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Gratitude as a Mediator between Self-Efficacy and Prosocial Behavior: Implications for Teacher Education Management

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ABSTRACT

This study aims to analyze the mediating role of gratitude in the relationship between self-efficacy and prosocial behavior, and to examine its implications for teacher education management in Indonesia. Teachers' prosocial behavior plays a vital role in creating a caring, collaborative, and conducive school climate. While self-efficacy is believed to encourage teachers' involvement in altruistic actions, the psychological mechanism linking self-efficacy and prosocial behavior through gratitude remains underexplored, particularly in collectivist and religious contexts such as Indonesia. This research employed a cross-sectional quantitative survey design. Self-efficacy, gratitude, and prosocial behavior were measured using standardized Likert-type scales administered to in-service teachers, and data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The analysis followed two main stages: (1) evaluation of the measurement model to test reliability as well as convergent and discriminant validity, and (2) evaluation of the structural model to estimate path coefficients, explained variance (R^2), effect sizes, and indirect effects using bootstrapping procedures. The findings provide significant evidence for the crucial mediating role of gratitude in linking self-efficacy to prosocial behavior. Teachers with high self-efficacy are more likely to engage in prosocial actions, both directly and through the internalization of appreciation.

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INTRODUCTION

Prosocial behavior includes actions intended to benefit other individuals as well as society as a whole (Umar et al., 2025), such as helping, sharing, and cooperating, which are important aspects of social functioning (Zhan et al., 2023; Pahl et al., 2025). In the school context, teachers play a role not only as transmitters of knowledge, but also as moral agents (Gbadamosi & Oladele, 2025) and reference figures (Bashori, 2017) in building a caring, inclusive, and collaborative educational environment (Umar et al., 2025). Teachers' prosocial behavior has been shown to foster work engagement with colleagues (Jankelová et al., 2025; Chen et al., 2025), support students beyond purely academic tasks (Zava et al., 2025), and reinforce positive cultures that enhance learning effectiveness (Petruța & Stănculescu, 2025; Sundari et al., 2025). Thus, teacher prosociality has managerial implications for strengthening the school climate, improving organizational performance, and fostering harmonious relationships among school members (Al-Thani & Semmar, 2017; Lindsey, 2025).

However, teachers' prosocial behavior is not a simple phenomenon because it is shaped by character, moral, emotional, and cognitive factors (Inesi et al., 2021). In practice, helping behaviors can be perceived ambiguously, for example as attempts to seek attention that may threaten one's reputation (Berman & Silver, 2022). Low levels of prosocial behavior can lead to reduced teacher performance (Dharma, 2020), increased stress due to workload (Karaben & Kustanti, 2020), and the emergence of selfishness within the school community (Chaikovska et al., 2021). Conversely, excessive prosocial behavior can result in discrimination (De Dreu et al., 2022) or reduced personal well-being (Righetti et al., 2022). Therefore, the study of prosocial behavior needs to consider multilevel factors at the micro, meso, and macro levels (Penner et al., 2005; Rosa & Tudge, 2013), as well as its implications for educational policy and management.

In the Indonesian context, where most teachers are Muslim, prosocial behavior is closely embedded in religious and cultural frameworks. Gratitude has been identified as an important psychological resource that nurtures morality, religiosity, and social solidarity (Kumru et al., 2019). The principle of ta'āwun 'alā al-birr wa al-taqwā (mutual assistance in goodness) (Muafi, 2021) aligns with Islamic educational ideals that emphasize collaboration and social concern as the foundation of a harmonious community (Maghrobi et al., 2024). At the same time, self-efficacy plays a crucial role in encouraging teachers to be optimistic, confident, and willing to engage in prosocial actions, thereby strengthening the organizational climate and institutional performance (Chaikovska et al., 2021; Sundari et al., 2025; Arfan et al., 2024).

Despite growing evidence on the links between self-efficacy, gratitude, and prosocial behavior, existing studies are largely dominated by Western or student samples and tend to examine these constructs separately or in simple direct-effect models. There is still a limited understanding of how self-efficacy translates into prosocial behavior through gratitude, especially among teachers in collectivist and strongly religious settings such as Indonesian

Islamic schools. Moreover, few studies explicitly connect these psychological mechanisms with the domain of teacher education management and the Islamic principle of ta'āwun as a guiding normative framework (Kibtiyah & Suud, 2024).

Addressing these gaps, the present study analyzes the mediating role of gratitude in the relationship between self-efficacy and teachers' prosocial behavior and relates these findings to implications for education management. A clearer understanding of this psychological mechanism is expected to inform teacher development policies, particularly in designing capacity-building programs that simultaneously strengthen self-efficacy and gratitude. In doing so, this research aims to contribute to the development of a more holistic education management strategy (Udin, 2024) that not only emphasizes academic competence, but also deliberately cultivates a collaborative, ethical school organizational climate in line with Indonesia's cultural values of mutual cooperation and the Islamic principle of ta'āwun.

Self-Efficacy with Prosocial Behavior

Teachers with high self-efficacy tend to show persistence, enthusiasm, and resilience that are more supportive of involvement in altruistic and prosocial actions (Caprara et al., 2006; Suud, F. M., & Salsabillah, W. T. (2024, February), high self-efficacy is able to influence, help others more effectively, (Salvo-Garrido et al., (2024), increase interpersonal interaction and social bonds, contribute to the collective well-being of teachers so that directly the social behavior of teachers will increase (Mieres-Chacaltana et al., 2025). Zava et al., (2025) said that the belief of individuals in schools who are empathic self-efficacy is more confident that they are able to understand the feelings of others, respond appropriately, and overcome obstacles in providing help and help so as to give rise to a sense of competence in dealing with social situations that require cooperation in increasing the likelihood of engaging in prosocial behavior.

Self-efficacy is also a direct predictor of prosocial behavior. Individuals with a high level of self-efficacy feel that they have enough competence to help others effectively. Self-efficacy contributes 31% to prosocial tendencies. Self-confidence is the cognitive and motivational foundation for a person to engage in helpful behaviors, especially in complex social situations (Pradnyana & Lestari, 2016). Furthermore (Anzala; & Herlena, 2018) found that there is a positive correlation of self-efficacy with the emergence of prosocial behaviors, where the initial process starting from self-belief in the individual's ability will encourage him to act further in realizing helpful behaviors to others so that it has an impact on increasing opportunities to provide welfare benefits for others as a form of prosocial behavior.

In the Islamic perspective, the relationship between self-efficacy Muslim individuals tend to have a balance of spirit and body, as well as show humility, enthusiasm for helping others, and better self-control (Noornajihan, 2014). Furthermore, self-efficacy in Islam is not just a psychological belief but is closely related to the spiritual aspect which is based on faith in Allah, tawakkal, and prayer so that a balance is created between effort and dependence on Allah. Therefore, Islamic self-efficacy

Self-efficacy with Gratitude

Gratitude and self-efficacy are two psychological constructs that mutually reinforce one another in fostering well-being and positive behavior. Gratitude encourages individuals to appraise life experiences more positively, recognize the support of others, and maintain optimism, which in turn strengthens their confidence in facing challenges. Conversely, self-efficacy provides a cognitive basis for believing that one can act effectively, making it more likely that individuals will notice, interpret, and internalize experiences as reasons to be grateful.

Empirically, Danish et al. (2024) report that gratitude is closely associated with self-efficacy in supporting self-care behaviors, suggesting that grateful individuals feel more capable of managing their own health. In educational contexts, Octavia et al. (2023) find that training interventions can enhance self-efficacy, while Yudiani et al. (2023) show that gratitude and self-efficacy jointly predict stronger learning commitment. Recent longitudinal work further indicates that self-related constructs contribute to subjective well-being through the mediating roles of gratitude and prosocial behavior among adolescents, underscoring the centrality of gratitude in translating positive self-views into adaptive outcomes (Li. et al. 2025).

Conceptually, gratitude can be understood as a source of intrinsic motivation that energizes and sustains the confident action patterns reflected in self-efficacy (Suud & Na'imah, 2023). In educational settings, this reciprocal relationship implies that teachers who feel efficacious are more likely to cultivate gratitude, and grateful teachers are more likely to maintain resilient, agentic beliefs about their capacity to contribute to students and colleagues. Building on this reciprocal link, the next subsection focuses on how gratitude functions as a key driver of prosocial behavior.

Gratitude with prosocial behavior

Building on the above, gratitude has been widely identified as an important antecedent of prosocial behavior. Classic work shows that grateful individuals experience a stronger sense of connectedness, empathy, and moral obligation, which motivates them to return kindness and contribute to others' welfare (McCullough et al., 2001; Emmons & McCullough, 2003). More recent experimental evidence demonstrates that gratitude promotes cooperative choices even under uncertainty, indicating that it acts as a "social lubricant" that facilitates interpersonal coordination and resource sharing. (Oguni 2024)

Cross-cultural studies also highlight gratitude's robust association with prosocial tendencies. For example, Alamri et al. (2024) show that gratitude predicts prosocial tendency among university students in Saudi Arabia and Egypt, with psychological resilience mediating this relationship, suggesting that gratitude strengthens prosociality partly by bolstering inner resources. Other research finds that grateful volunteers exhibit stronger intentions to help and greater sustained engagement in helping roles, indicating that gratitude

is closely tied to prosocial motivation in organizational and community settings. (Yang et al., 2023)

Within Islamic contexts, gratitude (*shukr*) is not only a positive emotion but also a religiously grounded virtue that is directed to Allah as the ultimate giver of favors and to fellow human beings as recipients and channels of God's grace (Khan et al., 2022; Haddara & Mattson, 2021). Rather than being a generic life attitude, *shukr* combines psychological, moral, and social dimensions and is closely linked to the ethic of *ta'āwun* (mutual assistance in goodness), which encourages believers to help one another in beneficial acts (Ali et al., 2020). In Muslim educational settings, such as Indonesian Islamic schools, this normative emphasis means that gratitude is expected to manifest in concrete prosocial practices, especially among teachers who function as moral and social role models (Siddiqui, 2022). In this way, gratitude forms a natural bridge between inner religious commitment and outward helping behavior

Self-efficacy mediated by Gratitude for Prosocial Behavior

Extending these two strands of literature, recent research increasingly treats gratitude as a key emotional mechanism that links personal resources, such as self-efficacy or power, to prosocial outcomes. Gratitude can be viewed as an emotional–cognitive disposition that heightens awareness of others' contributions, strengthens moral commitment, and promotes reciprocity in relationships (McCullough et al., 2001). For example, Datu and Fincham (2022) show that positive emotions such as gratitude support self-regulatory processes that facilitate helping behavior, while Li and Li (2022) provide evidence that gratitude mediates the association between self-efficacy and prosociality in youth samples.

More recent studies deepen this mediational perspective. Cai & Yang (2025), for instance, finds that gratitude mediates the effects of social power on both reciprocal and non-reciprocal prosocial behaviors, illustrating how gratitude can translate structural advantages into benevolent actions. Longitudinal work on school climate also suggests that gratitude can serve as a mediator between supportive environments and students' prosocial behavior, positioning gratitude as a central pathway through which contextual resources become social engagement. (B. Li et al., 2023). In the domain of teachers, Salvo-Garrido et al. (2024) report that self-efficacy and resilience jointly predict prosocial behavior among Chilean elementary school teachers, pointing to the importance of examining how different positive psychological resources combine to foster prosociality in educational professionals.

Taken together, these findings indicate that self-efficacy may not only have a direct effect on prosocial behavior, but also an indirect effect via gratitude. Individuals with higher self-efficacy tend to interpret their experiences more positively, which facilitates the development of gratitude, and this gratitude, in turn, promotes prosocial motivation and behavior. Although gratitude has been linked to well-being, interpersonal bonding, and moral motivation (Emmons & McCullough, 2003), empirical work with educators remains relatively scarce (Klemola, 2013). In Muslim-majority educational settings, where gratitude is strongly

emphasized as both a religious obligation and a social virtue, these mediational processes may be particularly salient, making teachers an important population in which to test such models.

Current Study Situation

In a collectivist society like Indonesia, where social harmony and relational interdependence are highly valued, gratitude can function as a motivational catalyst for helping behavior in professional contexts. Building on this cultural backdrop, Khusna and Aisah (2023) argue that religion can motivate prosocial behavior by shaping cognitive–affective processes, with gratitude providing a promising bridge between religious belief and actual helping. Similarly, recent cross-cultural research on prosocial behavior shows that, although basic forms of prosociality may look similar across societies, cultural norms influence which motives and emotions are emphasized in different contexts, underlining the importance of studying prosociality in non-Western settings. (Septarini et al., 2025).

Despite this theoretical promise, empirical studies that systematically examine the joint roles of self-efficacy, gratitude, and prosocial behavior within the specific sociocultural framework of Indonesian Muslim educators remain limited. Most existing research either focuses on student or general adult populations, or analyzes these variables in isolation (e.g., only self-efficacy and prosocial behavior, or only gratitude and prosociality), often in Western or secular contexts. This pattern risks overlooking culturally embedded meanings of gratitude, religious motivations, and the particular professional responsibilities of teachers. Moreover, there is a paucity of studies that explicitly connect these psychological mechanisms to teacher education management, even though teacher prosociality has clear implications for school climate and organizational functioning.

Against this backdrop, the present study investigates whether gratitude mediates the relationship between teachers' self-efficacy and prosocial behavior among Muslim teachers in Indonesian Islamic schools. By integrating self-efficacy and a moral emotion (gratitude) within a specific religious cultural context, this research responds to calls for more cross-cultural work on prosociality and morality and addresses the shortage of studies on adult prosocial behavior in teaching professions (Zettler, 2022; Pfattheicher et al., 2022). Furthermore, by linking these psychological mechanisms to implications for teacher education management particularly the design of training programs that strengthen both self-efficacy and gratitude this study aims to inform more holistic strategies for developing teachers who are not only competent but also consistently prosocial, in line with Indonesia's cultural values of mutual cooperation and the Islamic principle of *ta'āwun*.

METHODS

Participants and procedures

The population of this study comprised all teachers employed in private schools managed by the Perkumpulan Amal Bakti (PAB) foundation in North Sumatra. PAB is a large Islamic educational organization that oversees 85 schools at the kindergarten, elementary, MTs, senior high school, and vocational levels, with a total of 2,150 teachers. PAB schools were purposively selected because (a) their vision and mission explicitly integrate Islamic values into curriculum and school management, (b) the teaching staff are predominantly Muslim and work in faith-based settings where religious norms such as *ta'āwun* are emphasized, and (c) PAB represents one of the largest and longest-established private Islamic school networks in the province, thus offering a context that is broadly illustrative of Indonesian Muslim educators working in similar private Islamic institutions.

From this population, the sample size was determined using the Slovin formula (Majdina et al., 2024) with an allowable error of 5–6%, resulting in 311 teachers as a statistically representative sample. Data were collected using an online questionnaire distributed via Google Forms. The questionnaire included an informed consent section, clear instructions, the objectives of the survey, and assurances of confidentiality and voluntary participation. Data collection took place between 10 February and 10 June 2025.

Of the 311 respondents, the majority were female (225; 72%) and 86 were male (28%). Regarding teaching experience, 143 teachers (46%) had more than 10 years of experience, 67 teachers (22%) had 5–10 years, and 101 teachers (32%) had 1–5 years. In terms of educational background, most teachers held a bachelor's degree (S1; 263), followed by a master's degree (S2; 24), diploma (D3; 3), and senior high school (21), with no respondents holding a doctoral degree (S3). Overall, these characteristics indicate that PAB teachers in the sample are relatively well-educated and experienced, and provide a meaningful snapshot of Muslim teachers working in Indonesian Islamic private schools.

The population of this study comprises all teachers teaching in private schools under the North Sumatra Amal Bakti Association (PAB), which includes 85 institutions at the kindergarten, elementary, MTs, high school, and vocational levels, with a total of 2,150 teachers. The research sample was determined using the Slovin formula (Majdina et al., 2024) with a margin of error of 5–6%, yielding 311 representative respondents. Data collection was conducted using a Google Form questionnaire equipped with informed consent, including instructions, a description of the survey objectives, and assurances of answer confidentiality. The study was carried out from February 10 to June 10, 2025. Of the 311 respondents, the majority were female (225 teachers; 72%), while 86 were male (28%). These characteristics reflect a relatively well-educated and experienced PAB teaching workforce.

Table 1. Based on work experience,

Teaching Experience	Frequency	Percentage
1–5 years	101	32.5%
5–10 years	67	21.5%
More than 10 years	143	46.0%
Total	311	100%

Table 2. Respondents by Education Level

Education Level	Frequency	Percentage
High school	21	6.8%
Diploma (D3)	3	1.0%
Bachelor (S1)	263	84.6%
Master (S2)	24	7.7%
Doctoral (S3)	0	0.0%
Total	311	100%

This study employed a quantitative, non-experimental, cross-sectional survey design using a positivist, correlational approach to examine the relationships among self-efficacy, gratitude, and prosocial behavior. The data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS), following a two-step procedure: (1) evaluation of the measurement model to assess reliability as well as convergent and discriminant validity, and (2) evaluation of the structural model to estimate path coefficients, explained variance (R^2), effect sizes (f^2), and indirect (mediating) effects through bootstrapping.

Measurement

Prosocial Behavior

This prosocial behavior uses the Prosocialness scale for adults (PSA) with a total of 12 items, with the CFA model of one factor according to the data ($\chi^2/df = 4.180$, CFI = 0.937, RMSEA = 0.074, SRMR = 0.042) and deleting 4 items because they have a low value of the lowest Kappa (K) ≤ 0.74 while the remaining 12 items have Good reliability and validity with the internal consistency coefficient of the total scale is 0.890. After 4 weeks, the reliability of the total scale retests was 0.801 and the cross-time stability was high, indicating good measurement requirements (Zhan et al., 2023).

Table 3. Instrument of Indicator Prosocialness scale for adults (PSA)

No	Aspect	Indikators
1	Sharing	Listening to others' outpourings, entertaining them, spending time together
2	Cooperating	Activities with others
3	Donating	Giving energy, thoughts, and materials, lending things or money
4	Helping, assistance	Lightening others' burdens, helping those in need
5	Honesty, compassion	Relevant to the situation, friendly, approachable, caring
6	Generosity Self-sacrifice	Generous, providing useful knowledge, willing to make sacrifices

Gratitude

Gratitude using the Gratitude Quistionnaire-Six Item Form (GQ-6) by (Mccullough et al., 2002) has then been adapted for the Indonesian context to reveal the match of the Norm and Model Indexes starting from RMSEA < 0.08, (GFI) > 0.9, AGFI > 0.9, CFI > 0.9, SRMR < 0.0, The results of reliability analysis with Cronbach's alpha coefficient, α = 0.879. The item-total

correlation after the result is in the range of 0.517 – 0.655. This indicates good reliability for a measuring instrument. (Alwi et al., 2023)

Table 4. Instrument of Indicator Gratitude Quistionnaire-Six Item Form (GQ-6)

No	Aspect	Indikators
1	Optimism	Problem solving,
2	Stability	calmness
3	Risk Perception	The unexpected
4	Ideas	Having a new idea or method
5	Self-Regulation	Goal focus

No	Aspect	indicators
1	Intensity	Intense positive feelings
2	Frequency	Tend to behave well every day
3.	Span	Extensive positive events
4.	Density	The more things you are grateful for, the better

Self-efficacy

The General Self-Efficacy Scale (GSES) (Schwarzer & Jerusalem, 1995) consists of 20 items and then revised (Teo & Kam, 2014) to 10 items and for Indonesian culture has been adapted with Cronbach's alpha values which range from .75 to .91. In addition, in longitudinal research, it was also found that the stability coefficient (test re-test reliability) was quite good, ranging from 47 to .75. Results The confirmatory factor analysis (CFA) method using a single-factor model obtained after being modified with a fit model with chi-square = 34.87, df = 26, p-value = 0.11444, RMSEA = 0.024. (Novrianto et al., 2019)

Table.

Table 5. Instrument of Indicator The General Self-Efficacy Scale

FINDINGS AND DISCUSSION

Deskriptive statistic Analysis.

As shown in Table 1 (with standardized English variable labels and two-decimal formatting), the three focal constructs gratitude, self-efficacy, and prosocial behavior—each show mean scores around 3.00 with relatively small standard deviations, indicating that PAB teachers generally report moderately high levels of gratitude, confidence in their capabilities, and prosocial engagement, a generally positive level of gratitude, self-efficacy, and prosociality among PAB teachers (Azwar, 2012). Skewness and kurtosis values are close to zero, suggesting approximately symmetric, platykurtic distributions and supporting the use of parametric analyses. The standard deviation of 1.03 indicates considerable variability in responses, suggesting that teachers differ meaningfully in their experienced gratitude (Sekaran & Bougie, 2016). The excess kurtosis value of –0.60 indicates a platykurtic distribution, characterized by lighter tails and a flatter peak than the normal distribution, while the near-zero skewness of –0.05 suggests that the distribution of gratitude scores is approximately symmetrical (George & Mallery, 2010; Kline, 2016).

Rather than merely reflecting statistical adequacy, this pattern is substantively meaningful: it portrays a teacher population that, on average, is already functioning at a fairly positive level, but still leaves room for enhancement through targeted interventions. These descriptive results are broadly consistent with international findings showing that teachers in other contexts (e.g., Chilean elementary school teachers) also tend to exhibit relatively high self-efficacy and prosocial tendencies that mutually reinforce each other. Salvo & Garido (2024) At the same time, the current data highlight the cultural specificity of Indonesian Muslim teachers working in faith-based PAB schools, where professional roles intersect with religiously grounded norms of mutual help, making gratitude and prosocial behavior particularly salient targets for teacher education and school management.

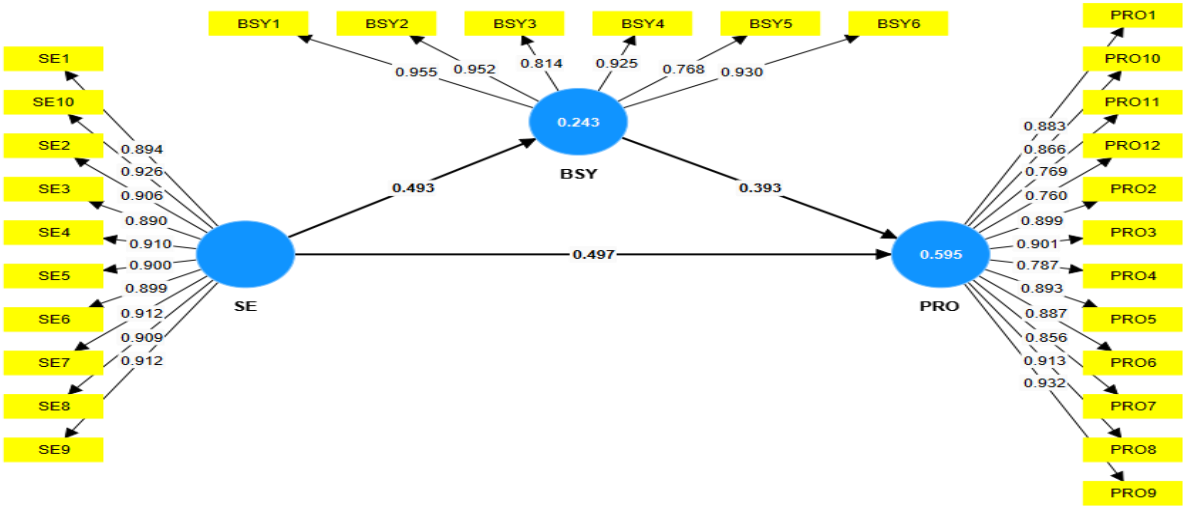
Table. 6. Statistic Descriptive and Uji Normality Cramér–von Mises

Variabel	Mean	Median	Standar Deviasi	Kurtosis	Skewnes	Cramér-von Mises p value
Gratitude	2,983	3,0	1,03	-0,600	-0,045	0.399
Self-Efficacy	3,247	3,16	0,906	-0,541	-0,033	0,439
Prosocial	3,279	3,0	0,899	-0,553	-0,034	0,43

Data Analysis

The analysis used in this study is the data analysis method used is structural equation modeling-partial least squares (SEM-PLS) using SmartPLS 4.1.1.4 software which can work efficiently with small sample sizes and complex models. In addition, the assumption of data distribution in SEM-PLS using variance-based SEM is relatively looser and there is no need for an extreme normality test and falls into the nonparametric category which aims to determine the total influence of independent variables , namely the prosocial behavior of the dependent variables of direct self-efficacy and indirect influence through the mediation of gratitude.

Figure 1. Model Testing based on Outer loading



Validity and realism of constructs

Cronbach's Alpha for all variables is in the range of 0.949–0.976, well above the recommended minimum limit (0.7) so it has a very high internal consistency, so the question items in it are

consistently the same. Composite Reliability (rho_a and rho_c) is also at a ≥ value of 0.96, which indicates very strong construct reliability. Values above 0.9 have excellent stability and consistency to test hypotheses. The Convergent Average Variance Extracted (AVE) validity for all three constructs was 0.821 (Self-Efficacy), 0.800 (Gratitude), and 0.747 (Prosocial Behavior). All exceeded the minimum limit of 0.50, which means that more than 50% of the indicator's variance can be explained by the constructed measured. This is shown in the table. 2 that each indicator has a strong correlation with the latent variable it represents.

Table 7. Construct reliability and validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Self-Efficacy (X1)	0,976	0,976	0,979	0,821
Gratitude (M)	0,949	0,961	0,960	0,800
Prosocial Behaviour (Y)	0,969	0,970	0,972	0,747

Fit Test Model

The results of the fit model test show that this research model is empirically acceptable. The SRMR value of 0.052 is a strong indicator that the proposed model is in accordance with the data, as it is below the 0.08 threshold recommended by Hu & Bentler (1999). This means that the residue or difference between observation data and estimates is relatively small. In addition, the NFI value of 0.883 although it has not reached the ideal standard of 0.90, it is close to the eligibility limit and shows a fairly good fit. The low values of d_ULS and d_G 1.079 and d_G = 0.789 so that the model is close to a good fit also reinforce the finding that the model can represent the relationships between variables quite well can be seen in the table. 3

Table.8 Model Uji Fit

	Saturated model	Estimated model
Chi-Squere	1.351.914	1.351.914
d_ULS	1.079	1.079
NFI	0.883	0.883
d_G	0.789	0.789
SRMR	0.052	0.052

The value of f-square (*effect size*) in table.4. shows how much influence one variable has on another variable in the *Structural Equation Modeling* (SEM-PLS) model. The value of f^2 helps us understand *the relative contribution* of each path to the R^2 of the dependent variable. According to the criteria (Cohen & Williamson, 1988) 0.02 – 0.14 = Small effect, 0.15 – 0.34 = Medium effect ≥ 0.35 = Large effect, Gratitude for Prosocial Behaviour = 0.105 Included in the category of small effects. That is, although gratitude has a positive effect on prosocial behavior, its direct contribution to the increase in R^2 of prosocial behavior is relatively small. However, in the context of mediation, this small effect remains important because it can be a pathway of strengthening the relationship of other variables. Self-Efficacy to Gratitude = 0.096 Includes the category of small effects. Showing that self-efficacy has a positive but limited role in increasing teacher gratitude. This can be influenced by other factors such as social support

or religious values that are more dominant in shaping gratitude (Mirawati, et al., 2024). Self-Efficacy to Prosocial Behaviour = 0.358 Included in the large effects category. Indicates that self-efficacy has a strong direct influence on the prosocial behavior of teachers. Teachers who believe in their abilities tend to be more actively involved in helpful, supportive, and cooperative behaviors can be seen from table 4

Table . 9. *f Squere Matrik*

	Gratitude	**Prosocial**	**Self-efficacy**
Gratitude		0.289	
Prosocial			
Self efficacy	0.320	0.462	

Significance Test.

From the output results of table 5. We get the SEM-PLS analysis, obtained several important findings related to the hypothesis, namely: The Role of Gratitude on Prosocial Behavior The path coefficient value was 0.393 with a *t-statistic* value of 6.726 and *a p-value* of 0.000 (< 0.05). These results show that gratitude has a positive and significant effect on prosocial behavior. In other words, the higher the teacher's gratitude, the higher their tendency to engage in prosocial behavior, the results of the H1 hypothesis are accepted

The Role of Self-Efficacy on Gratitude with a path coefficient value of 0.493 with *a t-statistic* of 8.689 and *a p-value* of 0.000. This means that self-efficacy has a strong and significant positive influence on gratitude, that is, the higher the self-efficacy, the higher the sense of gratitude so that teachers with high self-confidence are more likely to internalize gratitude in daily life, the H2 hypothesis is accepted.

The role of Self-Efficacy on Prosocial Behavior was a path coefficient of 0.497 with *a t-statistic* of 8.618 and *a p-value* of 0.000. These results show a significant positive influence, namely the higher the self-efficacy, the higher the prosocial behavior where high self-efficacy encourages teachers to be more active in helping, cooperating, and supporting others in the social and professional environment. So the H3 Hypothesis is accepted

The Role of Gratitude Mediation on Self-Efficacy and Prosocial Behavior of Muslim Teachers with T-Statistics 3,054 > 1.96 and P-Values = 0.002 < 0.05 so that the prediction that gratitude is able to mediate between self-efficacy and prosocial behavior is proven so that the hypothesis proposed in this study is accepted.

Table 10. Path Coepisioen *results*

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	R-Squeres
SE -> PRO	0.497	0.499	0.058	8.618	0.000	
SE -> BSY	0.493	0.492	0.057	8.689	0.000	
BSY -> PRO	0.393	0.391	0.058	6.726	0.000	0,595
SE->BSY->PRO	0.067	0.066	0.022	3.054	0.002	

Discussion

The results of the analysis show that all research hypotheses are significant and acceptable. The gratitude variable plays a positive role in prosocial behavior with a total effect value of 0.245. Although this effect is moderate, it is statistically meaningful in encouraging teachers to help, share, and support others. These findings are in line with moral emotion theory (Emmons & McCullough, 2003), which asserts that gratitude triggers prosocial action as a form of reciprocity. From an Islamic perspective, QS. Ibrahim (14:7) emphasizes that gratitude brings additional blessings, including social blessings in the form of harmonious relationships, while the hadith narrated by Bukhari and Muslim affirms that genuine faith is manifested by loving others. Thus, gratitude not only has an impact at the personal level, but also has important relevance for education management in building a school organizational culture that is collaborative, ethical, and value-oriented (Udin, 2024).

In addition, self-efficacy has a positive effect on gratitude with a total effect of 0.273. Teachers who believe in their abilities are more likely to feel grateful for their achievements and the support they receive (Datu & Yuen, 2020). In the framework of education management, this is important because confident teachers tend to be more adaptive to professional development programs, better prepared to face administrative and pedagogical challenges, and more capable of creating a healthy school climate. Islam teaches that self-belief needs to be framed with *tawakkul*, as QS. Al-Insyirah (94:5–6) affirms that with hardship comes ease. This suggests that self-efficacy not only builds individual optimism, but also fosters gratitude that, in turn, underpins prosocial behavior in the educational work environment.

The path analysis results also confirm that self-efficacy is the most powerful factor influencing prosocial behavior, with a direct path coefficient of 0.497, the highest value in the research model. Teachers with high self-efficacy do not only cultivate an attitude of gratitude, but are also driven to display concrete actions in the form of supporting students, helping colleagues, and contributing to the school community. These findings are consistent with Social Cognitive Theory (Bandura, 1997), which posits that individuals with high self-efficacy tend to be proactive, persistent, and optimistic in exhibiting prosocial behavior. In terms of education management, this shows that strengthening teachers' self-efficacy can be used as one of the main strategies in coaching and development programs, because confident teachers will more readily play the role of change agents in schools.

Strong confidence encourages teachers to be useful to others, in line with the words of the Prophet صلى الله عليه وسلم: "The best of people are those who are most beneficial to others" (HR. Ahmad, no. 23408). Thus, teachers who have high self-efficacy are not only professionally competent, but also role models of prosocial behavior in schools. Research by Salvo-Garrido et al. (2024) and Mieres-Chacaltana et al. (2025) supports this finding by showing that self-efficacy is an important predictor of prosocial behavior among teachers. Gratitude also plays a role as a moral emotion that strengthens the intention to help (Li & Li, 2022). From an education management perspective, these two variables form an important foundation for designing teacher development policies that integrate psychological and spiritual aspects in the development of human resources in education.

The findings of this study show that the strongest path in the model is the direct effect of self-efficacy on prosocial behavior, while the role of gratitude is more of an enhancing pathway than the primary route. Nevertheless, the mediation mechanism remains relevant, as it broadens our understanding that teachers' prosocial behavior is not only born from self-confidence, but is also reinforced by gratitude-based values that foster healthy social relationships in schools. In the context of education management, this emphasizes that teacher training programs should not only be oriented toward improving technical competence, but also toward cultivating affective and moral values that sustain prosociality.

The managerial implication of this study is the need for a more holistic education policy in teacher development. First, strengthening self-efficacy can be pursued through continuous professional development (CPD) programs that provide teachers with mastery experiences, constructive feedback, and opportunities for collaborative problem-solving. Second, the integration of gratitude practices into school routines—for example through daily reflection, appreciation forums, or spiritual mentoring—can reinforce a healthy organizational climate. Third, teachers' prosocial behavior can be used as one of the indicators in evaluating school performance and culture, as it has been shown to contribute to a collaborative and supportive educational climate. Thus, the results of this study support a value-based education management strategy that combines psychological, religious, and socio-cultural strengthening in order to improve both teacher quality and the overall quality of education in Indonesia.

Despite these contributions, this study has several limitations that should be acknowledged. First, the sample was drawn solely from PAB schools in North Sumatra, which are Islamic private institutions with a specific organizational culture; therefore, the findings may not fully generalize to public schools or to other regions of Indonesia with different socio-religious characteristics. Second, the data were collected using a cross-sectional survey and self-report instruments, which limits causal inference and raises the possibility of common-method bias and social desirability effects, especially on sensitive variables such as gratitude and prosocial behavior. Third, the analysis did not explicitly model the nested structure of the data (teachers within schools), so potential between-school variations in climate or leadership were not examined. Future research could address these limitations by using longitudinal or experimental designs, incorporating multi-informant data (e.g., student or principal ratings of teacher prosociality), and applying multilevel modeling across more diverse educational settings to test the robustness and generalizability of the mediating role of gratitude among Indonesian and non-Indonesian teachers.

CONCLUSION

The integration of self-efficacy, gratitude, and prosocial behavior in this study makes an important contribution to understanding the psychological mechanisms that underpin socially beneficial actions among teachers. In this model, gratitude functions as a mediating moral emotion that broadens teachers' cognitive appraisals, strengthens perceptions of social support, and enhances confidence, thereby helping to translate self-efficacy into concrete

prosocial behavior. Teachers with higher self-efficacy tend, in this sample, to report being more proactive in helping students and colleagues, while the internalization of gratitude is associated with richer altruistic motivation and stronger social ties within the school. Taken together, these results suggest that the combination of self-efficacy and gratitude is linked not only with teachers' individual well-being, but also with a more collaborative, ethical, and caring school climate.

Theoretically, this study extends positive psychology by empirically demonstrating the mediating role of gratitude in the self-efficacy prosocial behavior link within a collectivist, Muslim teacher population, a context that has been underrepresented in prior work. It also contributes to the field of Islamic education by providing quantitative evidence for how virtues emphasized in Islamic teachings such as shukr (gratitude) and ta'āwun (mutual assistance in goodness)—are related to teachers' prosocial behavior in professional settings. These findings do not claim universality, but they highlight culturally embedded mechanisms that may differ from, or complement, those observed in predominantly Western and secular samples.

Practically, the results support the integration of positive psychology principles especially strengthening self-efficacy and internalizing gratitude into teacher professional development. For education management and policy, this implies that teacher training should be designed not only to enhance pedagogical competence, but also to build self-efficacy through mastery experiences, supportive supervision, and peer mentoring. Practices of reflection, appreciation, and structured gratitude exercises can be incorporated into mentoring and coaching schemes to foster social morality that supports prosocial behavior. Within this framework, teachers' prosocial behavior can reasonably be considered as one of several indicators in evaluating school culture and performance, given its demonstrated association with a collaborative and conducive educational climate in the present study. Thus, while further evidence is needed from other settings, these findings point toward education management strategies that may benefit from a more holistic orientation combining psychological development, religiosity, and the cultural value of mutual cooperation to improve the quality of both teachers and education in Indonesia.

This research also has several limitations. First, the data were obtained through a cross-sectional quantitative survey relying on self-reports, which may be subject to subjective bias, common-method variance, and social desirability effects. Second, the sample was limited to Muslim teachers in PAB schools in North Sumatra, so the findings cannot be generalized without caution to other regions, non-Islamic schools, or different professional groups. Third, other potentially relevant factors—such as school leadership, organizational climate, or job satisfaction—were not included in the present model and therefore may account for additional variance in teacher prosociality. Future studies could employ mixed-methods designs to gain a deeper understanding of the psychological and contextual mechanisms that foster teacher prosocial behavior, and draw on more diverse samples across regions, religious

backgrounds, and educational levels to strengthen external validity. It would also be valuable to incorporate organizational variables (e.g., principal leadership, school climate, job satisfaction, school culture) and to experimentally design and test training programs based on self-efficacy and gratitude, so that the direct impact of such interventions on teachers' prosocial behavior in everyday school practice can be more rigorously evaluated.

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