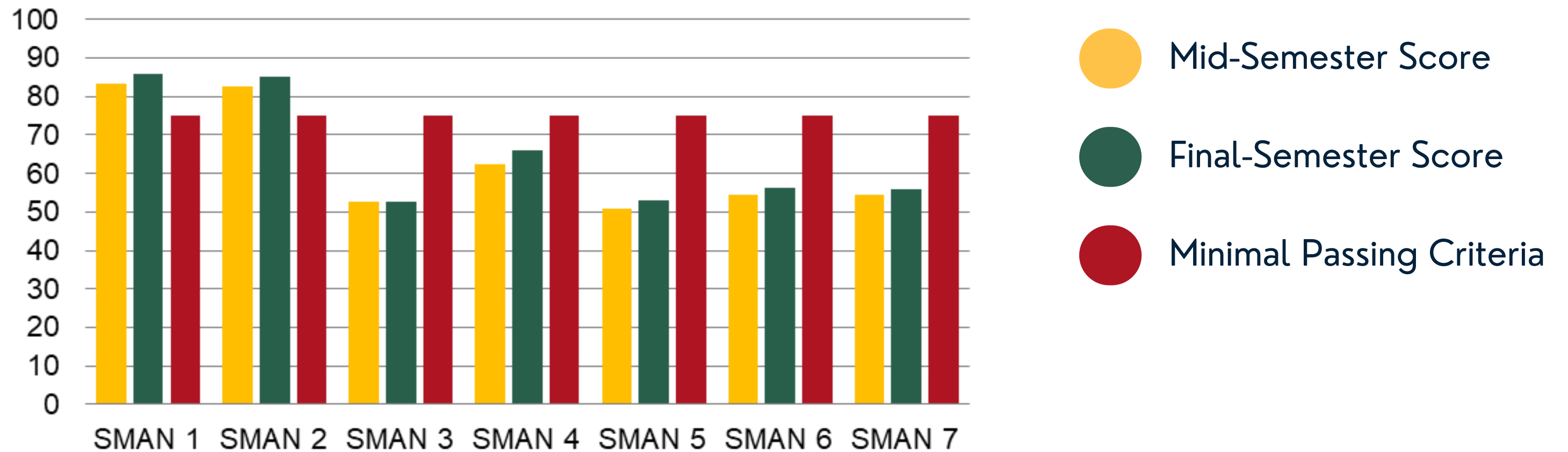# THE ROLE OF LEARNING INTEREST IN MEDIATING THE INFLUENCE OF TEACHER COMPETENCE ON LEARNING OUTCOMES

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# Introduction



Legend: Mid-Semester Score, Final-Semester Score, Minimal Passing Criteria

This research addresses the issue that the average scores for Mid-Semester and Final-Semester assessments in economics for 11th-grade social students at public high schools in Tanjungpinang fall below the Minimum Passing Criteria (KKM) of 75. This suggests a persistent problem with students' economics learning outcomes, as a significant number of scores remain below the Minimum Passing Criteria/KKM standard.

Economics' Teachers

The learning outcomes are closely related to the cognitive and behavioral interaction between teachers and students, where both aspects are inseparable. They unanimously agree that economics has the lowest scores compared to other social subjects, but there's no issue for student's behavior.

# Introduction

Robert M. Gagne
Learning consists of intellectual skills and verbal information, which are influenced by internal factors as a result of external factors.

Gestalt by Kohler
Understanding is achieved through teacher demonstrations, which capture the students' attention, allowing them to use the insights they have gained to comprehend the lesson.

Teacher Competence Indicators:
1. Pedagogic
2. Professional
3. Personality
4. Social

Tucker & Cofsky (in Sulaiman & Ismail, 2020); Undang-Undang No. 16, 2007.

Learning Interest Indicators:
1. Triggered Situation
2. Well Developed Individual
3. Emerging Individual
4. Maintained Situation

Hidi & Renninger (2006); Knekta (2020).

# Inconsistent Previous Research

1. Bogo Aperocho (2023): teacher competence influences learning outcomes by 68.6%.
2. Habsyi. et al. (2023): teacher competence influences learning outcomes by 57,65%.
3. Liu & Su (2022): teacher competence influences learning outcomes by 40,7%.
4. Nwankwo (2021): teacher competence influences learning outcomes by 63%.
5. Podungge. et. al (2020): teacher competence influences learning outcomes by 91,8%.
6. Pandey & Kumar (2020): there is a strong influence of teacher competence on learning outcomes.
7. Fauth. at. al (2019): teacher competence influences learning outcomes by 50%.
8. Azis. et. al (2020): there is a minor influence of teacher competence on learning outcomes by 23,7%.
9. Zulkarnain. et. al (2019): teacher competence influences learning outcomes by 3,8%.
10. Titu. et.al (2023): teacher competence influences learning outcomes by 37,4%.

# Research Purpose

The researcher aims to address the inconsistences found in previous studies regarding the influence of teacher competence on student learning outcomes. This study will adopt a novel approach by incorporating student learning interest as a mediating variable in the relationship between teacher competence and learning outcomes in economics. Conducted in Tanjungpinang, Indonesia, where no prior research on this specific topic exists, the study seeks to explore how teacher competence affects students' learning outcomes in economics, with a particular focus on the mediating role of student learning interest.

# Hypothesis
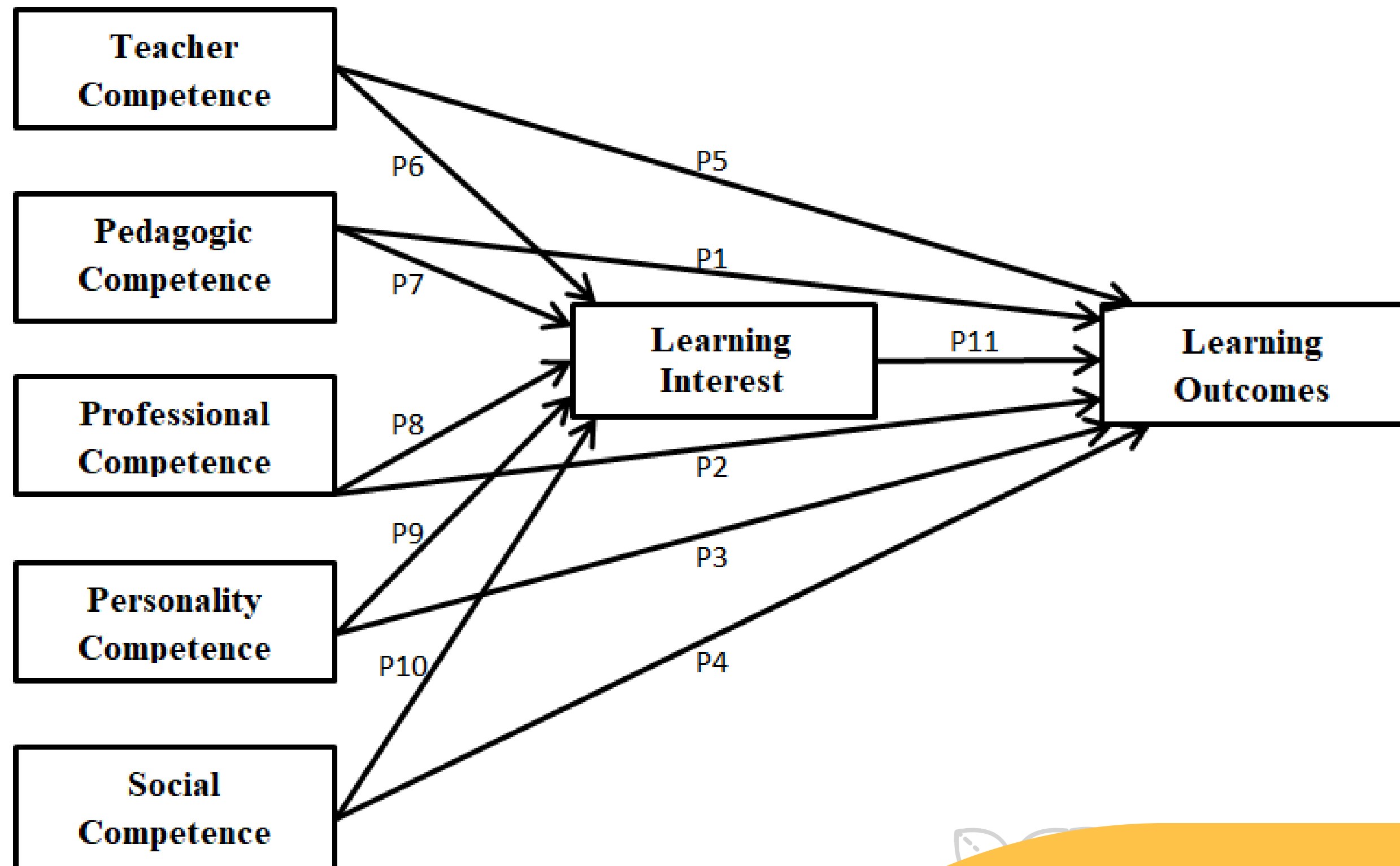
# Hypothesis

**Model 1**
- Teacher competence influences student learning outcomes. (p5)
- Student interest mediates the effect of teacher competence on student learning outcomes. (p6*p11)

**Model 2**
- Teacher pedagogical competence influences student learning outcomes. (p1)
- Student interest mediates the effect of teacher pedagogical competence on student learning outcomes. (p7*p11)

**Model 3**
- Teacher professional competence influences student learning outcomes. (p2)
- Student interest mediates the effect of teacher professional competence on student learning outcomes. (p8*p11)

**Model 4**
- Teacher personality competence influences student learning outcomes. (p3)
- Student interest mediates the effect of teacher personality competence on student learning outcomes. (p9*p11)

**Model 5**
- Teacher social competence influences student learning outcomes. (p4)
- Student interest mediates the effect of teacher social competence on student learning outcomes. (p10*p11)

# Research Method

The objects of research are student learning outcomes as the dependent variable, teacher competence as the independent variable, and student learning interest as the mediating (intervening) variable. The subjects of the study are 11th-grade students from public high schools in the city of Tanjungpinang.

This research uses a survey with a cross-sectional design. It employs questionnaires as the tool for conducting the survey. The method used for distributing the survey questionnaires is self-administered questionnaires.

In this study, random sampling was chosen for the sample selection process. To determine the sample size, the researcher used the G*Power 3.1.9.7 program. The number of student samples from each school was determined proportionally. The research instrument scale used is a bipolar adjective scale. This study employs a bootstrapping approach using the Process application by Hayes.

# Research Results

## MODEL 1

<table>
<tr><td colspan="7" align="center">Total Effect of X on Y</td></tr>
<tr><td>R-sq</td><td>Effect</td><td>se</td><td>t</td><td>p</td><td>LLCI</td><td>ULCI</td></tr>
<tr><td>0.504</td><td>0.077</td><td>0.07</td><td>11.046</td><td>0</td><td>0.064</td><td>0.091</td></tr>
<tr><td colspan="7" align="center">Direct Effect of X on Y</td></tr>
<tr><td></td><td>Effect</td><td>se</td><td>t</td><td>p</td><td>LLCI</td><td>ULCI</td></tr>
<tr><td></td><td>0.06</td><td>0.007</td><td>9.199</td><td>0</td><td>0.047</td><td>0.073</td></tr>
<tr><td colspan="7" align="center">Indirect Effect of X on Y</td></tr>
<tr><td></td><td>Effect</td><td>BoostSE</td><td>BootLLCI</td><td>BootULCI</td><td></td><td></td></tr>
<tr><td>M</td><td>0.018</td><td>0.006</td><td>0.008</td><td>0.031</td><td></td><td></td></tr>
</table>

Influence of X on Y without a Mediator
1. The effect is significant, as the range of LLCI and ULCI does not include zero
2. There is an effect of 50.4%, with a partial effect of 0.077.

Direct Influence of X on Y with a Mediator
1. The effect is significant, as the range of LLCI and ULCI does not include zero.
2. The direct effect of X on Y is 0.060.

Indirect Influence of X on Y with a Mediator
1. The 95% confidence interval indicates that the range of LLCI and ULCI does not include zero, signifying a mediation effect of 0.018.

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# Research Results

## MODEL 2

| Total Effect of X on Y | | | | | | |
|---|---|---|---|---|---|---|
| R-sq | Effect | se | t | p | LLCI | ULCI |
| 0.474 | 0.169 | 0.016 | 10.404 | 0 | 0.137 | 0.202 |
| Direct Effect of X on Y | | | | | | |
| | Effect | se | t | p | LLCI | ULCI |
| | 0.129 | 0.015 | 8.441 | 0 | 0.098 | 0.159 |
| Indirect Effect of X on Y | | | | | | |
| | Effect | BoostSE | BootLLCI | BootULCI | | |
| M | 0.041 | 0.014 | 0.019 | 0.074 | | |

Influence of X on Y without a Mediator
1. The effect is significant, as the range of LLCI and ULCI does not include zero
2. There is an effect of 47.4%, with a partial effect of 0.169.

Direct Influence of X on Y with a Mediator
1. The effect is significant, as the range of LLCI and ULCI does not include zero.
2. The direct effect of X on Y is 0.129.

Indirect Influence of X on Y with a Mediator
1. The 95% confidence interval indicates that the range of LLCI and ULCI does not include zero, signifying a mediation effect of 0.041.

PEDAGOGIC

# Research Results

## MODEL 3

| Total Effect of X on Y | | | | | | |
|---|---|---|---|---|---|---|
| R-sq | Effect | se | t | p | LLCI | ULCI |
| 0.436 | 0.289 | 0.030 | 9.630 | 0 | 0.229 | 0.348 |

| Direct Effect of X on Y | | | | | | |
|---|---|---|---|---|---|---|
| | Effect | se | t | p | LLCI | ULCI |
| | 0.219 | 0.027 | 8.160 | 0 | 0.166 | 0.273 |

| Indirect Effect of X on Y | | | | | |
|---|---|---|---|---|---|
| | Effect | BoostSE | BootLLCI | BootULCI | |
| M | 0.069 | 0.026 | 0.030 | 0.128 | |

Influence of X on Y without a Mediator
1. The effect is significant, as the range of LLCI and ULCI does not include zero
2. There is an effect of 43,6%, with a partial effect of 0.289.

Direct Influence of X on Y with a Mediator
1. The effect is significant, as the range of LLCI and ULCI does not include zero.
2. The direct effect of X on Y is 0.219.

Indirect Influence of X on Y with a Mediator
1. The 95% confidence interval indicates that the range of LLCI and ULCI does not include zero, signifying a mediation effect of 0.069.

# Research Results

## MODEL 4

<table>
<tr><td colspan="7" align="center">Total Effect of X on Y</td></tr>
<tr><td>R-sq</td><td>Effect</td><td>se</td><td>t</td><td>p</td><td>LLCI</td><td>ULCI</td></tr>
<tr><td>0.435</td><td>0.385</td><td>0.040</td><td>9.621</td><td>0</td><td>0.305</td><td>0.464</td></tr>
<tr><td colspan="7" align="center">Direct Effect of X on Y</td></tr>
<tr><td></td><td>Effect</td><td>se</td><td>t</td><td>p</td><td>LLCI</td><td>ULCI</td></tr>
<tr><td></td><td>0.291</td><td>0.036</td><td>8.072</td><td>0</td><td>0.220</td><td>0.363</td></tr>
<tr><td colspan="7" align="center">Indirect Effect of X on Y</td></tr>
<tr><td></td><td>Effect</td><td>BoostSE</td><td>BootLLCI</td><td>BootULCI</td><td></td><td></td></tr>
<tr><td>M</td><td>0.093</td><td>0.028</td><td>0.044</td><td>0.152</td><td></td><td></td></tr>
</table>

Influence of X on Y without a Mediator

1. The effect is significant, as the range of LLCI and ULCI does not include zero
2. There is an effect of 43,5%, with a partial effect of 0.385.

Direct Influence of X on Y with a Mediator

1. The effect is significant, as the range of LLCI and ULCI does not include zero.
2. The direct effect of X on Y is 0.291.

Indirect Influence of X on Y with a Mediator

1. The 95% confidence interval indicates that the range of LLCI and ULCI does not include zero, signifying a mediation effect of 0.093.

# Research Results

## MODEL 5

<table>
<tr><td colspan="7">Total Effect of X on Y</td></tr>
<tr><td>R-sq</td><td>Effect</td><td>se</td><td>t</td><td>p</td><td>LLCI</td><td>ULCI</td></tr>
<tr><td>0.361</td><td>0.338</td><td>0.041</td><td>8.229</td><td>0</td><td>0.257</td><td>0.420</td></tr>
<tr><td colspan="7">Direct Effect of X on Y</td></tr>
<tr><td></td><td>Effect</td><td>se</td><td>t</td><td>p</td><td>LLCI</td><td>ULCI</td></tr>
<tr><td></td><td>0.253</td><td>0.036</td><td>7.066</td><td>0</td><td>0.182</td><td>0.323</td></tr>
<tr><td colspan="7">Indirect Effect of X on Y</td></tr>
<tr><td></td><td>Effect</td><td>BoostSE</td><td>BootLLCI</td><td>BootULCI</td><td></td><td></td></tr>
<tr><td>M</td><td>0.086</td><td>0.032</td><td>0.037</td><td>0.164</td><td></td><td></td></tr>
</table>

Influence of X on Y without a Mediator
1. The effect is significant, as the range of LLCI and ULCI does not include zero
2. There is an effect of 36,1%, with a partial effect of 0.338.

Direct Influence of X on Y with a Mediator
1. The effect is significant, as the range of LLCI and ULCI does not include zero.
2. The direct effect of X on Y is 0.253.

Indirect Influence of X on Y with a Mediator
1. The 95% confidence interval indicates that the range of LLCI and ULCI does not include zero, signifying a mediation effect of 0.086.

S O C I A L

# Conclusion

Economic teacher competencies at public high schools in Tanjungpinang are rated high in all dimension pedagogical, professional, personality, and social. Correspondingly, 11th-grade social studies students exhibit high interest in learning, resulting in economic learning outcomes that generally exceed the minimum passing grade (KKM). Teacher competencies positively impact these outcomes with a moderate effect, suggesting that higher competencies correlate with better student performance. Each competency pedagogical, professional, personality, and social has a mediate positive influence on learning outcomes. Additionally, student learning interest partially mediates the relationship between teacher competencies and learning outcomes, indicating that teacher competencies affect outcomes both directly and indirectly through students' interest in learning.

# Thank You

Monday , October 7 2024