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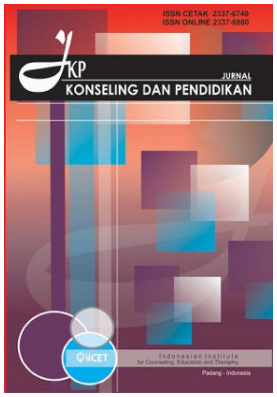

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Article

The relationship between spiritual intelligence, emotional intelligence, and self-regulated learning in high school students

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ABSTRACT

This study examines the contribution of spiritual and emotional intelligence to self-regulated learning among 300 Indonesian high school students. The main problem addressed is low self-regulated learning, characterized by lack of motivation, procrastination, and infrequent material review. A quantitative *ex post facto* design with simple random sampling was employed. Data were collected using standardized Likert scales and analyzed via multiple linear regression and independent sample *t*-tests. Results showed significant associations between spiritual and emotional intelligence and self-regulated learning ($R = 0.489$, $R^2 = 0.284$, $F = 15.988$, $p < 0.001$), with partial contributions of 16.1% and 12.8%, respectively. No significant gender differences in self-regulated learning were found. These findings underscore the importance of spiritual and emotional intelligence development to enhance self-regulated learning. Practical implications include integrating spiritual and emotional development modules into curricula, counseling programs, and self-management training.

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Introduction

Self-regulated learning refers to students' ability to consciously manage their thoughts, emotions, and actions to achieve learning goals (Andrikos, Smith, & Ciccarelli, 2024; Sitzmann & Bauer, 2025; Chen, Lin, Chen, & Fu, 2023). Previous studies indicate that Indonesian students' self-regulated learning levels remain low, characterized by low motivation, difficulties in goal-setting, ineffective learning strategies, and procrastination (Indrayani et al., 2021; Yuzarion et al., 2024; Reyes, Morales, & Bajo, 2025; Sari & Yuzarion 2025). These challenges contribute to unstable academic performance and lower learning outcomes (DeJoseph et al., 2025; Kishor, Mamodiya, Saini, & Bossoufi, 2025).

Internal psychological factors, such as spiritual intelligence and emotional intelligence, are believed to enhance students' self-regulation. Spiritual intelligence involves critical reflection on existence, deriving personal meaning, self-awareness, and developing spiritual well-being (King, 2008; Yin & Liu, 2025; Fauzan, 2023; Fidelis, Moreira, & Vitória, 2024). Emotional intelligence includes the ability to recognize, understand, and manage one's own and others' emotions to support social

interaction and learning achievement (Goleman, 1998; Oteng et al., 2025; Salovey & Mayer, 1990; Chen et al., 2025). According to self-regulated learning theory (Zimmerman, 2013; Pintrich, 2000; Panadero et al., 2025), personal factors such as motivation, strategies, and self-control directly influence learning effectiveness.

Although previous research has examined self-regulated learning, the specific relationship between spiritual intelligence, emotional intelligence, and self-regulated learning, particularly through the lens of Islamic gender equality, remains underexplored. This perspective emphasizes that male and female students have equal rights and responsibilities in acquiring knowledge, consistent with Islamic principles (Qur'an; Hadith).

This study aims to: (1) analyze the psychological relationship between spiritual and emotional intelligence with students' self-regulated learning, and (2) investigate gender-based differences in self-regulated learning. The findings are expected to provide practical recommendations for teachers, school principals, and parents to optimize spiritual and emotional development to support more effective self-regulated learning.

Methods

Research Design

This study employed a correlational ex post facto quantitative design (causal-comparative) to examine the relationships and predictive contributions of spiritual and emotional intelligence on students' self-regulated learning. This design allows for the analysis of naturally occurring phenomena without manipulating variables, grounded in a post-positivist paradigm emphasizing systematic observation, measurement, and hypothesis testing.

Participants

The study involved 300 eleventh-grade students from SMAN X, Indonesia, selected using stratified random sampling to ensure balanced representation of male and female students. Randomization was conducted using a computerized random number procedure from the complete population list. Inclusion criteria were: (1) active grade XI students, (2) willingness to participate and provide written informed consent, (3) no severe psychological disorders as confirmed by counseling teachers. Exclusion criteria included students on leave or absent during data collection. Participants were aged 16–18 years, from diverse academic and socio-economic backgrounds.

Instruments

Data were collected using three structured Likert-type scales (1 = Highly Unsuitable to 4 = Highly Suitable, with reverse scoring for negative items). Self-Regulated Learning Scale: adapted from Yuzarion (2022) & Yuzarion (2024), including six dimensions: goal-setting, self-control, help-seeking, motivation, learning strategies, and self-evaluation. Construct validity was confirmed via CFA, showing good model fit; Cronbach's alpha = 0.902.

Spiritual Intelligence Scale: based on King (2008) and Yin & Liu, (2025), measuring critical existential thinking, personal meaning production, spiritual awareness, and consciousness development. Content validity was evaluated by psychology and education experts; Cronbach's alpha = 0.855.

Emotional Intelligence Scale: based on Goleman (1995) & Oteng et al., (2025), including self-awareness, emotional regulation and expression, motivation, empathy, and interpersonal relationship management. Content validity confirmed by experts; Cronbach's alpha = 0.871. Data were collected face-to-face in school under standardized conditions to minimize response bias.

Data Analysis

SPSS v22 was used to conduct multiple linear regression analysis (enter method) to examine the effects of spiritual and emotional intelligence on self-regulated learning. Assumptions of parametric

analysis were checked: normality (Shapiro-Wilk), linearity, multicollinearity (VIF < 10), homoscedasticity (Glejser test), and autocorrelation (Durbin-Watson test).

An independent samples t-test was conducted to assess gender-based differences in self-regulated learning. The choice of regression and t-test was justified based on the variable structure (two continuous predictors, one continuous dependent variable) and the research objective to determine relative contributions and group differences. Potential confounding variables such as age and class were controlled through descriptive and correlational preliminary analyses.

Results and Discussion

Results

Preliminary analyses were conducted to ensure assumptions for regression were met. Shapiro-Wilk tests confirmed normality for self-regulated learning ($p = 0.239$), spiritual intelligence ($p = 0.439$), and emotional intelligence ($p = 0.082$). Linearity tests confirmed a linear relationship between spiritual intelligence and self-regulated learning ($p = 0.019$) and emotional intelligence and self-regulated learning ($p < 0.001$). Multicollinearity checks showed tolerance > 0.10 and VIF < 10.

Multiple linear regression indicated an R^2 of 0.284, meaning 28.4% of the variance in self-regulated learning was explained jointly by spiritual and emotional intelligence. Partial regression coefficients and standardized beta values are presented at table 1.

Table 1. Partial Regression Coefficients and Standardized Beta Values

Predictor Variable	B	Std. Error	Beta	t	p
Spiritual Intelligence	0.412	0.075	0.361	5.49	0.000
Emotional Intelligence	0.293	0.124	0.214	2.36	0.038

Interpretation: Spiritual intelligence contributes 16.1%, and emotional intelligence contributes 12.8% to self-regulated learning, classified as moderate effects according to educational psychology benchmarks (Cohen, 1988).

Independent samples t-test indicated no significant self-regulated learning differences between male ($M = 60.98$) and female students ($M = 59.55$), $t(298) = 0.820$, $p = 0.407$. Variance homogeneity was $F = 0.430$, $p > 0.05$.

Discussion

These findings support Zimmerman (2004) and Adler & Shani (2026) self-regulated learning theory, highlighting that self-regulation is influenced by internal factors like motivation, self-awareness, and emotional control. Spiritual intelligence demonstrated a stronger contribution to self-regulated learning than emotional intelligence, consistent with Pinto et al., (2023), Lestari et al. (2023) and Wang et al., (2023), emphasizing that personal meaning and purpose motivate students to plan, monitor, and evaluate learning.

Emotional intelligence also significantly influences self-regulated learning, aligning with Martínez-López et al., (2023), Srem-Sai et al., (2025) and Haibar & Yuzarion, (2024), who reported that emotion regulation and interpersonal skills enhance learning self-regulation. Practically, emotional management helps students maintain focus, adapt strategies, and optimize academic potential.

The total explained variance of 28.4% indicates a moderate effect, while 71.6% unexplained variance suggests influence from other factors such as social support, teacher-student interactions, instructional strategies, and achievement motivation (Vos et al., 2025; Reyes, Morales, & Bajo, 2025; Lo & Chang, 2025; Ebbes et al., 2026). Future research should explore these additional determinants.

Gender analysis revealed no significant difference in self-regulated learning between male and female students, likely due to equitable treatment, uniform access to education, and selection based on academic performance. This aligns with Islamic principles of gender equality in education (Quran,

An-Nisa 4:97; Al-Zumar 39:9), emphasizing equal rights for men and women, though the empirical perspective should consider social and institutional contexts.

Practical implications. self-regulated learning development programs should integrate spiritual and emotional intelligence training. Teachers and counselors can implement strategies that support self-regulation through goal reflection and emotion management. Attention to external variables influencing self-regulated learning is crucial for both research and educational practice.

Limitations. Sample limited to one school, affecting generalizability. Confounding variables such as socio-economic background and prior academic experiences were not fully controlled. While reliable, the instruments' long-term predictive validity has not been established.

Conclusion

This study concludes that spiritual intelligence and emotional intelligence have a significant psychological relationship with students' self-regulated learning, empirically demonstrating the psychological dynamics between these variables. The combined contribution of both variables to self-regulated learning is 28.9%, with spiritual intelligence contributing 16.1% and emotional intelligence contributing 12.8%, classified as moderate effects according to educational psychology standards.

The findings also indicate no significant difference in self-regulated learning between male and female students, supporting the principle of gender equality in Islamic education. This suggests that both male and female students have similar potential to develop self-regulation in learning, particularly in schools with equitable policies and access to education.

Scientific contribution. This research provides novel insights by integrating the psychological analysis of spiritual and emotional intelligence with self-regulated learning while considering the Islamic perspective on gender equality. The results reinforce the understanding that self-regulated learning development depends not only on cognitive ability but also on students' psychological and spiritual dimensions.

Research limitations. The sample was limited to one school, restricting generalizability. Confounding variables such as socio-economic background, prior academic experience, and learning environment factors were not fully controlled. Long-term predictive validity of the measurement instruments has not been established.

Practical implications. Teachers and counselors can develop self-regulated learning programs that emphasize strengthening students' spiritual and emotional intelligence. Instructional strategies supporting self-reflection, emotion regulation, and goal-setting can enhance students' self-regulatory abilities. Attention to external factors affecting self-regulated learning, such as motivation, social support, and teacher-student interactions, is crucial for effective educational practice.

Future research directions. Future studies are recommended to employ more representative samples and investigate additional external factors influencing self-regulated learning. Researchers may also explore the interaction between spiritual intelligence, emotional intelligence, and psychosocial variables to enhance predictive contributions to students' self-regulated learning.

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References

Adler, I., & Shani, Y. (2026). *Hybrid Human-GenAI cognitive apprenticeship: Encouraging pre-service teachers to implement instructional practices to support students' self-regulated learning*. **Teaching and Teacher Education, 169**, 105268. https://doi.org/10.1016/j.tate.2025.105268

Andrikos, G. P., Smith, C. A., & Ciccarelli, M. (2024). Supporting co-regulation and development of self-regulation skills in students with intellectual disabilities: A scoping review. *Australasian Journal of Special and Inclusive Education, 48*(1), 90–106. https://doi.org/10.1017/jsi.2024.3

Chen, D., Liu, Y., Zhao, Y., Liu, Y., & Luo, M. (2025). *The influence of emotional intelligence on graduate employability: Using university-industry linkages as a moderator*. **Acta Psychologica, 261**, 105959. https://doi.org/10.1016/j.actpsy.2025.105959

Chen, J., Lin, C.-H., Chen, G., & Fu, H. (2023). *Individual differences in self-regulated learning profiles of Chinese EFL readers: A sequential explanatory mixed-methods study*. **Studies in Second Language Acquisition, 45**, 955–978. https://doi.org/10.1017/S0272263122000584

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers. https://www.scirp.org/reference/ReferencesPapers?ReferenceID=2041144

DeJoseph, M. L., Walasek, N., Liu, S., Young, E. S., Raikes, A., Waldman, M., Frankenhuis, W. E., & Fisher, P. (2025). *Hidden dynamics of economic hardship: Characterizing economic unpredictability and its role on self-regulation in early childhood*. **Development and Psychopathology**, 1–16. https://doi.org/10.1017/S0954579425100771

Ebbes, R., Zee, M., Jansen, B. R. J., Koomen, H. M. Y., & Schuitema, J. A. (2026). *Promoting self-regulated learning during the COVID-mandated remote learning period: Insights from interviews with primary school teachers*. **Teaching and Teacher Education, 169**, 105287. https://doi.org/10.1016/j.tate.2025.105287

Fauzan, K., Fachrian, A., Yulina, E., & Nuranasmita, T. (2023). Spiritual intelligence and emotional intelligence on the spiritual leadership style of government structural officials. *Psikoborneo: Jurnal Ilmiah Psikologi, 11*(1), 131-140. https://doi.org/10.30872/psikoborneo.v11i1

Fidelis, A., Moreira, A. C., & Vitória, A. (2024). *[Article title not provided–silakan berikan judul jika ingin dilengkapi]*. **Social Sciences & Humanities Open, 9**, 100879. https://doi.org/10.1016/j.ssaho.2024.100879

Goleman, D. (1995). *Emotional intelligence.* Bantam Books. https://psycnet.apa.org/record/1995-98387-000

Haibar, R. A. L., & Yuzarion, Y. (2024). *Self-efficacy, teacher' s attitude, and English language learning achievements*. **Bulletin of Counseling and Psychotherapy, 6**(1). https://doi.org/10.51214/00202406755000

Indrayani, F., Yuzarion, Y., & Hidayah, N. (2021). Pentingnya kecerdasan spiritual bagi self-regulated learning siswa SMA. *Jurnal Studia Insania, 9*(1), 23-31. http://dx.doi.org/10.18592/jsi.v9i1.4589

King, D.B. (2008) Rethinking Claims of Spiritual Intelligence: A Definition, Model, and Measure. A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree of Master of Science, Peterborouge. https://www.scirp.org/reference/referencespapers?referenceid=1597063

King, M., Marston, L., McManus, S., Brugha, T., Meltzer, H., & Bebbington, P. (2013). Religion, spirituality and mental health: Results from a national study of English households. *British Journal of Psychiatry, 202,* 68–73. http://dx.doi.org/10.1192/bjp.bp.112.112003

Kishor, I., Mamodiya, U., Saini, S., & Bossoufi, B. (2025). *Voice-enabled human-robot interaction: Adaptive self-learning systems for enhanced collaboration*. **Robotica, 43**, 2143–2171. https://doi.org/10.1017/S0263574725000438

Lestari, E. ., Yuzarion, Y., & Hidayah, N. (2023). Self-regulated learning of senior high school students reviewed from emotional maturity and social parental support. *Jurnal Pendidikan Dan Konseling (JPDK), 5*(2), 1490–1497. https://doi.org/10.31004/jpdk.v5i2.13121

Lo, N., & Chang, Y. (2025). *A cross-cultural comparative study of language learning applications for self-regulated language learning: Insights from Mainland China, the UK, and the US*. **Asian-**

Pacific Journal of Second and Foreign Language Education, Article 100246. https://doi.org/10.1016/j.amper.2025.100246

Martínez-López, Z., Nouws, S., Villar, E., Mayo, M. E., & Tinajero, C. (2023). *Perceived social support and self-regulated learning: A systematic review and meta-analysis*. **International Journal of Educational Research Open, 5**, 100291. https://doi.org/10.1016/j.ijedro.2023.100291

Oteng, P. A., Koomson, F. S., Acheampong, J. N., & Musah, A. (2025). *The role of emotional intelligence in the relationship between employee commitment, engagement, abusive supervision and employee agility*. **Acta Psychologica, 261**, 105934. https://doi.org/10.1016/j.actpsy.2025.105934

Panadero, E., Fernández-Ortube, A., Zamorano, D., Pinedo, L., Sánchez-Iglesias, I., & Barrenetxea-Mínguez, L. (2025). *Tracking self-regulated learning in action: How individual differences shape positive and negative regulation across three types of tasks*. **Learning and Individual Differences, 124**, 102808. https://doi.org/10.1016/j.lindif.2025.102808

Pinto, C. T., Veiga, F., Guedes, L., Pinto, S., & Nunes, R. (2023). *Models of spiritual intelligence interventions: A scoping review*. **Nurse Education in Practice, 73**, 103829. https://doi.org/10.1016/j.nepr.2023.103829

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), Handbook of self-regulation (pp. 451–502). Academic Press. https://doi.org/10.1016/B978-012109890-2/50043-3

Reyes, M., Morales, M. J., & Bajo, M. T. (2025). *Self-regulated learning strategies in L1 and L2 reading*. **Bilingualism: Language and Cognition, 28**, 879–896. https://doi.org/10.1017/S1366728924000683

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9,* 185–211. http://dx.doi.org/10.2190/DUGG-P24E-52WK-6CDG

Sari, I. P., & Yuzarion, Y. (2025). Self-esteem, parental social support, and academic achievement among junior high school students in public schools. *Jurnal Counseling Care, 9*(1), 53–65. https://doi.org/10.22202/JCC.2025.v9i1.8690

Sitzmann, T., & Bauer, K. N. (2025). *Self-regulated learning: A person-centric approach to training*. **Industrial and Organizational Psychology, 18**, 143–146. https://doi.org/10.1017/iop.2024.65

Srem-Sai, M., Arthur, F., Salifu, I., Amoadu, M., Obeng, P., Agormedah, E. K., Hagan, J. E. Jr., & Schack, T. (2025). *Modelling the associations between students' academic resilience, learning motivation, self-regulated learning and academic well-being in Ghana*. **Acta Psychologica, 258**, 105278. https://doi.org/10.1016/j.actpsy.2025.105278

Vos, S. G., Wijnia, L., Martens, R. L., & de Groot, R. H. M. (2025). *How do distance learners self-regulate learning? A latent profile analysis of self-regulated learning and its relationship with self-regulatory efficacy, motivation, need satisfaction, need frustration, academic achievement, and well-being*. **Learning and Individual Differences, 120**, 102678. https://doi.org/10.1016/j.lindif.2025.102678

Wang, S., Blasco, D., Hamzah, A., & Verschuren, B. (2023). *Tourists and 'philosophers': Nature as a medium to consciousness and transcendence in spiritual tourism*. **Annals of Tourism Research, 99**, 103543. https://doi.org/10.1016/j.annals.2023.103543

Yin, P., & Liu, N. (2025). *The relationship between components of EFL teachers' spiritual intelligence and their work engagement*. **Acta Psychologica, 257**, 105093. https://doi.org/10.1016/j.actpsy.2025.105093

Yuzarion, Y., Diponegoro, A. M., Prasetya, A. F., Taufikurrahman, A., Isma, A. I., & Anari, I. (2024). The contribution of self-regulated learning, self-awareness, and spiritual intelligence to academic achievement. *Psikologika: Jurnal Pemikiran dan Penelitian Psikologi, 29*(1). https://doi.org/10.20885/psikologika.vol29.iss1.art6

Zimmerman, B. J. (2013). From cognitive modeling to self-regulation: A social cognitive career path. *Educational Psychologist. 48*(3), 135-147. https://doi.org/10.1080/00461520.2013.794676

Zimmerman, B. J., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology, 82*(1), 51–59. https://doi.org/10.1037/0022-0663.82.1.51

Zimmerman, B., J. (2004). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 4*(2), 22-63. DOI: 10.1037/0022-0663.81.3.329