and manage their learning activities when they know what is expected of them. Lastly, the result corroborates with Wegner et al. (2014) that teachers with solid learning environment management skills create a classroom culture that values independence and self-directed learning. When students feel safe, respected, and encouraged to express their ideas and preferences, they are more likely to take ownership of their learning.

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Table 11. The Influence of Teachers' Learning Environment Management Skills on the Students' Autonomy in Marilog District, Davao City

Variables	B	Beta	S.E.	p-value	Decision
Maintaining a Positive Classroom Climate	0.161*	.	0.231	0.045	Reject H0
Encouraging Intellectually Competitive Environment	0.295*	.	0.408	0.047	Reject H0
Respect in Individual Differences	0.085	.	0.108	0.082	Accept H0
$R^2 = 0.351$					
F-value = 27.837*					
p-value = 0.000					

- *Significant @ $p < 0.05$

4. Conclusions and Recommendations

This part of the paper presents the researcher's conclusions and recommendations. The discussions were supported by the literature presented in the first chapters, and the conclusions were statements of the problem presented in this study.

4.1. Findings—The primary objective of this study was to evaluate which domains of teachers' learning environment management skills significantly influence the students' autonomy, utilizing a non-experimental quantitative design and the descriptive-correlation technique. The researcher selected 222 elementary school teachers in Marilog District, Davao City, as the respondents through a stratified random sampling method. The researcher used modified and enhanced adapted survey questionnaires, which were pilot-tested in a nearby school to ensure high reliability and internal consistency of the items in the instrument. Teachers' learning environment management skills in Marilog District, Davao City, got an overall mean of 3.68 with an extensive descriptive rating. Also, teachers' learning environment management skills in maintaining a positive classroom climate, encouraging an intellectually competitive environment, and respecting individual differences obtained mean scores of 3.68, 3.73, and 3.64, respectively. Students' autonomy in Marilog District, Davao City, has an overall mean of 3.53 with an extensive descriptive rating. Also, students' autonomy regarding interest in learning, learning responsibility, motivation in the learning process, and decisiveness in learning obtained mean scores of 3.44, 3.23, 3.79, and 3.65, respectively. The result showed that teachers' learning environment management skills have a significant positive relationship with the students' autonomy in Marilog District in Davao City with a p-value of .000 that is less than .05 level of significance (two-tailed) (r = .555, p¡0.05). The teachers' learning environment management skills in maintaining a positive classroom climate and encouraging an intellectually competitive environment significantly influenced the students' autonomy in Marilog District in Davao City, as evidenced by the F-value of 27.837 and p¡0.05. The r2 value of 0.351 indicated that teachers' learning environment management skills had contributed significantly to the variability of the students' autonomy in the Marilog District in Davao City by 35.10

4.2. Conclusions—Based on the findings of this study, several conclusions were gener-

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ated: Teachers' learning environment management skills in Marilog District, Davao City, were extensive. Meanwhile, teachers' learning environment management skills in maintaining a positive classroom climate, encouraging an intellectually competitive environment, and respecting individual differences obtained an extensive descriptive rating. This means that the ability to create, organize, and maintain a positive and effective classroom environment that supports student learning and well-being is oftentimes manifested. Students' autonomy in Marilog District, Davao City, was rated as extensive. Students' autonomy in terms of interest in learning, learning responsibility, motivation in the learning process, and decisiveness in learning belong to the extensive rating. The result indicates that students have a sense of agency and are actively involved in decisions related to their education. The result showed that teachers' learning environment management skills have a significant positive relationship with the students' autonomy in Marilog District, Davao City. As the extent of the teachers' learning environment management skills changes, students' autonomy also significantly changes. The extent of teachers' learning environment management skills in terms of maintaining a positive classroom climate and encouraging an intellectually competitive environment are the domains that significantly influenced the students' autonomy in Marilog District, Davao City. This affirms that students' autonomy is a function of teachers' learning environment management skills in Marilog District, Davao City.

4.3. Recommendations—The researcher may recommend that DepEd allocate resources and support ongoing professional development opportunities for teachers. DepEd may also offer training programs and workshops to enhance teachers' learning environment management skills. DepEd may also develop and implement policies promoting autonomy and self-directed learning for students and teachers. It may also encourage innovation in teaching methods and curricular design. School principals may create a supportive and collaborative culture where teachers feel empowered to experiment with innovative teaching methods and personalize learning experiences. They may also organize regular professional development opportunities for teachers, focusing on classroom management, student engagement, and strategies to promote autonomy. Students may take the initiative to set clear academic and personal educational goals. They may write them down and revisit them regularly. They should also develop good time management skills to allocate sufficient time for studying, assignments, and other educational activities. Lastly, researchers may conduct further analysis on the factors that influence the students' autonomy in Marilog District in Davao City since teachers' learning environment management skills only contributed 35.10 percent to the total variability.

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