

# **The Relationship Between Achievement Motivation and Self-Efficacy with the Playing Skills of Table Tennis Club Athletes in Cimahi City**

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# Introduction

## Background

- Table tennis performance depends not only on technical skills but also on psychological factors.
- **Achievement motivation** encourages athletes to train consistently and strive for better performance.
- **Self-efficacy** strengthens athletes' confidence in performing skills under training and competition.
- However, studies examining the combined relationship between achievement motivation, self-efficacy, and table tennis playing skills among club athletes are still limited.

## Research Problem

Is there a relationship between achievement motivation and self-efficacy with the playing skills of table tennis club athletes in Cimahi City?

## Research Objective

To examine the relationship between achievement motivation and self-efficacy with the playing skills of table tennis club athletes in Cimahi City.

# Introduction

## Research Objective

To examine the relationship between:

- Achievement Motivation ( $X_1$ )
- Self-Efficacy ( $X_2$ )

toward

- Table Tennis Playing Skills (Y)

## Research Framework

Achievement  
Motivation ( $X_1$ )

Self-Efficacy ( $X_2$ )

Playing Skills (Y)

## Hypotheses

- H1: Achievement motivation positively affects playing skills.
- H2: Self-efficacy positively affects playing skills.
- H3: Achievement motivation and self-efficacy simultaneously affect playing skills.

# Methods

## Research Design

- Quantitative research
- Descriptive correlational design

## Participants

- 30 active table tennis athletes
- Table tennis clubs in Cimahi City
- Age: 14–30 years
- Purposive sampling

## Research Instruments

- Achievement Motivation Questionnaire (33 items)
- Self-Efficacy Questionnaire (17 items)
- Playing Skills GPAI (20 indicators)



# Results

Tabel Uji Validitas

| Instrument             | Items | Valid Items | Decision |
|------------------------|-------|-------------|----------|
| Achievement Motivation | 33    | 33          | ✓ Valid  |
| Self-Efficacy          | 17    | 17          | ✓ Valid  |
| Playing Skills (GPAI)  | 20    | 20          | ✓ Valid  |

Tabel Reliabilitas X1

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| 946                    | 33         |

Tabel Reliabilitas X2

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| 923                    | 17         |

Tabel Reliabilitas Y

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| 882                    | 20         |

# DICUSSION

- Validity Test

The validity test was conducted using the Pearson Product Moment correlation with 30 respondents, resulting in an r-table value of 0.361.

All items in the Achievement Motivation (33 items), Self-Efficacy (17 items), and Playing Skills (20 items) instruments had r-count values greater than 0.361.

Therefore, all research instruments were valid and suitable for data collection.

- Reliability Test

Reliability was assessed using Cronbach's Alpha. The Achievement Motivation instrument obtained an alpha value of 0.946, Self-Efficacy 0.923, and Playing Skills 0.882.

Since all Cronbach's Alpha values were greater than 0.70, the instruments were considered highly reliable.

## Classical Assumption Test

| One-Sample Kolmogorov-Smirnov Test                 |                |                     |
|----------------------------------------------------|----------------|---------------------|
|                                                    |                | Unstandardized      |
| N                                                  |                | 30                  |
| Normal Parameters <sup>a,b</sup>                   | Mean           | 0                   |
|                                                    | Std. Deviation | 316.529.957         |
| Most Extreme Differences                           | Absolute       | 89                  |
|                                                    | Positive       | 87                  |
|                                                    | Negative       | -89                 |
| Test Statistic                                     |                | 89                  |
| Asymp. Sig. (2-tailed)                             |                | .200 <sup>c,d</sup> |
| a. Test distribution is Normal.                    |                |                     |
| b. Calculated from data.                           |                |                     |
| c. Lilliefors Significance Correction.             |                |                     |
| d. This is a lower bound of the true significance. |                |                     |

## Normality Test

# Results

| Coefficients <sup>a</sup> |                     |                         |       |
|---------------------------|---------------------|-------------------------|-------|
| Model                     |                     | Collinearity Statistics |       |
|                           |                     | Tolerance               | VIF   |
| 1                         | Motivasi Berprestas | 775                     | 1.290 |
|                           | Self-Efficacy       | 775                     | 1.290 |

a. Dependent Variable: Keterampilan Bermain Tennis Meja

## Multicollinearity Test

| Coefficients <sup>a</sup> |         |                |       |        |      |      |
|---------------------------|---------|----------------|-------|--------|------|------|
| Model                     |         | Unstandardized |       | Standa | t    | Sig. |
|                           |         | B              | Std.  | Beta   |      |      |
| 1                         | (Consta | 1.610          | 3.865 |        | 416  | 680  |
|                           | Motiva  | 14             | 34    | 93     | 427  | 673  |
|                           | Self-   | -14            | 60    | -49    | -226 | 823  |

a. Dependent Variable: ABS\_RES

## Heteroscedasticity Test

# Discussion

## Normality Test

- The Kolmogorov–Smirnov test produced a significance value of 0.200, which is greater than 0.05.
- Therefore, the data were normally distributed and met the normality assumption.

## Multicollinearity Test

- Both independent variables had a Tolerance value of 0.775 and a VIF value of 1.290.
- Since the tolerance value was greater than 0.10 and the VIF value was less than 10, there was no multicollinearity between the independent variables.

## Heteroscedasticity Test

- The significance value for Achievement Motivation was 0.673, while Self-Efficacy obtained 0.823.
- Since both significance values were greater than 0.05, the regression model was free from heteroscedasticity.

# Results

## Regression Results

| Coefficients <sup>a</sup>                               |                   |                             |            |               |       |      |
|---------------------------------------------------------|-------------------|-----------------------------|------------|---------------|-------|------|
| Model                                                   |                   | Unstandardized Coefficients |            | Standard ized | t     | Sig. |
|                                                         |                   | B                           | Std. Error | Beta          |       |      |
| 1                                                       | (Constant)        | 6.379                       | 6.455      |               | 988   | 332  |
|                                                         | Motivasi Berprest | 365                         | 57         | 662           | 6.438 | 0    |
|                                                         | Self-Efficacy     | 338                         | 100        | 348           | 3.385 | 2    |
| a. Dependent Variable: Keterampilan Bermain Tennis Meja |                   |                             |            |               |       |      |

$$Y = 6,379 + 0,365 X_1 + 0,338 X_2 + \epsilon$$

| Model Summary <sup>b</sup>                                      |       |          |                   |                            |
|-----------------------------------------------------------------|-------|----------|-------------------|----------------------------|
| Model                                                           | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1                                                               | .882a | .779     | .762              | 328.044                    |
| a. Predictors: (Constant), Self-Efficacy , Motivasi Berprestasi |       |          |                   |                            |
| b. Dependent Variable: Keterampilan Bermain Tennis Meja         |       |          |                   |                            |

**Coefficient of Determination**  
 **$R^2 = 0.779$**

# Discussion

## Multiple Linear Regression

- The regression equation obtained was:
- $Y = 6.379 + 0.365X_1 + 0.338X_2$
- This indicates that an increase of one unit in Achievement Motivation increases Playing Skills by 0.365, while an increase of one unit in Self-Efficacy increases Playing Skills by 0.338, assuming the other variable remains constant.

## Coefficient of Determination ( $R^2$ )

- The coefficient of determination ( $R^2$ ) was 0.779.
- This means that 77.9% of the variation in Playing Skills can be explained by Achievement Motivation and Self-Efficacy.
- The remaining 22.1% is influenced by other variables outside this study.

# Results

## Uji F

| ANOVAa                                                          |            |                |    |             |        |       |
|-----------------------------------------------------------------|------------|----------------|----|-------------|--------|-------|
| Model                                                           |            | Sum of Squares | df | Mean Square | F      | Sig.  |
| 1                                                               | Regression | 1.021.745      | 2  | 510.873     | 47.473 | .000b |
|                                                                 | Residual   | 290.555        | 27 | 10.761      |        |       |
|                                                                 | Total      | 1.312.300      | 29 |             |        |       |
| a. Dependent Variable: Keterampilan Bermain Tennis Meja         |            |                |    |             |        |       |
| b. Predictors: (Constant), Self-Efficacy , Motivasi Berprestasi |            |                |    |             |        |       |

## Uji T

| Coefficientsa                                           |                       |                             |            |                         |       |      |
|---------------------------------------------------------|-----------------------|-----------------------------|------------|-------------------------|-------|------|
| Model                                                   |                       | Unstandardized Coefficients |            | Standard ized Coefficie | t     | Sig. |
|                                                         |                       | B                           | Std. Error | Beta                    |       |      |
| 1                                                       | (Constan t)           | 6.379                       | 6.455      |                         | 988   | 332  |
|                                                         | Motivasi Berprest asi | 365                         | 57         | 662                     | 6.438 | 0    |
|                                                         | Self-Efficacy         | 338                         | 100        | 348                     | 3.385 | 2    |
| a. Dependent Variable: Keterampilan Bermain Tennis Meja |                       |                             |            |                         |       |      |

# Discussion

## F-Test

- The F-test produced an F-value of 47.473 with a significance value of 0.000.
- Since the significance value was less than 0.05, Achievement Motivation and Self-Efficacy simultaneously have a significant effect on Playing Skills.
- Therefore, the third hypothesis ( $H_3$ ) was accepted.

## t-Test

- Achievement Motivation obtained a t-value of 6.438 with a significance value of 0.000, indicating a positive and significant relationship with Playing Skills.
- Self-Efficacy obtained a t-value of 3.385 with a significance value of 0.002, also indicating a positive and significant relationship with Playing Skills.
- Therefore, the first hypothesis ( $H_1$ ) and the second hypothesis ( $H_2$ ) were accepted.

# Conclusion

- Achievement motivation has a positive and significant relationship with playing skills.
- Self-efficacy also has a positive and significant relationship with playing skills.
- Both variables simultaneously contribute significantly to athletes' playing skills.
- Coaches should integrate psychological training with technical practice to optimize athlete performance

# References

- Adam, S. (2023). Hubungan Efikasi Diri Dan Kepercayaan Diri Dengan Motivasi Berprestasi Mahasiswa Atlet Maluku Utara. Jurnal Ilmiah Wahana Pendidikan, 1141-1154.**
- Ade Saputra, D. (2020). HUBUNGAN KELENTUKAN PERGELANGAN TANGAN DENGAN KEMAMPUAN PUKULAN BACKHAND PADA ATLIT CLUB PTMSI. Jurnal Olahraga Indragiri, 109-129.**
- Alim, A. (2018). HUBUNGAN MOTIVASI, ATTITUDE, ANXIETY DAN SELF EFFICACY TERHADAP PRESTASI ATLET TENIS LAPANGAN LEVEL JUNIOR DAN SENIOR. MEDIKORA, 83-90.**
- Apta, M. (2014). Psikologi olahraga. jakarta: bumi aksara.**
- Ardiansyah Nur, A. L. (2021). Pengaruh Latihan Drill Smash terhadap Pukulan Smash Forehand dalam Permainan Tennis Meja Mahasiswa PJKR Universitas Muhammadiyah Luwuk. Jurnal Pendidikan Olahraga, 1-7.**
- Ari Kurniawan, N. S. (2025). SOCIAL SUPPORT IN MODERATING ATHLETES' SELF-EFFICACY AND ACHIEVEMENT MOTIVATION: A SYSTEMATIC LITERATURE REVIEW. MEDIKORA, 81-92.**
- Bandura, A. (1997). Self-Efficacy The Exercise of Control. new york: Stanford University.**
- Blegur, J. &. (2018). Motivasi berolahraga atletik dan tinju. Jurnal Keolahragaan, 29-37.**
- Degeng, I. N. (1997). Strategi Pembelajaran (Mengorganisasi Isi Pembelajaran dengan Model. Elaborasi). Malang. Ikatan Profesi Teknologi Pendidikan.**
- Dr. Sujarwo, M. (2011). MOTIVASI BERPRESTASI SEBAGAI SALAH SATU PERHATIAN DALAM.**
- Effendi, H. (2016). PRANAN PSIKOLOGI OLAHRAGA DALAM MENINGKATKAN PRESTASI ATLET. Jurnal Ilmu Pengetahuan Sosial, 22-31.**

# References

- ELPIRA, N. (2020). PENINGKATAN KETERAMPILAN DRIBBLE DALAM PERMAINAN SEPAK BOLA MELALUI MEDIA AUDIO VISUAL. Jurnal Al-Azkiya, 18-26.**
- Erez, A. J. (2001). Hubungan antara evaluasi diri inti dengan penetapan tujuan, motivasi, dan kinerja. Jurnal Psikologi Terapan, 1270-1279.**
- Fauzi. (2010). Belajar Keterampilan Motorik, Pengantar Teori dan Metode. Jakarta: Depdikbud.**
- Gusriko Hardianto, E. a. (2014). Hubungan Antara Self Efficacy Akademik Dengan Hasil Belajar Siswa. Jurnal Konselor.**
- Hendri, J. (2023). Peningkatan Keterampilan Guru Membuat LKPD Melalui Workshop Di SDN 026 Tanjung Selor . Jurnal Hukum Pendidikan Sosial Keagamaan, 109-124.**
- Hinggut Agam Berutu, d. (2025). PEMBINAAN CABANG OLAHRAGA TENIS MEJA. Jurnal Ilmiah Ilmu Keolahragaan, 42-52.**
- John William Atkinson, J. O. (2008). Motivasi dan Prestasi . Universitas Michigan: Winston.**
- Maslow, A. (1943). Sebuah teori motivasi manusia. Psychological Review, 370-396.**
- Masrun, A. Y. (2022). Psychological aspects and the roles for student's sport performance . Journal Sport Area, 425-436.**
- McClelland, D. (1987). Human Motivation. New York: The Press Syndicate of The University of Chambridge.**
- McClelland, D. C. (1953). Motif pencapaian. Appleton-Century-Crofts.**
- McClelland, D. C. (1965). Menuju teori perolehan motif. American Psycologist, 321-333.**
- Miftakhul Jannah, F. D. (2022). MOTIVASI BERPRESTASI OLAHRAGA PADA ATLET PEAJAR KETIKA PANDEMI COVID-19 DI JAWA TIMUR. Jurnal Kajian, Penelitian dan Pengembangan Kependidikan, 60-65.**
- Muskanan, K. (2015). Analisis Motivasi Berprestasi AtletPusat Pendidikan dan Latihan Olahraga Pelajar (PPLP)ProVinsi Nusa Tenggara Timur. Jurnal Kebijakan & Administrasi Publik, 105-113.**
- Nasution, R. S. (2024). PENGARUH EFIKASI DIRI DAN KREATIVITAS TERHADAP NIAT KEWIRAUSAHAAN MAHASISWA PSIKOLOGI DI UNIVERSITAS SUMATERA UTARA. Jurnal Darma Agung, 31-36.**
- Noraini. (2021). Studi Tentang Prestasi Anak Rawa yang Mengandalkan Bakat dan Minat Terhadap Keterbatasan Sarana Prasarana di SMAN 1 Danau Panggang . Jurnal Ilmiah Pendidikan , 85-93.**
- PAMUNGKAS, M. B. (2023). PENGEMBANGAN TEKNIK DASAR PUKULAN TENIS MEJA PADA PEMULA MENGGUNAKAN RETURNBOARD. Doctoral dissertation, STKIP PGRI PACITAN.**

# References

- Pujianto, A. (2015). PROFIL KONDISI FISIK DAN KETERAMPILAN TEKNIK DASAR ATLET TENIS MEJA USIA DINI DI KOTA SEMARANG. *Journal of Physical Education, Health and Sport*, 38-43.
- Rabideau, S. T. (2015). *Achievement Motivation on Behavior*. . Institut Teknologi Rochester.
- Risnawati, M. N. (2013). *Teori-Teori Psikologi*. Jogjakarta: Ar Ruzz MediaJ.
- Robert S. Weinberg, D. G. (2023). *Foundations of Sport and Exercise Psychology*. Human kinetics.
- Sandriya, M. H. (2019). PENGEMBANGAN MODIFIKASI PEMBELAJARAN DALAM AKTIVITAS TENIS MEJA UNTUK MENGOPTIMALKAN KETERBATASAN ALAT. S1 thesis, Universitas Pendidikan Indonesia.
- Sarno. (2019). UPAYA MENINGKATKAN KETERAMPILAN PUKULAN BACKHAND DALAM PERMAINAN TENIS MEJA DENGAN MENGGUNAKAN ALAT MODIFIKASI BET PADA SISWA KELAS IV SDN 1 LEGOKSAYEM KECAMATAN WANAYASA KABUPATEN BANJARNEGARA. 36-102.
- Singgih D. Gunarsa, M. P. (1996). *Psikologi olahraga : teori dan praktik*. jakarta: BPK. Gunung Mulia.
- Susanto, A. (2018). *Bimbingan dan konseling di Sekolah: Konsep, teori, dan aplikasinya*. Kencana.
- Suwarno. (2003). *Sepakbola: Gerak Dasar dan Teknik Dasar*. Yogyakarta: FIK UNY.
- Vredo Adisyah Putra, E. J. (2024). PERAN EFIKASI DIRI DAN MOTIVASI BERPRESTASI TERHADAP PRESTASI ATLET DI KABUPATEN SEMARANG DENGAN RESILIENSI SEBAGAI INTERVENING. *INDONESIAN OF INTERDISCIPLINARY JOURNAL*, 235-249.
- Wajong, T. L. (2016). PENGARUH GAME SITUATED LEARNING DALAM TENIS MEJA TERHADAP JUMLAH WAKTU AKTIF BELAJAR DAN HASIL BELAJAR. *UPI Respiratory*.
- Yulianto, F. R. (2015). Study Analisis Keterampilan Teknik Bermain Cabang Olahraga Permainan Tenis Meja. *Jurnal Kesehatan Olahraga*, 201-206.
- Yusuf Hidayat, B. H. (2019). Validation of the Extrinsic and Intrinsic Motivation Scale Among Beginner Badminton Child-Athletes. *Atlantis press*, 299-303.
- Yusuf, M. (2023). ANALYSIS OF TABLE TENNIS SMASH FOREHAND ABILITY IN. 1-64



# Thank You