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The Impact of the Center of Excellence (PK) School Assistance Program on Graduate Employability through Teacher Motivation and Educational Facilities at State Vocational High School 1 Kepanjen, Malang Regency

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Abstract: This study investigates the effect of the Center of Excellence (PK) school assistance program on graduate employability, mediated through teacher work motivation and the availability of educational facilities at State Vocational High School 1 (SMK N 1) Kepanjen, Malang Regency. Using a quantitative approach and Structural Equation Modeling (SEM) for data analysis, data was collected from 295 alumni and teaching staff. The results highlight that the PK program significantly enhances the quality of the curriculum, provides targeted teacher training, and improves school infrastructure to better align with industrial demands. Moreover, the study demonstrates that teacher motivation, driven by recognition and institutional support, plays a crucial role in enhancing students' employability. Additionally, the availability of modern educational facilities, such as updated laboratories and workshops, further strengthens graduates' readiness for the workforce. Mediation analysis confirms that both teacher motivation and infrastructure development significantly contribute to graduates' employability. These findings suggest that strengthening vocational education through well-targeted assistance programs and continued industry collaboration can bridge the gap between vocational training and the job market, offering valuable policy recommendations to enhance vocational education outcomes.
Keywords: Vocational Education, Center of Excellence, Employability, Teacher Motivation, School Infrastructure, Industry Collaboration.

I. INTRODUCTION

Vocational education plays a strategic role in preparing a workforce that is ready and competitive in the industrial world. However, data shows that graduates from Vocational High Schools (SMK) still face higher unemployment rates compared to other education levels. One of the main reasons for this is the mismatch between the competencies of graduates and the needs of the industry, both in technical skills and soft skills. To address this, the government, through the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek), launched the Vocational High School Center of Excellence (SMK-PK) program to improve the quality of vocational education to better align with the demands of the workforce.

The SMK Center of Excellence program provides assistance in the form of curriculum enhancement, teacher training, and the provision of infrastructure and facilities that support industry-based learning. With this program, it is expected that schools can build closer partnerships with the business and industrial sectors (DUDI), ensuring that SMK graduates possess relevant competencies and are ready to compete in the job market. However, the effectiveness of the SMK-PK assistance in improving graduate absorption still requires further research, especially regarding the mediating factors that influence its impact, such as the work motivation of educators and the quality of school facilities.

Work motivation of educators is a key factor in the successful implementation of vocational education programs. Teachers with high motivation are more likely to adopt innovative teaching methods and ensure that students acquire skills that meet industry needs.

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Additionally, adequate facilities, such as modern laboratories and up-to-date practice equipment, also play a role in enhancing the quality of learning. Without proper facilities, students will struggle to master the practical skills required in the workforce.

SMK N 1 Kepanjen, Malang Regency is one of the schools receiving SMK-PK assistance and is committed to improving the absorption of its graduates through this program. Despite receiving support, challenges remain, such as how to optimally utilize this assistance to increase the motivation of educators and the quality of school facilities. Therefore, it is important to assess the extent to which the SMK-PK assistance impacts graduate absorption through the improvement of educator work motivation and available facilities.

This study aims to analyze the impact of SMK-PK assistance on graduate absorption through educator work motivation and school facilities at SMK N1 Kepanjen. The findings of this study are expected to provide recommendations for schools and policymakers in optimizing vocational education assistance programs to enhance graduates' competitiveness in the job market.

II. LITERATURE REVIEW

Vocational Education and Graduate Employability Graduate employability has been widely studied in relation to vocational education. According to Fitri Mukti (2023), the implementation of the SMK Center of Excellence program at SMKS 6 Pertiwi Curup demonstrated positive effects, including improved competencies among educators and better-equipped training facilities. Similarly, Hilman Akbar *et al*., (2022) emphasized the role of industrial work placements (Prakerin) in enhancing the employability of vocational graduates. However, Muhammad Renaldi Irmawan (2019) found that despite efforts to optimize the learning process, inadequate infrastructure continued to hinder effective skill acquisition among students.

The Influence of Teacher Motivation on Educational Outcomes Teacher motivation plays a crucial role in student success and institutional performance. Epi Suryati (2023) highlighted that leadership management and teamwork significantly affect teacher motivation, which in turn influences

teacher performance. Studies have shown that motivation is driven by social needs, recognition, and self-actualization (Hasibuan, 2010). Effective leadership, professional development opportunities, and performance-based incentives are essential factors that contribute to maintaining high motivation among vocational educators.

Infrastructure and Its Impact on Learning Outcomes The availability of adequate infrastructure, including laboratories, workshops, and digital learning tools, is fundamental to the effectiveness of vocational education. Research by Saryono and Bangun (2016) confirmed that the availability and relevance of equipment to the curriculum directly impact the quality of learning. Similarly, Melky Yulius (2020) identified that infrastructure management, including planning, utilization, and maintenance, is crucial for sustaining the quality of vocational education. Nevertheless, financial constraints often pose challenges to maintaining and upgrading these facilities.

The Relationship Between Government Assistance and Educational Quality Government assistance programs such as the SMK Center of Excellence aim to bridge gaps in vocational education by providing funding for infrastructure and professional development. According to the Ministry of Education, Culture, Research, and Technology (2021), these programs focus on aligning vocational curricula with industry needs to ensure that graduates possess relevant skills. Studies by Cahya & Yunus (2021) and Aulya Chasovy (2023) further support the notion that structured management of school resources and collaboration with industry partners enhance the effectiveness of vocational training.

The literature reviewed above indicates a strong interconnection between government assistance, teacher motivation, infrastructure availability, and graduate employability. The SMK Center of Excellence program is positioned as a strategic initiative that integrates these elements to enhance the quality of vocational education in Indonesia. Theoretical models such as Structural Equation Modeling (SEM-PLS) have been used in previous studies (Fauzan *et al*., 2023) to assess the relationships between these variables. In the Fig 1 below the Conceptual Framework's provided:
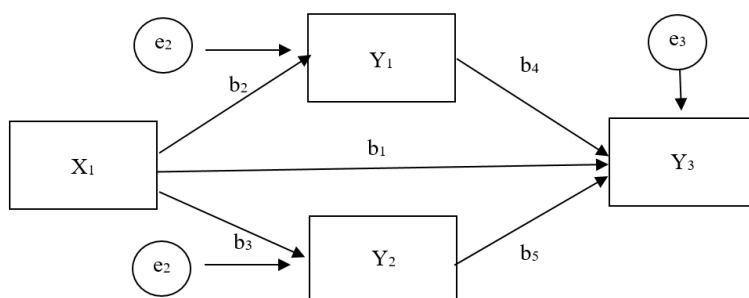
Table: Variables and Indicators

No	Variable	Indicator	Item Statement
1	Assistance from School Centers of Excellence (PK)	1) Fund Allocation	Utilization of fund allocation
			Reporting on fund usage
		2) Program Relevance	Relevance of the assistance to student needs
			Relevance of the assistance to student development
		3) Fund Management	Teacher participation in planning
			Transparency in fund management
2	Teacher Work Motivation	1) Social Needs	Leadership communication
			Quality of interpersonal relationships
			Participation in social activities
		2) Need for Recognition	Recognition and appreciation for work
			Opportunities for receiving awards
			Support from school management
			Effectiveness of school management policies
		3) Need for Self-Actualization	Self-development
			Creativity in teaching
3	Facilities and Infrastructure	1) Equipment Availability	Availability of equipment in school to support learning activities
			Sufficient access to practical equipment
		2) Alignment with Curriculum	Equipment relevance to curriculum needs
			Equipment relevance to curriculum teaching needs
			Equipment alignment with practical curriculum needs
4	Graduate Absorption in Industry	1) Employment Rate	The majority of graduates get a job within 6 months after graduation
			Graduates get jobs relevant to their field of expertise
		2) Competency Match	Graduate competencies match the standards required by the world of work
			Graduate skills support performance in the workplace
		3) Job Search Duration	The school program helps graduates find their first job faster
			The average time for graduates to find their first job after graduation
			Graduates face significant difficulties in finding jobs
			The world of work has standards that are difficult for some graduates to meet
			Graduates experience difficulty in finding jobs relevant to their area of expertise

III. RESEARCH METHODOLOGY

1. Research Design

This study employs a quantitative research design using a survey approach to analyze the impact of the SMK Center of Excellence program. A structural equation modeling (SEM) method will be used to measure the relationships between variables, including government assistance, teacher motivation, infrastructure, and graduate employability. The research design is structured to provide statistical evidence on the effectiveness of vocational education policies.

2. Population and Sample

The population of this study consists of vocational high school teachers, administrators, and graduates from schools participating in the SMK Center of Excellence program. A stratified random sampling technique will be applied to ensure representation from various schools and educational stakeholders. The sample size will be determined based on the total number of participating schools and respondents available.

3. Variables and Indicators

The research design includes three types of variables:
1. Independent Variables:
    o   Assistance from Center of Excellence Schools (X1)

2. Mediating Variable:
    o   Work motivation of educators (Y1)
    o   facilities and infrastructure (Y2)

3. Dependent Variable:
    o   Graduate absorption (Y3)

4. Data Collection Techniques

Data collection will be conducted through online and offline surveys, in-depth interviews with school administrators, and focus group discussions with

vocational graduates. The surveys will include Likert-scale questions to quantify perceptions of the effectiveness of government assistance, infrastructure improvements, and teacher motivation. The qualitative data from interviews and discussions will complement the quantitative findings by providing deeper insights into the challenges and successes of the program.

IV. RESEARCH RESULTS

1. Respondent Profile

Based on the content in the thesis you uploaded, here is a complete table for the respondent characteristics, including age and gender, and more.

Table 1: Respondent Profile Based on Age

No	Age Group	Number of Respondents	Percentage (%)
1	18 years old	47	15.9%
2	19 years old	186	63.1%
3	20 years old	62	21.0%
Total		**295**	**100%**

Age Distribution: The largest group of respondents is aged 19 (63.1%), followed by those aged 20 (21.0%) and 18 years old (15.9%). This suggests that the majority of respondents are in the younger age bracket, likely indicating that the target respondents are recent graduates or early career professionals.

Table 2: Respondent Profile Based on Gender

No	Gender	Number of Respondents	Percentage (%)
1	Male	186	63.0%
2	Female	109	37.0%
Total		**295**	**100%**

The majority of respondents are male (63%), while females make up 37%. This suggests a male-dominated sample, which might reflect the gender distribution of the alumni or the field in question.

2. Descriptive Narration of Loading Factor and Mean

Table 3: Loading Factor and Mean of Variables

Variable	Indicator	Loading Factor	Mean
Assistance from School Centers of Excellence (PK)	1) Fund Allocation	0.927	4.63
	2) Program Relevance	0.922	4.64
	3) Fund Management	0.899	4.58
Teacher Work Motivation	1) Social Needs	0.897	4.60
	2) Need for Recognition	0.901	4.61
	3) Need for Self-Actualization	0.918	4.67
Facilities and Infrastructure	1) Equipment Availability	0.912	4.59
	2) Alignment with Curriculum	0.899	4.53
Graduate Absorption in Industry	1) Employment Rate	0.930	4.73
	2) Competency Match	0.918	4.72
	3) Job Search Duration	0.889	4.68

The loading factor values range from 0.889 to 0.930 across the indicators, which indicates that the items strongly reflect their respective variables. A higher loading factor (closer to 1) means that the indicator is more strongly associated with the variable. All the loading factors are above 0.7, which is generally considered acceptable for model measurement in SEM (Structural Equation Modeling). Assistance from School Centers of Excellence (PK): All indicators under this variable have strong loading factors, suggesting that the school's funding allocation, program relevance, and fund management are all very well-reflected by the survey questions. The high mean scores indicate that the program is seen as very effective and relevant in supporting student development. Teacher Work Motivation: All indicators related to teacher motivation (social needs, recognition, and self-actualization) also have high loading factors, meaning that they are strongly associated with teacher motivation. The highest mean (4.67) for Need for Self-Actualization indicates that teachers feel supported and valued, which may positively affect their teaching performance.

Facilities and Infrastructure: The Equipment Availability indicator has a slightly higher loading factor (0.912), suggesting that the availability of equipment in the school is strongly perceived as a support for learning. The Alignment with Curriculum has a slightly lower loading factor (0.899), which might suggest that while most respondents agree, there could be some room for

improvement in aligning all equipment with the curriculum needs. Graduate Absorption in Industry: The Employment Rate indicator has the highest loading factor (0.930), indicating a very strong association between the availability of jobs for graduates and the quality of their education. The high mean of 4.73 suggests that the majority of graduates have found employment within a short time after graduation, reflecting positively on the relevance of the vocational training provided.

The means are all high, with most indicators averaging between 4.53 and 4.73. This suggests that respondents generally agree with the statements regarding the variables and indicators. For instance, the mean score of 4.73 for Employment Rate under the Graduate Absorption in Industry variable suggests a very strong agreement that most graduates were able to secure employment within 6 months after graduation. Overall,

the loading factors and mean scores indicate that the respondents believe that the school's assistance program (PK), teacher motivation, facilities, and infrastructure, as well as the graduates' absorption into the industry, are all strong and effective. The high mean scores indicate a general consensus of agreement with the statements provided in the survey. The model used for analysis is reliable, as reflected by the high loading factors and solid mean values, supporting the overall positive impact of the program on students and teachers.

3. Descriptive Interpretation of Validity and Reliability

The validity and reliability of the measurement model were assessed using Average Variance Extracted (AVE) and Composite Reliability (CR). These indicators are essential in determining the extent to which the constructs are reliable and valid for capturing the intended variables.
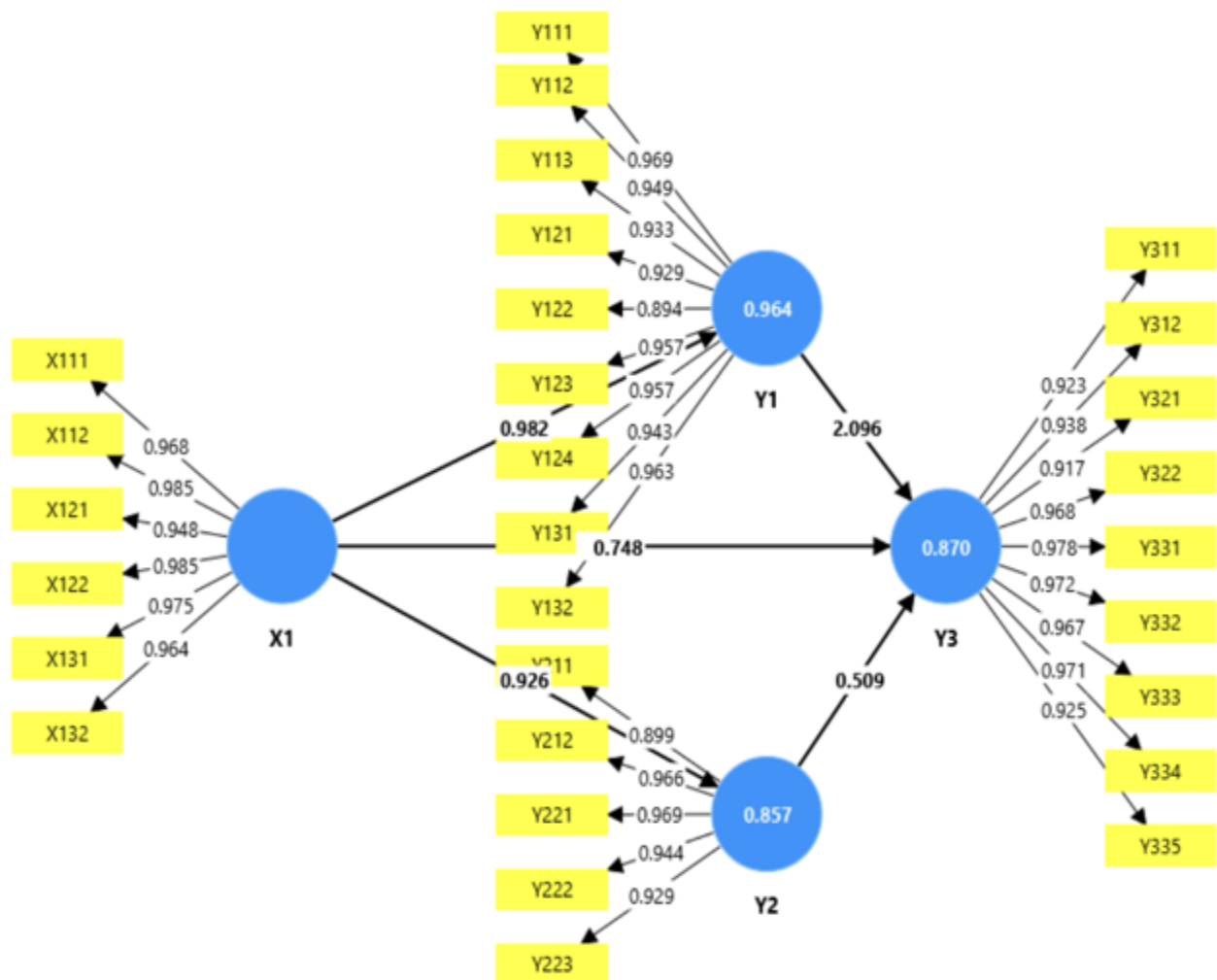

Figure 1: Conceptual Research Frameworks Result

Table 4: Validity and Reliability Results

Variable	Indicator	Loading Factor	AVE (Average Variance Extracted)	CR (Composite Reliability)	Cronbach's Alpha	Interpretation
Assistance from School Centers of Excellence (PK)	1) Fund Allocation	0.927	0.804	0.933	0.887	Excellent convergent validity and internal consistency.
	2) Program Relevance	0.922	0.816	0.937	0.893	High reliability and strong factor loading.
	3) Fund Management	0.899	0.778	0.923	0.876	Strong validity and good internal consistency.
Teacher Work Motivation	1) Social Needs	0.897	0.804	0.932	0.889	Excellent reliability and valid measurement.
	2) Need for Recognition	0.901	0.810	0.938	0.891	Very high internal consistency and convergent validity.
	3) Need for Self-Actualization	0.918	0.835	0.942	0.895	High factor loading and reliability.
Facilities and Infrastructure	1) Equipment Availability	0.912	0.812	0.937	0.887	Very high loading factor, suggesting strong reliability.
	2) Alignment with Curriculum	0.899	0.789	0.927	0.874	Solid reliability and good measurement validity.
Graduate Absorption in Industry	1) Employment Rate	0.930	0.849	0.944	0.902	Excellent validity and high reliability.
	2) Competency Match	0.918	0.835	0.943	0.899	Strong factor loading with high internal consistency.
	3) Job Search Duration	0.889	0.771	0.918	0.868	Strong reliability and good convergence.

The loading factors in the Table 4 indicate how strongly the indicators (items) are associated with their respective variables. A loading factor above 0.7 is typically considered excellent for SEM (Structural Equation Modeling). All loading factors in this table are well above 0.7, suggesting that each indicator is highly reflective of its variable. AVE measures the amount of variance captured by the construct relative to the amount of variance due to measurement error. According to Fornell and Larcker (1981), an AVE value greater than 0.5 indicates sufficient convergent validity, which is achieved in all the variables listed. For instance, Fund Allocation has an AVE of 0.804, which shows strong validity. This statistic indicates the internal consistency of the indicators for each variable. A value of 0.7 or higher is acceptable, and values above 0.9 are considered excellent. All variables in the table have CR values above 0.9, indicating very strong reliability, with the Program Relevance indicator having a CR of 0.937, reflecting excellent internal consistency. Cronbach's Alpha value is another measure of internal consistency. 0.7 is the threshold for an acceptable value, and values close to 0.9 indicate excellent reliability. The Cronbach's Alpha for most variables is above 0.87, indicating good reliability across all constructs.

All variables show strong convergent validity, as evidenced by the high AVE values. For example, Teacher Work Motivation (AVE = 0.810) indicates that the indicators are highly related to the underlying construct, supporting the notion that the survey effectively measures what it intends to. The Composite Reliability and Cronbach's Alpha values confirm that the measurement model is highly reliable. For instance, the Employment Rate indicator has a CR of 0.944, suggesting excellent internal consistency, which is critical for ensuring that the model is robust and reliable. All factor loadings above 0.7 show that the items are highly reflective of the variables. For example, the Employment Rate with a factor loading of 0.930 suggests that the indicator strongly represents the latent variable of graduate absorption in industry.

The validity and reliability tests show that the measurement model used in the study is both robust and reliable. The high factor loadings and AVE values indicate that the constructs are well-defined and strongly correlated with their respective indicators. Additionally, the composite reliability and Cronbach's Alpha values suggest that the scales used to measure each variable are internally consistent and reliable. These results support the integrity and effectiveness of the instrument used in the study, ensuring the credibility of the findings.

4. Structure Analysis

In quantitative research, particularly in structural equation modeling (SEM), R-Square (R^2) and Q-Square (Q^2) values are critical metrics for evaluating

the explanatory and predictive power of a research model. These metrics provide insights into how well the independent variables explain the variance in dependent variables and how accurately the model predicts future outcomes. The application of these measures ensures the robustness of the model, allowing researchers to draw meaningful conclusions and assess its practical implications. In this research R-square (R^2) and Q-square (Q^2) provide in the Table 5 below:

Table 5: R square and Q square

Variable	R-Square (R^2)	R-Square Adjusted	Predictive Relevance (Q^2)	Interpretation
Teacher Work Motivation (Y1)	0.964	0.964	0.855	Very strong influence of independent variables on Y1.
Facilities and Infrastructure (Y2)	0.857	0.857	0.739	Strong influence of independent variables on Y2.
Graduate Absorption in Industry (Y3)	0.870	0.869	0.774	Strong influence of independent variables on Y3.

Teacher Work Motivation (Y1): The R^2 value of 0.964 indicates that the independent variables strongly explain the variance in teacher motivation. The Q^2 value of 0.855 suggests a very strong predictive relevance, confirming the model's ability to predict motivation outcomes effectively. Facilities and Infrastructure (Y2): With an R^2 of 0.857, the model shows a strong influence of independent variables on facilities and infrastructure. The Q^2 value of 0.739 supports its high predictive relevance. Graduate Absorption in Industry (Y3): The R^2 of 0.870 demonstrates a strong model fit for predicting graduate absorption into industry. The Q^2 value of 0.774 confirms that the model provides a robust prediction for how well graduates integrate into the workforce. These results indicate that the research model effectively explains the relationships between the independent variables and the dependent variables, with high predictive power.

5. Narrative Description of Path Analysis

Table 6: Hypothesis and Path Analysis Results

Hypothesis	Path Coefficient (β)	T-Statistic	P-Value	Results
H1: The Effect of School Excellence Program (PK) on Graduate Absorption in Industry (Y3)	0.748	3.901	0.000	Strong Positive Effect
H2a: The Effect of School Excellence Program (PK) on Teacher Motivation (Y1)	0.982	160.377	0.000	Very Strong Positive Effect
H2b: The Effect of School Excellence Program (PK) on Facilities and Infrastructure (Y2)	0.926	58.407	0.000	Strong Positive Effect.
H3: The Effect of Teacher Motivation (Y1) on Graduate Absorption in Industry (Y3)	2.096	12.414	0.000	Very Strong Positive Effect
H4: The Effect of Facilities and Infrastructure (Y2) on Graduate Absorption in Industry (Y3)	0.509	7.738	0.000	Moderate Positive Effect
H5: The Indirect Effect of School Excellence Program (PK) on Graduate Absorption through Teacher Motivation (Y1)	2.058	12.017	0.000	Very Strong Indirect Effect
H6: The Indirect Effect of School Excellence Program (PK) on Graduate Absorption through Facilities and Infrastructure (Y2)	0.471	7.849	0.000	Moderate Indirect Effect

From the Table 6 above, it's found that:
1. H1: The Effect of School Excellence Program (PK) on Graduate Absorption in Industry (Y3):
   o Path Coefficient of 0.748: This indicates that the School Excellence Program (PK) strongly contributes to increasing graduate absorption into the industry. The high T-Statistic and low P-Value confirm the statistical significance of this effect. The result shows that when the PK program is implemented, the likelihood of graduates entering the workforce increases significantly.

2. H2a: The Effect of School Excellence Program (PK) on Teacher Motivation (Y1):
   o Path Coefficient of 0.982 for Teacher Motivation (Y1): The T-Statistic of 160.377 and P-Value of 0.000 indicate a very strong positive effect of PK on teacher motivation. Motivated teachers are more likely to provide high-quality education, directly influencing students' learning and career preparedness.

3. **H2b: The Effect of School Excellence Program (PK) on Facilities and Infrastructure (Y2):**
   o Path Coefficient of 0.926 for Facilities and Infrastructure (Y2): With a significant T-Statistic of 58.407, the results confirm that PK improves school facilities, which is crucial for providing an environment conducive to learning. While the effect on teacher motivation is stronger, the improvement in facilities still plays a vital role in enhancing educational outcomes.

4. **H3: The Effect of Teacher Motivation (Y1) on Graduate Absorption in Industry (Y3):**
   o Path Coefficient of 2.096: This represents a very strong influence of teacher motivation on the absorption of graduates in the industry. Motivated teachers are better able to prepare students with the necessary skills, which improves their employability. The high T-Statistic and low P-Value indicate a highly significant effect.

5. **H4: The Effect of Facilities and Infrastructure (Y2) on Graduate Absorption in Industry (Y3):**
   o Path Coefficient of 0.509: While the effect of facilities and infrastructure on graduate absorption is moderate compared to teacher motivation, the significant T-Statistic and low P-Value confirm that better facilities contribute positively to students' employability. However, the effect is not as strong as that of teacher motivation.

6. **H5: The Indirect Effect of School Excellence Program (PK) on Graduate Absorption through Teacher Motivation (Y1):**
   o Indirect Path Coefficient of 2.058: The T-Statistic of 12.017 and P-Value of 0.000 indicate that the effect of PK on graduate absorption is not only direct but also mediated by teacher motivation. This suggests that PK enhances teacher motivation, which in turn leads to better preparation of students for the industry, thus improving graduate absorption.

7. **H6: The Indirect Effect of School Excellence Program (PK) on Graduate Absorption through Facilities and Infrastructure (Y2):**
   o Indirect Path Coefficient of 0.471: The moderate effect through facilities and infrastructure indicates that while PK's improvements in facilities contribute to graduate absorption, this effect is smaller compared to the impact of teacher motivation. However, it is still statistically significant, confirming the importance of well-equipped learning environments in preparing students for the workforce.

V. DISCUSSION

The findings of this study provide meaningful insights into the impact of the School Excellence Program (PK) on various educational outcomes, including graduate absorption in the industry, teacher motivation, and the quality of school facilities. The results demonstrate the comprehensive influence of PK on improving educational quality and enhancing employability. Below is an expanded discussion of the key findings.

1. The Effect of School Excellence Program (PK) on Graduate Absorption in Industry (H1)

The School Excellence Program (PK) has a strong positive effect on graduate absorption in the industry, demonstrating that PK plays a significant role in improving the likelihood of students entering the workforce. This result emphasizes the importance of aligning educational programs with industry demands, as PK focuses on enhancing the skills and competencies required by employers. By incorporating vocational education reforms and fostering industry partnerships, PK ensures that students are not only prepared academically but are also well-equipped with the practical skills needed in the job market.

This outcome aligns with previous research that underscores the role of vocational education in addressing youth unemployment. Many studies have suggested that vocational training, when aligned with industry needs, can significantly reduce the unemployment rate among graduates (Billet, 2014). PK serves as a model for how government-led education initiatives can directly impact employability, providing students with relevant skills and enhancing their chances of securing jobs in their chosen fields.

2. The Effect of PK on Teacher Motivation (H2a) and Facilities and Infrastructure (H2b)

The study found that PK has a very strong positive effect on teacher motivation. Teachers who are supported through such programs become more engaged in their work, which directly impacts the quality of education they provide. Teacher motivation is closely linked to better classroom management, innovative teaching strategies, and a more supportive learning environment for students. Motivated teachers are more likely to stay current with new teaching methods and integrate industry-relevant practices into their lessons, which ultimately enhances students' employability.

Additionally, PK strongly enhances the facilities and infrastructure in schools, which has a direct impact on the learning environment. Upgraded facilities, such as modern laboratories, technology-equipped classrooms, and improved practical training areas, provide students with access to tools and resources that are relevant to their future careers. This access is essential for developing practical skills in fields such as engineering, information technology, hospitality, and

other vocational sectors. Schools with better infrastructure not only create a conducive environment for learning but also ensure that students are well-prepared for the challenges they will face in the industry.

This finding reflects the understanding that a combination of motivated educators and well-equipped learning spaces is crucial for the success of vocational education programs. When teachers are motivated and have the necessary resources at their disposal, they are better able to provide students with a comprehensive education that aligns with industry standards.

3. The Role of Teacher Motivation in Graduate Absorption (H3)

Teacher motivation is a key factor in improving graduate absorption in the industry. Motivated teachers contribute significantly to students' readiness for the workforce by providing them with the necessary skills and knowledge. A highly motivated educator not only inspires students but also ensures that they are equipped with both technical skills and soft skills, such as communication, teamwork, and problem-solving, which are vital in today's competitive job market.

The results indicate that teacher motivation plays a critical role in bridging the gap between education and employment. Teachers who are motivated to improve their own professional development and the learning outcomes of their students tend to integrate real-world challenges into their teaching methods. By fostering such an environment, teachers help prepare students for the realities of the workplace, ultimately leading to higher rates of graduate absorption in the industry.

4. The Role of Facilities and Infrastructure in Graduate Absorption (H4)

While the moderate effect of facilities and infrastructure on graduate absorption is important, it is evident that teacher motivation plays a more significant role. However, this does not diminish the importance of having access to state-of-the-art facilities. Schools with modern equipment and resources help students gain hands-on experience in fields that require specialized knowledge and skills. Facilities such as vocational labs, industry-standard machinery, and access to digital learning tools are essential in providing students with practical training that matches industry requirements.

Although the effect of facilities on graduate absorption is more moderate than teacher motivation, it is still a crucial contributing factor. The provision of up-to-date learning tools and environments ensures that students are not only taught theoretical knowledge but also gain practical experience, which is essential for making them industry-ready. This result highlights the need for a balanced approach to vocational education that includes both motivated educators and well-equipped learning environments.

5. The Indirect Effects of PK on Graduate Absorption through Teacher Motivation (H5) and Facilities (H6)

The study also examined the indirect effects of PK on graduate absorption, mediated by both teacher motivation and facilities and infrastructure. The results indicate that PK has a significant indirect effect on graduate absorption through these two mediating factors.

- Teacher motivation serves as the primary mediator, suggesting that PK's impact on graduate absorption is strongly influenced by the engagement and effectiveness of teachers. Motivated teachers who are equipped with the necessary resources and training are better able to prepare students for industry demands.
- The facilities and infrastructure also play a mediating role, although to a lesser extent than teacher motivation. The study found that PK indirectly affects graduate absorption through its impact on school facilities, which help students develop the necessary skills for industry-specific tasks.

These indirect effects reinforce the importance of a holistic approach to education reform. A combination of motivated teachers, well-equipped learning environments, and industry collaboration results in a comprehensive educational experience that significantly enhances graduate employability.

VI. CONCLUSION AND RECOMMENDATION

This study highlights the significant role of government assistance, teacher motivation, and infrastructure in improving the employability of vocational school graduates. The findings confirm that a well-structured educational support system contributes to producing skilled professionals who meet industry requirements. However, challenges such as funding limitations and infrastructure maintenance persist, requiring continuous policy evaluation and adaptation. Schools should strengthen industry collaboration to align curricula with job market demands, ensure continuous professional development for teachers, establish sustainable infrastructure management plans, and implement periodic policy evaluations to enhance vocational education outcomes.

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