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Task Significance and Prosocial Behavior among Rescue Volunteers: The Mediating Role of Pressure-Based Prosocial Motivation

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Abstract

Background/problem: Rescue volunteers work under risk, strain, and strong social expectations. Although perceived task significance is usually treated as a positive work-design resource, socially significant volunteer work may also make helping feel expected or difficult to refuse.

Objective/purpose: This study tested pressure-based prosocial motivation as a mediator and impression management motive as a moderator of the task significance–motivation association.

Design and methodology: A cross-sectional survey was conducted with 572 rescue volunteers from 64 charitable emergency service organizations in southern Thailand. Data were analyzed using latent structural equation modeling in Mplus, with robust standard errors adjusted for organizational clustering.

Results: Task significance was positively associated with pressure-based prosocial motivation ($b = .46, SE = .12, p < .001$) and prosocial behavior ($b = .58, SE = .14, p < .001$). The indirect association was significant ($b = .13, SE = .05, p = .02, 95\% CI [.03, .24]$). Impression management motive strengthened the task significance–pressure-based motivation association ($b = .12, SE = .05, p = .03$), but the index of moderated mediation was nonsignificant ($b = .03, SE = .02, p = .13, 95\% CI [-.01, .08]$).

Conclusion and implications: Task significance may carry an obligation-based motivational component in morally salient volunteer work. Rescue organizations should communicate task importance without making refusal or recovery socially costly. Cross-sectional data do not establish causality, and the study did not compare controlled and autonomous pathways.

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Rescue volunteers assist accident victims, distressed families, and communities during fires, disasters, and other emergencies, often under conditions of personal risk, emotional strain, and limited resources. Prosocial behavior—actions intended to benefit individuals, groups, or communities (Brief & Motowidlo, 1986)—is shaped not only by altruism but also by motivation, work design, social evaluation, and moral expectations. This context is especially salient in Thailand, where charitable emergency-service volunteers often serve as first responders despite limited resources and danger (Bangkok Post, 2017, 2023). Their work carries strong social and moral significance because it directly affects victims, families, and communities. Thai research further suggests that helping reflects both individual and social motivational forces, including gratitude, leader public service motivation, and citizen gratitude (Tongsongsom & Potipiroon, 2026; Wangwan, 2014). Rescue volunteering therefore provides a relevant setting for examining not only whether volunteers help but also why helping may sometimes feel expected.

Perceived task significance refers to the extent to which individuals believe their work has important consequences for others (Hackman & Oldham, 1976; Morgeson & Humphrey, 2006). Work design and

relational job design research generally treats task significance as a positive motivational resource that promotes meaningfulness, motivation, persistence, and prosocial contribution (Allan, 2017; Grant, 2007, 2008; Humphrey et al., 2007). Recent scholarship likewise identifies socially consequential work as central to high-quality work design (Parker & Knight, 2024). The present study does not dispute this positive view or suggest that task significance is inherently negative. Instead, it examines whether perceived task significance in morally salient rescue work is also associated with a pressure-based form of prosocial motivation. Awareness that one's actions can protect lives, comfort families, and support communities may make volunteer work deeply meaningful while also making non-helping difficult to justify. This possibility is consistent with self-determination theory, which distinguishes autonomous motivation from controlled motivation grounded in pressure, obligation, guilt, or external expectations (Deci & Ryan, 2000; Gagné & Deci, 2005). Despite evidence linking task significance to meaningfulness and prosocial contribution, whether socially significant work is associated with felt pressure to help remains underexamined in high-risk volunteer contexts. Meaningful volunteer work may therefore encourage helping both because volunteers want to help and because they feel they should.

Accordingly, this study examined the direct association between perceived task significance and self-reported prosocial behavior and the indirect association through pressure-based prosocial motivation among rescue volunteers from charitable emergency-service organizations in southern Thailand. It also tested whether impression management motive moderated the association between task significance and pressure-based prosocial motivation.

Literature Review

Work design theory identifies task significance as the work cue that makes volunteers aware that their actions affect others. Self-determination theory explains how this awareness may be experienced not only as meaningful but also as controlled, should-based motivation involving obligation, guilt, or external expectations. Impression management theory specifies the boundary condition: volunteers concerned with others' evaluations may view socially significant rescue work as more relevant to their desired image, strengthening its association with pressure-based prosocial motivation. Together, the theories explain the work cue, motivational regulation, and boundary condition.

Work Design Theory

Work design theory proposes that job characteristics shape motivation and behavior through employees' work experiences. The job characteristics model defines task significance as the extent to which work affects others (Hackman & Oldham, 1976), while relational job design theory explains how awareness of beneficiaries motivates prosocial contribution (Grant, 2007, 2008). Task significance is therefore viewed as a positive resource associated with meaningfulness, performance, and prosocial contribution (Allan, 2017; Humphrey et al., 2007; Parker & Knight, 2024).

Self-Determination Theory

However, socially significant work may also be associated with felt pressure. In high-impact volunteer contexts, task significance may heighten volunteers' awareness that victims, families, and communities depend on their actions. This awareness can activate moral responsibility, anticipated guilt, and role-based expectations, making helping feel less like a discretionary act and more like something one ought to do. This argument is consistent with self-determination theory, which distinguishes autonomous motivation from controlled motivation driven by pressure, obligation, guilt, or external expectations (Deci & Ryan, 2000; Gagné & Deci, 2005). In rescue volunteer work, beneficiaries' needs are often urgent and morally salient; therefore, volunteers who perceive their work as highly significant may find non-helping difficult to justify. This view aligns with research distinguishing pleasure-based from pressure-based prosocial motivation and with calls to treat prosocial motivation as a differentiated construct rather than a uniformly positive force (Gebauer et al., 2008; Liao et al., 2022).

Pressure-based prosocial motivation is conceptually related to, but distinct from, moral obligation, anticipated guilt, and social expectations. Moral obligation concerns a perceived responsibility to act consistently with moral standards or role duties, whereas anticipated guilt is a self-conscious emotion expected when one fails to meet internalized standards (Deci & Ryan, 2000). Social expectations concern perceived norms conveyed by peers, leaders, beneficiaries, or the wider community (Leary & Kowalski, 1990; McFarland et al., 2023). These experiences may contribute to pressure-based prosocial motivation but are not interchangeable with it. Pressure-based prosocial motivation is the controlled motivational orientation in which helping is experienced as something one should or ought to do, or as difficult to refuse (Gebauer et al., 2008; Liao et al., 2022). The present model therefore treats obligation, anticipated guilt, and social expectations as possible sources of pressure rather than as measured mediators.

Impression Management Theory

Impression management theory explains when meaningful work may become image-relevant and pressuring. Impression management motive is the desire to create or protect a favorable image (Leary & Kowalski, 1990). Because helping can signal responsibility and moral character (Bolino, 1999; Grant & Mayer, 2009), image-conscious volunteers may perceive socially significant rescue work as more expected and difficult to refuse. This argument accords with contextual research emphasizing audiences and social expectations (McFarland et al., 2023).

Key Constructs

The model includes four focal constructs. Perceived task significance denotes volunteers' perceptions that their work has meaningful consequences for victims, families, and communities (Hackman & Oldham, 1976; Morgeson & Humphrey, 2006). Pressure-based prosocial motivation is a controlled orientation in which helping feels obligatory or difficult to refuse (Gebauer et al., 2008). Impression management motive refers to the desire to be viewed favorably and is treated as a boundary condition shaping how volunteers interpret socially meaningful work (Leary & Kowalski, 1990). Prosocial behavior comprises self-reported actions intended to benefit others or promote community welfare during rescue work (Brief & Motowidlo, 1986).

Research Hypotheses

Direct Relationships among Perceived Task Significance, Pressure-Based Prosocial Motivation, and Prosocial Behavior

Perceived task significance is generally associated with meaningfulness, motivation, and work-related performance (Allan, 2017; Grant, 2008; Humphrey et al., 2007). Research on relational job design further shows that awareness of a job's impact on beneficiaries can increase employees' perceived social impact, persistence, and effort (Grant, 2007, 2008). In rescue work, such awareness may also heighten volunteers' sense that victims, families, and communities depend on their actions, making helping feel expected or difficult to refuse. Although direct evidence connecting task significance specifically to pressure-based prosocial motivation remains limited, research distinguishes pressure-based helping motives from more autonomous forms of prosocial motivation (Gebauer et al., 2008; Liao et al., 2022). The present hypothesis therefore extends prior task-significance research by proposing that socially consequential work may be associated with controlled as well as autonomous motivation.

H1: Perceived task significance is positively associated with pressure-based prosocial motivation.

Task significance should also be positively associated with prosocial behavior. Relational job design research indicates that awareness of beneficiaries can motivate individuals to invest greater effort in making a prosocial difference (Grant, 2007, 2008). Meta-analytic and longitudinal evidence similarly links task significance with meaningful work, motivation, and performance-related outcomes (Allan, 2017; Humphrey et al., 2007). In rescue settings, volunteers who perceive that their actions have meaningful consequences for others should therefore report greater engagement in helping behavior.

H2: Perceived task significance is positively associated with prosocial behavior.

Pressure-based prosocial motivation is also expected to be positively associated with prosocial behavior. Although controlled motivation differs from autonomous motivation in its psychological quality, empirical evidence indicates that controlled prosocial motivation—helping because it is perceived as a duty or obligation—can predict the frequency of helping and the effort and resources devoted to helping (Peetz & Milyavskaya, 2021). Similarly, meta-analytic evidence indicates that obligatory forms of prosocial motivation can be associated with prosocial behavior, although their psychological consequences may differ from those of discretionary motivation (Liao et al., 2022). In emergency volunteer contexts, where others' needs are urgent and visible, felt obligation may therefore energize helping behavior even when helping is experienced as demanding.

H3: Pressure-based prosocial motivation is positively associated with prosocial behavior.

Indirect Role of Pressure-Based Prosocial Motivation

The preceding evidence supports a proposed indirect association. Task-significance research shows that awareness of beneficiary impact can focus attention on the consequences of one's work (Grant, 2007, 2008), while prosocial-motivation research indicates that helping motives are associated with prosocial behavior and differ in their level of autonomy (Gebauer et al., 2008; Liao et al., 2022). Accordingly, volunteers who perceive their work as socially significant may experience stronger pressure-based prosocial motivation, which may in turn be associated with greater self-reported helping. Direct evidence for this specific indirect relationship remains limited; Hypothesis 4 therefore represents a theory-extending test. Because the data are cross-sectional, the hypothesis concerns an indirect association consistent with the proposed mechanism rather than temporal or causal mediation.

H4: Pressure-based prosocial motivation mediates the association between perceived task significance and prosocial behavior.

The Moderating Role of Impression Management Motive

Impression management motive may strengthen the association between perceived task significance and pressure-based prosocial motivation. In two multisource field studies, Grant and Mayer (2009) found that prosocial and impression management motives interacted positively in predicting affiliative citizenship behaviors, including helping and courtesy. More recent research emphasizes that the expression of impression management depends on audiences, social expectations, and the meaning attached to behavior within a particular context (McFarland et al., 2023). Rescue work is often visible to peers, leaders, beneficiaries, and community members; consequently, helping may communicate responsibility, commitment, and moral character. Volunteers with stronger impression management motives may therefore interpret socially significant rescue work as more relevant to their desired image and as something expected of a good rescue volunteer. Although prior studies have not tested this exact interaction, their findings support the proposition that image concerns can strengthen the behavioral relevance of prosocial work motives.

H5: Impression management motive moderates the relationship between perceived task significance and pressure-based prosocial motivation, such that the relationship is stronger when the impression management motive is high rather than low.

The Conditional Indirect Association

Extending the first-stage moderation argument, impression management motive may also condition the proposed indirect association. If socially significant rescue work is more strongly associated with pressure-based prosocial motivation among volunteers with greater image concerns, and pressure-based motivation is positively associated with helping, the indirect association between task significance and prosocial behavior should be stronger at higher levels of impression management motive. Evidence directly testing this complete conditional process is limited; Hypothesis 6 is therefore presented as a theory-extending test rather than a replication of an established relationship. Because the data are cross-sectional,

it concerns a conditional indirect association and not a causal moderated mediation process (Hayes, 2015; Preacher et al., 2007).

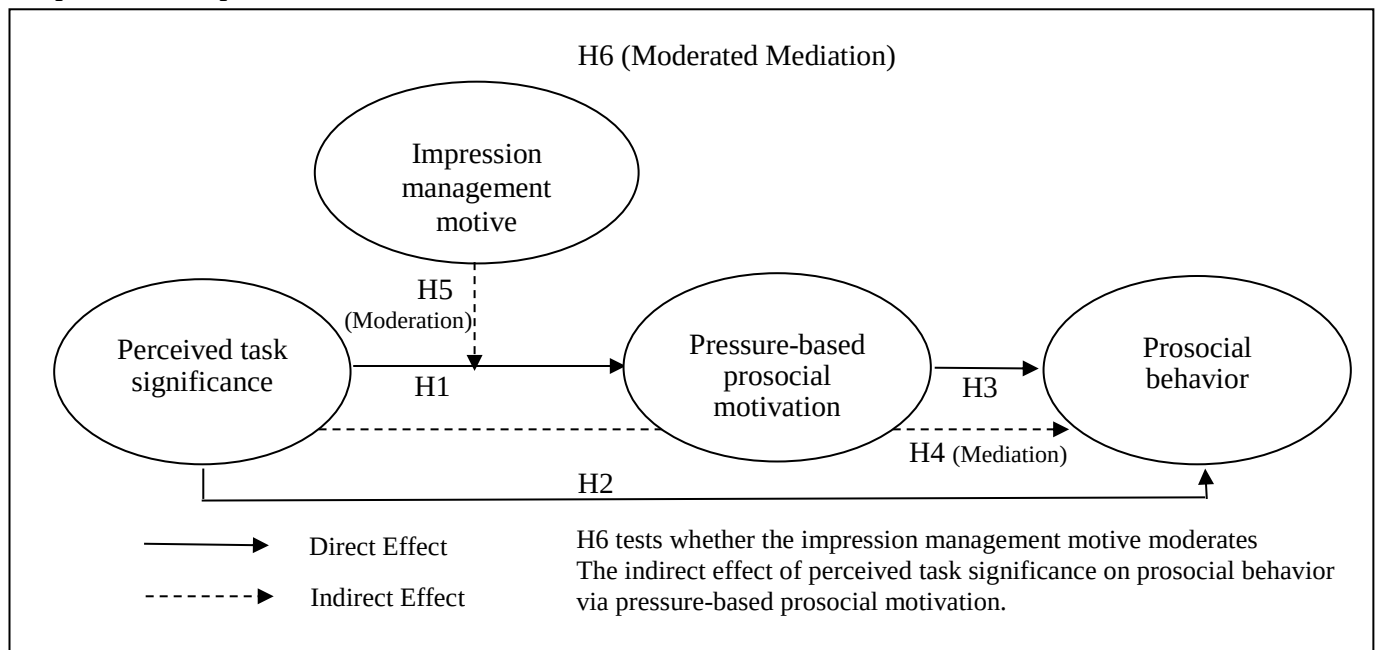
H6: Impression management motive moderates the indirect association between perceived task significance and prosocial behavior through pressure-based prosocial motivation, such that the indirect association is stronger when the impression management motive is high rather than low.

Conceptual Framework

Figure 1 presents the proposed model. Perceived task significance is expected to be associated with prosocial behavior directly and indirectly through pressure-based prosocial motivation. Impression management motive is expected to strengthen the first-stage association between task significance and pressure-based prosocial motivation.

Figure 1

Proposed Conceptual Framework



Note. Solid arrows represent hypothesized structural associations. The dashed arrow represents moderation of the PTS → PBP association by IMM. H4 concerns the indirect association through PBP, whereas H6 concerns whether that indirect association varies across levels of IMM. PTS = perceived task significance; PBP = pressure-based prosocial motivation; IMM = impression management motive; PB = prosocial behavior.

Method

Research Design

This study used a quantitative cross-sectional survey design to examine the relationships among perceived task significance, pressure-based prosocial motivation, impression management motive, and prosocial behavior. A cross-sectional design was appropriate for testing theory-consistent associations among the study variables, although it does not permit strong causal inference or establish temporal ordering. Accordingly, the mediation and moderated mediation results are interpreted as indirect associations consistent with the proposed theory rather than as definitive causal effects. Because the model included latent constructs, mediation, moderation, and conditional indirect associations, latent structural equation modeling was used to test the hypotheses while accounting for measurement error (Kline, 2016).

Research Setting

The study was conducted among rescue volunteers affiliated with charitable nonprofit emergency-service organizations across all 14 provinces of southern Thailand. The region was selected as a

geographically bounded sampling area that enabled organization-based recruitment with coverage across all provinces. It also provided a relevant context for examining volunteer emergency-service work. For example, floods during November–December 2024 affected 11 southern provinces and 780,272 households and caused 53 deaths, mobilizing government agencies, charitable foundations, and volunteers (Department of Disaster Prevention and Mitigation [DDPM], 2024). These regional characteristics provided a suitable setting for examining the proposed relationships.

Participants/ Sample

The sampling frame was compiled from official records maintained by the Department of Disaster Prevention and Mitigation, Ministry of Interior, Thailand (DDPM; <https://www.disaster.go.th/>). It comprised 125 charitable rescue organizations and approximately 3,000 rescue volunteers across the 14 southern provinces. Recruitment proceeded in three stages. First, organizations were screened for eligibility, defined as actively providing community-based emergency or rescue services and relying on volunteers in service delivery. Second, 90 organizations were purposively selected based on eligibility, geographic coverage across all 14 provinces, accessibility during the data-collection period, and the availability of an organizational coordinator. Third, 900 paper questionnaires were allocated among the selected organizations in proportion to their estimated numbers of active rescue volunteers. Organizational coordinators then distributed the questionnaires to active volunteers across available teams and work shifts.

A total of 572 usable questionnaires were returned from volunteers in 64 organizations. This represented an individual-level usable-response rate of 63.6% based on the 900 questionnaires distributed and an organizational-level usable-response rate of 71.1% based on the 90 organizations approached. Because organizations were purposively selected and volunteer participation depended on availability, the sample was nonprobability-based and was not statistically representative of all rescue volunteers in southern Thailand or Thailand as a whole.

Sampling and Sample Procedures

The required sample size was evaluated using both a 20:1 sample-to-item guideline for SEM and an a priori G*Power analysis. With 14 focal measurement items, the SEM guideline suggested at least 280 participants (Kline, 2016). The G*Power analysis, using $\alpha = .05$, power = .80, $f^2 = .15$, and 8 predictors, indicated a minimum of 109 participants (Cohen, 1988; Faul et al., 2009). The final sample of 572 exceeded both thresholds.

Instruments

Fourteen items assessed four constructs: perceived task significance (four items), impression management motive (three), pressure-based prosocial motivation (four), and prosocial behavior (three). All measures used five-point agreement scales (1 = strongly disagree, 5 = strongly agree), except prosocial behavior, which used a seven-point scale (1 = strongly disagree, 7 = strongly agree). Perceived task significance was measured with four items adapted from Morgeson and Humphrey (2006), $\alpha = .77$; impression management motive with three items adapted from Bolino (1999) and Grant and Mayer (2009), $\alpha = .96$; pressure-based prosocial motivation with four items adapted from Gebauer et al. (2008), $\alpha = .90$; and self-reported prosocial behavior with three items adapted from Brief and Motowidlo (1986) and Grant and Mayer (2009), $\alpha = .90$. The prosocial behavior items captured respondents' endorsement of self-described helping actions rather than behavioral frequency. All measures were translated into Thai using back-translation (Brislin, 1970) and reviewed by five experts for content relevance and contextual appropriateness. Item-objective congruence values ranged from .60 to 1.00, indicating acceptable content validity (Rovinelli & Hambleton, 1976).

Procedure

Data were collected from March to April 2026 using paper questionnaires distributed by local coordinators. Participation was voluntary, anonymous, and confidential, and no identifying information was collected. Respondents were informed that there were no right or wrong answers and were encouraged

to answer honestly, consistent with procedural recommendations for reducing common method bias (Podsakoff et al., 2003). Content validity was assessed through expert review and item-objective congruence, internal consistency through Cronbach's alpha, and construct validity through confirmatory factor analysis. The hypotheses were tested using latent structural equation modeling in Mplus Version 8.7 (Muthén & Muthén, 2017). Since the 572 respondents were nested within 64 organizations, robust maximum likelihood estimation with TYPE = COMPLEX adjusted standard errors and chi-square tests for clustering without estimating organization-level effects (Stapleton, 2006). Model fit was evaluated jointly using χ^2 , CFI, TLI, RMSEA with its 90% confidence interval, and SRMR, with conventional thresholds treated as interpretive guidelines (Hu & Bentler, 1999; Kline, 2016). Convergent validity was assessed using standardized loadings, composite reliability, and average variance extracted (Fornell & Larcker, 1981). The mediation model was estimated first, followed by a latent-interaction model using XWITH; conditional indirect associations were derived using MODEL CONSTRAINT (Hayes, 2015; Klein & Moosbrugger, 2000; Preacher et al., 2007). Because conventional global fit indices are unavailable for XWITH models, fit was assessed using the corresponding model without the interaction, whereas the interaction model was evaluated from its coefficient and conditional indirect estimates. Given the cross-sectional design, all indirect associations were interpreted as noncausal.

Results

Descriptive Statistics and Bivariate Correlations

Respondents were predominantly male (70.10%). Most had less than a bachelor's degree (83.22%), 16.08% held a bachelor's degree, and 0.70% had education beyond a bachelor's degree. Mean age was 25.73 years ($SD = 7.66$), mean organizational tenure was 3.74 years ($SD = 3.02$), and mean dyad tenure with current team leaders was 3.27 years ($SD = 3.69$). The focal variables showed acceptable distributional properties, with skewness values ranging from -1.160 to -0.138. As shown in Table 1, all bivariate correlations among the focal variables were significant and in the predicted directions. Correlations remained below .57, and VIF values ranged from 1.03 to 1.87, suggesting no serious multicollinearity concern.

Table 1
Means, Standard Deviations, and Bivariate Correlations

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. PTS	4.04	0.66	(.72)							
2. IMM	2.56	1.24	.23**	(.94)						
3. PBP	3.59	0.84	.43**	.42**	(.84)					
4. PB	6.02	0.99	.34**	.17**	.33**	(.87)				
5. Gender	1.30	0.46	-.02	-.06	-.14**	-.01	-			
6. Age	25.73	7.66	-.13**	-.01	-.07	-.21**	-.07	-		
7. Edu	1.18	0.40	-.12**	-.14**	-.03	-.05	.02	.12**	-	
8. Tenure	3.74	3.02	-.03	.02	-.01	-.17**	-.02	.56**	.02	-
9. Dyad tenure	3.27	3.69	-.04	-.01	-.09*	-.08*	-.01	.31**	.06	.52**

Note. $n = 572$; * $p < .05$; ** $p < .01$; *** $p < .001$. Values on the diagonal are square roots of AVE. PTS = perceived task significance; IMM = impression management motive; PBP = pressure-based prosocial motivation; PB = prosocial behavior; AVE = average variance extracted.

Measurement Model

We first examined the hypothesized four-factor model, consisting of perceived task significance, impression management motive, pressure-based prosocial motivation, and prosocial behavior, followed by alternative models in which conceptually similar factors were merged. The proposed four-factor model showed an acceptable, although not ideal, fit to the data, $\chi^2 = 363.76$, $df = 67$, $p < .001$, RMSEA = .088, CFI = .92, TLI = .89, and SRMR = .07. In contrast, the three-factor models showed poorer fit. Specifically, the model in which perceived task significance and pressure-based prosocial motivation were merged showed a poorer fit, $\chi^2 = 512.44$, $df = 70$, RMSEA = .105, CFI = .87, TLI = .84, and SRMR = .09. The

model in which impression management motive and pressure-based prosocial motivation were merged also showed a poorer fit, $\chi^2 = 604.22$, $df = 70$, RMSEA = .116, CFI = .85, TLI = .81, and SRMR = .10. Similarly, the model in which pressure-based prosocial motivation and prosocial behavior were merged showed a poorer fit, $\chi^2 = 681.59$, $df = 70$, RMSEA = .124, CFI = .83, TLI = .78, and SRMR = .11. Finally, when all indicators were loaded onto a single factor, the model showed the worst fit, $\chi^2 = 1,846.33$, $df = 77$, RMSEA = .201, CFI = .49, TLI = .40, and SRMR = .17.

Convergent validity was evaluated using standardized factor loadings, composite reliability (CR), and average variance extracted (AVE). As reported in Table 2, all standardized loadings were statistically significant. The loadings ranged from .49 to .79 for perceived task significance, .89 to .95 for impression management motive, .80 to .90 for pressure-based prosocial motivation, and .84 to .92 for prosocial behavior. All constructs exceeded the .70 guideline for CR, with values ranging from .79 to .96. The AVE values for impression management motive (.88), pressure-based prosocial motivation (.70), and prosocial behavior (.76) exceeded the .50 guideline. However, perceived task significance produced an AVE of .48, and one indicator had a loading of .49. Its convergent validity was therefore considered marginal rather than fully established. Overall, the results supported the reliability and convergent validity of three constructs, while providing qualified support for perceived task significance. The recommended values were treated as interpretive guidelines rather than rigid cutoffs (Fornell & Larcker, 1981; Kline, 2016).

Because all focal variables were self-reported in the same survey, common method variance was assessed through sensitivity analyses. First, a one-factor CFA showed very poor fit, $\chi^2(77) = 2,516.83$, $p < .001$, RMSEA = .236, 90% CI [.228, .244], CFI = .302, TLI = .175, and SRMR = .167, indicating that a single common factor did not adequately reproduce the observed covariance structure. Second, an unmeasured common latent method factor was added to the hypothesized four-factor measurement model. The freely estimated method-factor model did not converge and was therefore not interpreted. A restrictive equal-loading method-factor model converged, $\chi^2(70) = 366.95$, $p < .001$, RMSEA = .086, 90% CI [.078, .095], CFI = .915, TLI = .890, and SRMR = .067, showing only small changes in conventional fit indices relative to the baseline four-factor model. However, because this model imposed equal method loadings and produced a warning regarding possible multiple solutions, it was treated as a sensitivity analysis rather than definitive evidence regarding method variance. Collectively, the results do not support a single-factor explanation of the observed relationships, but common method variance cannot be ruled out. The findings should therefore be interpreted with appropriate caution (Podsakoff et al., 2003).

Hypothesized Structural Models

Because all focal variables were self-reported, potential common method variance was examined using a preliminary model-implied assessment. Based on a correlation matrix reconstructed from the standardized factor loadings and construct correlations, the first principal component was estimated to account for 36.3% of the total variance, below the 50% benchmark. Consistent with the poor fit of the one-factor CFA, this estimate suggests that no single factor dominated the measures. Following validation of the measurement model, we estimated the structural mediation model without the latent interaction. Pressure-based prosocial motivation and prosocial behavior were regressed on all control variables. Model fit was mixed, $\chi^2(131) = 550.87$, $p < .001$, RMSEA = .08, 90% CI [.07, .08], CFI = .90, TLI = .88, and SRMR = .07. Although the CFI and SRMR approached conventional guidelines, the TLI was below .90 and the RMSEA indicated marginal fit. The structural estimates were therefore interpreted cautiously.

These results indicate that the overall structural model provided an adequate representation of the data, although some fit indices suggested room for improvement. For the latent interaction model estimated with XWITH, conventional global fit indices were not directly available because the model was estimated using latent moderated structural equations with numerical integration; therefore, the model was evaluated using log-likelihood information, information criteria, the latent interaction estimate, and conditional indirect effects. The latent interaction model had a log-likelihood of -8718.89, AIC = 17555.78, BIC = 17812.28, and sample-size adjusted BIC = 17624.98.

Table 2*Measurement Model Results: Factor Loadings, AVEs, CRs, and Internal Consistency*

Variables	Measurement items	Standardized factor loading	AVE	CR	α
Perceived task significance	1. My volunteer work has a significant positive impact on other people.	.71	.48	.79	.77
	2. The outcomes of my rescue work are important to victims, families, and communities.	.79			
	3. The quality of my rescue work can substantially affect the well-being of people who need assistance.	.49			
	4. The rescue tasks I perform have meaningful consequences for people beyond my organization.	.75			
Impression management motive	1. I try to behave in ways that make others see me positively as a rescue volunteer.	.95	.88	.96	.96
	2. I want others to regard me as a responsible and dedicated rescue volunteer.	.94			
	3. When I help, I am concerned with making a favorable impression on other people.	.89			
Pressure-based prosocial motivation	1. I help others because I feel that I should not ignore their needs.	.80	.70	.90	.90
	2. I would feel guilty if I did not help when people needed me.	.90			
	3. I feel obligated to help because others expect it from a rescue volunteer.	.83			
	4. Even when I do not personally want to help, I feel that I ought to do so.	.80			
Prosocial behavior	1. I voluntarily help people who need assistance during rescue work.	.92	.76	.90	.90
	2. I provide additional help to victims or team members when I notice that they need it.	.84			
	3. I willingly assist with rescue-related tasks beyond what is formally required of me.	.84			

Note. All loadings were statistically significant. α = Cronbach's alpha; AVE = average variance extracted; CR = composite reliability.

Hypotheses 1–3: Direct Effects

As shown in Table 3, Model 0 indicated that perceived task significance was positively related to pressure-based prosocial motivation ($b = .46$, $SE = .12$, $p < .001$) and self-reported prosocial behavior ($b = .58$, $SE = .14$, $p < .001$). Pressure-based prosocial motivation was also positively related to self-reported prosocial behavior ($b = .28$, $SE = .11$, $p = .01$). These results support Hypotheses 1–3. Gender was negatively associated with pressure-based prosocial motivation ($b = -.19$, $SE = .05$, $p < .001$), consistent with the coding of 1 = male and 2 = female. Leader–volunteer dyad tenure was also negatively associated with pressure-based prosocial motivation ($b = -.02$, $SE = .01$, $p = .01$). Age and organizational tenure were marginally associated with pressure-based prosocial motivation. None of the control variables was significantly associated with self-reported prosocial behavior at the .05 level.

Hypothesis 4: Mediation

As shown in Table 4, the estimated indirect association between perceived task significance and self-reported prosocial behavior through pressure-based prosocial motivation was positive and statistically significant ($b = .13$, $SE = .05$, $p = .015$, 95% CI [.03, .24]). This finding was consistent with the indirect association proposed in Hypothesis 4. The model explained 35.9% and 24.4% of the variance in pressure-based prosocial motivation and self-reported prosocial behavior, respectively. The direct association remained statistically significant after accounting for pressure-based prosocial motivation ($b = .58$, $SE = .14$, $p = .001$, 95% CI [.31, .86]), and the total association was also statistically significant ($b = .71$, $SE = .13$, $p = .001$, 95% CI [.46, .97]).

Table 3

Latent Moderated Mediation Structural Equation Modeling (SEM) Analysis

Predictor Variables	Mediation (Model 0)		Moderated Mediation (Model 1)	
	PBP	PB	PBP	PB
Control variables				
Gender (1 = male)	-.19*** (.05)	.04 (.11)	-.20** (.06)	.05 (.11)
Age (in years)	-.01 ^t (.01)	-.01 ^t (.01)	-.01 ^t (.01)	-.01 ^t (.01)
Education	.12 (.07)	.02 (.12)	.12 (.07)	.02 (.12)
Organizational tenure (in years)	.02 ^t (.01)	-.04 ^t (.02)	.02 ^t (.01)	-.04 ^t (.02)
Dyad tenure (in years)	-.02* (.01)	.01 (.01)	-.02** (.01)	.01 (.01)
Main predictors				
Perceived task significance	.46*** (.12)	.58*** (.14)	.46*** (.13)	.57*** (.14)
Impression management motive	.20*** (.03)	.02 (.04)	.18*** (.03)	.02 (.04)
Mediator				
PBP	-	.28* (.11)	-	.28* (.11)
Interaction term				
Task significance × impression management motive	-	-	.12* (.05)	-
R^2	.36	.24	.35	.24
Free Parameters	58	58	59	59
Log (L)	-8722.87	-8722.87	-8718.89	-8718.89

Note. ^t $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$. Values in parentheses are standard errors; unstandardized estimates are reported. PTS = perceived task significance; IMM = impression management motive; PBP = pressure-based prosocial motivation; PB = prosocial behavior.

Hypothesis 5: Moderating Role of Impression Management Motive

As shown in Table 3, Model 1 indicated that the latent interaction between perceived task significance and impression management motive was positive and statistically significant ($b = .12$, $SE = .05$, $p = .03$), supporting Hypothesis 5. Simple-slope analyses showed a positive association between task significance and pressure-based prosocial motivation at low impression management motive ($b = .34$, $SE = .16$, $p = .03$) and a stronger association at high impression management motive ($b = .59$, $SE = .13$, $p < .001$). Figure 2 illustrates this interaction: the positive association between perceived task significance and pressure-based prosocial motivation is steeper at higher levels of impression management motive. Given the cross-sectional design, these estimates indicate conditional associations rather than causal effects.

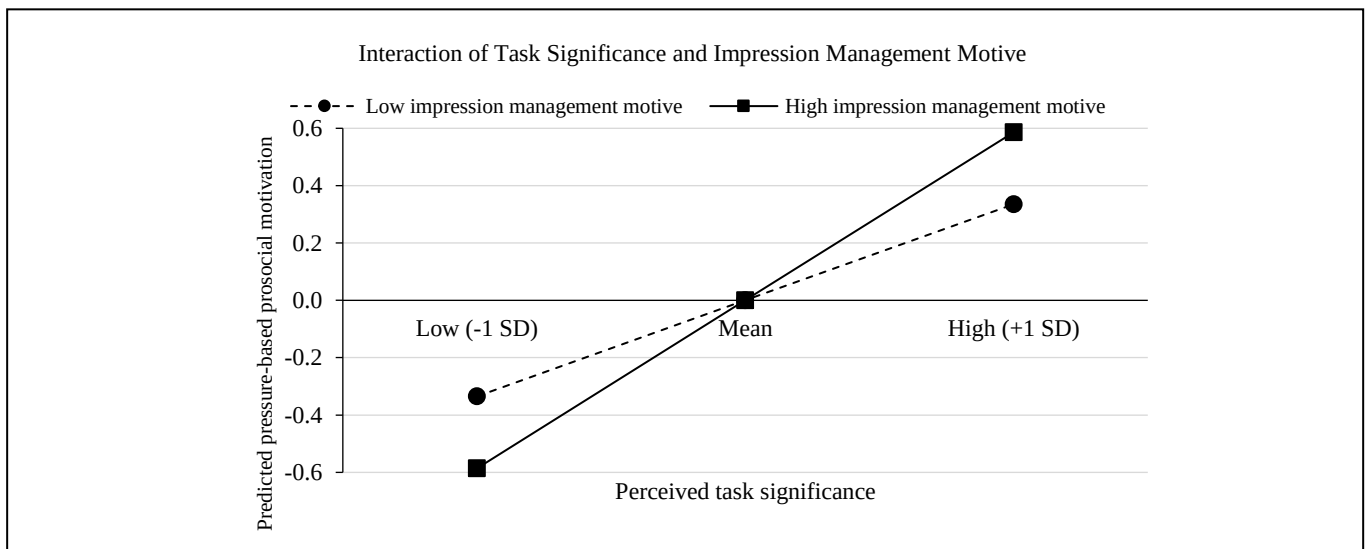
Table 4
Indirect Effects

Mediated path	Indirect Effects			95% CI	
	Coefficients	SE	p	LLCI	ULCI
Total effect	.71	.13	.001	.46	.97
Indirect Effects: PTS → PBP → PB	.13	.05	.015	.03	.24
Direct effect: PTS → PB	.58	.14	.001	.31	.86

Note. Unstandardized coefficients are reported. CI = confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval; PTS = perceived task significance; PBP = pressure-based prosocial motivation; PB = prosocial behavior.

Figure 2

Interaction Between Perceived Task Significance and Impression Management Motive in Predicting Pressure-Based Prosocial Motivation



Note. The y-axis displays model-implied values used to visualize the latent interaction rather than raw pressure-based prosocial motivation scale scores.

Hypothesis 6: Moderated Mediation

As shown in Table 5, the conditional indirect association through pressure-based prosocial motivation was significant at low impression management motive ($b = .09$, $SE = .05$, $p = .04$, 95% CI [.01, .19]) and high impression management motive ($b = .16$, $SE = .06$, $p = .01$, 95% CI [.04, .30]). Although the estimates differed descriptively, the index of moderated mediation was not significant ($b = .03$, $SE = .02$, $p = .13$, 95% CI [-.01, .08]). Hypothesis 6 was therefore not supported: the evidence was insufficient to conclude that the indirect association differed across levels of impression management motive.

Table 5
Conditional Indirect Effects and Index of Moderated Mediation

Mediated path	Levels of IMM	Indirect effects			95% CI	
		Coefficients	SE	p	LLCI	ULCI
PTS → PBP → PB	Low	.09	.05	.04	.01	.19
	High	.16	.06	.01	.04	.30
	Index	.03	.02	.13	-.01	.08

Note. Unstandardized coefficients are reported. A confidence interval containing zero indicates that the index of moderated mediation is not statistically significant. CI = confidence interval; LLCI = lower limit of the confidence interval; ULCI = upper limit of the confidence interval; PTS = perceived task significance; IMM = impression management motive; PBP = pressure-based prosocial motivation; PB = prosocial behavior.

Discussion and Conclusion

Discussion of Main Results

The central contribution of this study is the observed positive association between perceived task significance and an obligation-based form of prosocial motivation. Work design research has generally linked task significance with meaningfulness, prosocial contribution, and work motivation (Grant, 2008; Grant & Shandell, 2022; Humphrey et al., 2007; Knight & Parker, 2021). Recent scholarship further emphasizes that the motivational implications of work characteristics depend on their social and organizational contexts. In the present sample, perceived task significance was positively associated with pressure-based prosocial motivation. This pattern is theoretically consistent with self-determination theory's distinction between autonomous and controlled regulation: socially consequential work may be experienced as meaningful while also being associated with obligation, anticipated guilt, or perceived expectations to help (Gagné & Deci, 2005; Liao et al., 2022). However, the findings do not establish that task significance causes pressure-based prosocial motivation, nor does the study directly compare pressure-based and autonomous motivational pathways.

The results also showed a statistically significant indirect association between perceived task significance and self-reported prosocial behavior involving pressure-based prosocial motivation. This pattern is consistent with the proposed theoretical pathway but does not establish temporal ordering or causal mediation. Nevertheless, it highlights the importance of distinguishing helping behavior from the motivational quality associated with that behavior. Volunteers may report similar helping actions while differing in whether helping is experienced as freely chosen, personally meaningful, morally expected, or difficult to refuse. Accordingly, the positive association between pressure-based prosocial motivation and self-reported prosocial behavior should not be interpreted as evidence that controlled motivation is necessarily beneficial. Rather, felt obligation may coexist with helping behavior in socially demanding situations, although its longer-term implications for volunteer well-being, burnout, and retention require longitudinal investigation (Breen et al., 2024; Grant & Shandell, 2022; Liao et al., 2022; Tongsongsom & Potipiroon, 2026).

The latent interaction indicated that the positive association between perceived task significance and pressure-based prosocial motivation was stronger at higher levels of impression management motive. This pattern is consistent with the argument that volunteers who are more attentive to others' evaluations may experience socially significant rescue work as more relevant to their desired public image (Grant & Mayer, 2009; McFarland et al., 2023). However, the cross-sectional findings cannot determine whether image concerns shape perceptions of task significance and obligation or whether these perceptions are reciprocally related. Moreover, the index of moderated mediation was not statistically significant. Thus, the findings are consistent with the first-stage interaction proposed in Hypothesis 5 but do not support Hypothesis 6's stronger proposition that the complete indirect association varies significantly across levels of impression management motive (Hayes, 2015; Preacher et al., 2007).

Finally, all focal constructs were self-reported in the same survey. Although the sensitivity analyses did not support a single-factor representation of the data, they cannot eliminate concerns about common method variance or socially desirable responding. The magnitudes of the observed associations should therefore be interpreted cautiously and examined in future research using longitudinal designs, multiple data sources, and behavioral or supervisor-rated outcomes.

Limitations

Four limitations warrant attention. First, the cross-sectional data do not establish temporal ordering or causal mediation (Kline, 2016). Second, all focal constructs were self-reported in the same survey, and prosocial behavior reflected endorsed helping rather than observed behavior. Although the one-factor CFA fit poorly, common method variance cannot be excluded (Podsakoff et al., 2003). Future research should use longitudinal designs, multiple data sources, and behavioral indicators.

Third, the significant first-stage interaction did not produce a significant index of moderated mediation (Hayes, 2015; Preacher et al., 2007). Thus, the findings support moderation of the task significance–motivation association but not the complete conditional indirect effect. Finally, purposive recruitment from 64 organizations in southern Thailand limits national generalizability. TYPE = COMPLEX adjusted standard errors for clustering but did not estimate organization-level effects (Stapleton, 2006). Future studies should employ multi-region probability samples and multilevel designs.

Implications for Behavioral Science

This study offers three implications for behavioral science. First, the findings suggest a possible extension of work design research by showing that perceived task significance is associated with an obligation-based form of motivation in a morally salient volunteer context. This pattern complements research emphasizing meaningfulness and prosocial contribution (Grant, 2008; Grant & Shandell, 2022; Humphrey et al., 2007; Knight & Parker, 2021). However, the study does not establish causality or compare pressure-based and autonomous motivational pathways. Second, the findings reinforce the distinction between prosocial behavior and its underlying motivational quality. Similar helping actions may be associated with autonomous or pressure-based regulation, which can have different psychological implications (Gagné & Deci, 2005; Gebauer et al., 2008; Liao et al., 2022). The significant indirect association provides preliminary evidence consistent with the proposed pathway but should not be interpreted as causal mediation. Third, the interaction suggests that impression management motive may be a boundary condition of the association between task significance and pressure-based prosocial motivation (Grant & Mayer, 2009; McFarland et al., 2023). However, because the index of moderated mediation was nonsignificant, the contribution is limited to the first-stage interaction rather than the complete conditional indirect association.

Practical Implications for Rescue Organizations

Rescue organizations should communicate the importance of emergency work without implying that committed volunteers must always accept assignments. Autonomy-supportive communication, legitimate opt-out procedures, recovery time, workload rotation, and confidential monitoring of fatigue can help prevent task significance from becoming moral or social pressure (Gagné & Deci, 2005). Recognition systems should value safe judgment, teamwork, and sustainable participation rather than uninterrupted sacrifice. These recommendations are precautionary applications of the broader literature; burnout and fatigue were not measured as outcomes in this study.

Conclusion

This study suggests that perceived task significance is associated with self-reported prosocial behavior partly through pressure-based prosocial motivation among rescue volunteers. Impression management motive strengthened the task significance–pressure-based motivation association, but the index of moderated mediation was not significant. The findings therefore identify an obligation-based component associated with task significance without establishing that task significance is harmful or that the full indirect process is moderated. Understanding sustainable volunteer helping requires attention to both behavior and the motivational quality underlying it.

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Declarations

Conflicts of Interest: The authors declare no conflicts of interest.

Ethical Approval Statement: The study was conducted in accordance with the Declaration of Helsinki and was approved by the Ethics Committee in Human Research, Walailak University (Approval No. WUEC-26-103-01; Project No. WUEC-PO-1-046-69; approval date: 9 March 2026) for studies involving human participants.

Declaration of Generative AI: During the preparation of this work, the authors used generative AI tools, namely ChatGPT, only for language editing, grammar checking, improving sentence clarity, and assisting with manuscript formatting. All conceptual development, data analysis, creation of tables and figures, interpretation of results, and theoretical arguments were conducted exclusively by the authors.

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