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Peer Pressure and Fraud Normalization Intention: The Mediating Role of Rationalization from an Ethical Fading Perspective

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Abstract. Fraud remains costly for organizations, yet little is known about the early stage at which deviant behavior comes to be accepted as normal. Drawing on ethical fading, the fraud triangle and social influence theory, this study examines whether peer pressure increases fraud normalization intention among accounting, finance and tax staff in Indonesia, and whether rationalization mediates this relationship. Financial pressure and length of employment are included as control variables. Survey data from 240 respondents were analyzed with partial least squares structural equation modeling (PLS-SEM). The measurement model met the criteria for convergent validity, discriminant validity and reliability, and the structural model showed good fit (SRMR = 0.052). Peer pressure had a positive effect on rationalization (β = 0.789) and on fraud normalization intention (β = 0.425), and rationalization had a positive effect on fraud normalization intention (β = 0.287). Rationalization partially mediated the effect of peer pressure (indirect effect = 0.226). Financial pressure also increased the intention, whereas length of employment had only a small negative effect. The findings suggest that fraud normalization is a socially driven process that is justified cognitively before it becomes visible behavior, so early warning efforts should address peer norms and justification patterns, not only formal controls.

Keywords Ethical fading; Fraud normalization; Peer pressure; Rationalization; SEM-PLS

1 Introduction

Fraud remains a serious problem for organizations worldwide. The Association of Certified Fraud Examiners estimates that organizations lose about 5% of their annual revenue to fraud, and financial statement fraud, although the least frequent scheme, causes the largest losses, with a median of USD 766,000 per case [1]. Indonesia shows a similar pattern: the 2025 Indonesia Fraud Survey reports that

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corruption accounts for 47.6% of fraud cases, asset misappropriation for 40.2% and financial statement fraud for 12.2% [2]. These figures suggest that individual behavior and the social environment at work deserve attention alongside formal controls.

Ethics codes and regulations exist in accounting and taxation, yet compliance does not always follow when people face pressure from the work environment and performance demands [3, 4]. Ethical fading theory explains why: when decisions are dominated by targets or self-interest, the moral dimension of a decision fades from view and people no longer recognize an act as an ethical violation [3, 4]. Social influence theory adds that individuals adjust their attitudes and behavior to gain acceptance from the group around them [5]. In the fraud triangle, rationalization is the element that lets individuals regard a deviant act as acceptable and reduces the guilt attached to it [6, 7]. Together, these perspectives suggest a sequence in which peer pressure prompts people to justify deviance, and justification makes deviance appear normal.

Earlier studies mostly examined pressure, opportunity and rationalization as predictors of fraud intention or behavior, that is, after the individual has reached the decision stage [7, 8]. The earlier stage, in which deviance is gradually accepted as ordinary before any intention to commit fraud forms, has received much less attention [4]. Evidence on peer pressure among accounting, finance and tax staff in Indonesia also remains limited, and few studies position rationalization as a mediator between peer pressure and the normalization of fraud rather than fraud intention itself [7].

This study therefore examines the effect of peer pressure on fraud normalization intention, the effect of peer pressure on rationalization, the effect of rationalization on fraud normalization intention, and the mediating role of rationalization, among accounting, finance and tax staff in Indonesia. Financial pressure and length of employment are controlled: personal financial conditions may raise tolerance of deviant behavior [7], while tenure shapes how far an individual has adapted to the norms and culture of the organization. The study treats fraud normalization intention as an early-warning indicator that can be observed before fraudulent behavior occurs.

2 Figures and tables

2.1 Theoretical perspectives

Ethical fading describes how the ethical aspect of a decision disappears from awareness while other considerations, such as targets or self-interest, dominate [3]. In workplaces with a permissive culture, it leads people to treat unethical acts as ordinary and gradually lose moral sensitivity toward them [4]. The fraud triangle attributes fraud to pressure, opportunity and rationalization [6]. This study focuses on rationalization, the cognitive mechanism that makes a deviant act acceptable before it turns into an intention [6, 7]. Social influence theory distinguishes compliance, identification and internalization as the processes through which the social environment changes behavior, and explains why peers matter: individuals conform to group norms to gain acceptance and to avoid social sanctions [5, 9].

2.2 Hypothesis development

Peer pressure arises through interaction in work groups and pushes individuals to follow the practices of their team [9, 10]. In accounting, finance and tax work, this can lead staff to adopt practices that are considered usual in the organization even when they conflict with standards, in order to win acceptance or meet work demands. From the ethical fading perspective, such pressure reduces moral sensitivity, so deviant acts are more easily normalized [3, 4]. Gupta et al. [9] link peers' unethical behavior to employees' own behavior, and Kon et al. [7] found that pressure increases the intention to commit fraud.

H1: Peer pressure has a positive effect on fraud normalization intention.

To remain accepted by the group, individuals under social pressure tend to justify actions they would otherwise question. In the fraud triangle, rationalization is the factor that allows people to accept fraud as justifiable [6]. Kon et al. [7] found that pressure positively affects rationalization in the context of fraud intention.

H2: Peer pressure has a positive effect on rationalization.

Rationalization makes individuals regard deviant acts as acceptable and lowers the guilt attached to unethical behavior [6, 11]. In accounting, finance and tax practice it can take the form of seeing number manipulation as a minor violation or as part of the work routine. Ethical fading theory suggests that repeated justification dulls moral sensitivity [3]. Aksa et al. [11] show that rationalization that frames fraud as normal raises the risk of fraudulent behavior, and Owusu et al. [12] report that pressure, opportunity and rationalization jointly explain employee fraud.

H3: Rationalization has a positive effect on fraud normalization intention.

Combining these arguments, peer pressure should operate partly through rationalization: social pressure first prompts individuals to justify deviance, and the justification then reduces moral consideration and increases the tendency to normalize fraud [3, 7]. Kon et al. [7] showed that pressure influences fraud intention through rationalization as a mediator.

H4: Rationalization mediates the effect of peer pressure on fraud normalization intention.

Financial pressure and length of employment enter the model as control variables. Financial pressure is a classic element of the fraud triangle [6, 7], and length of employment reflects exposure and adaptation to organizational norms.

3 Research method

3.1 Research design and sample

This is quantitative explanatory research that tests causal relationships among variables with a survey. Data were collected through an online questionnaire (Google Forms) distributed via social media, professional networks and personal contacts in October–November 2026. The population is accounting, finance and tax staff working in Indonesia, whose exact number is unknown, so convenience and snowball sampling were used. Eligible respondents were currently employed in these fields in Indonesia, older than 18 years, had at least three months of work experience and agreed to participate; only respondents holding staff positions in accounting, finance or tax were retained, which gave 240 respondents. The minimum sample size follows the guideline of Hair et al. [13] of at least five respondents per indicator. With 27 indicators in the initial model, the minimum is $5 \times 27 = 135$ respondents; the 240 respondents analyzed here exceed this minimum, and PLS-SEM is well suited to models with mediation and moderate sample sizes [13].

3.2 Measurement

All constructs except length of employment were measured with multi-item statements on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Peer pressure (eight items) was adapted from Li et al. [10]. Rationalization (eight items) and fraud normalization intention (five items) were adapted from Owusu et al. [12]; rationalization covers justification, denial of harm and appeal to the common good, and fraud normalization intention covers acceptance of asset misuse and rule deviation. Financial pressure (five items) was adapted from Santoso and Cahaya [14]. Length of employment was a single item, tenure in the current organization in years, coded into four categories (1 = less than 1 year; 2 = 1–3 years; 3 = more than 3 up to 5 years; 4 = more than 5 years).

Because all data come from one self-reported questionnaire completed at one point in time, common method bias was addressed both procedurally and statistically. Respondents were told that participation is voluntary, that their answers are kept confidential and used only for academic purposes, and that they should answer honestly according to their own situation; no names or other identifying data were collected. Statistically, collinearity statistics (VIF) were examined, where values above 3.3 would indicate pathological collinearity and possible common method bias [15].

3.3 Data analysis

Data were analyzed with PLS-SEM in SmartPLS 4 [13]. The measurement model was assessed in two stages: outer loadings were first estimated for all indicators and the model was then re-estimated with a refined indicator set. Convergent validity was judged by outer loadings (≥ 0.708 preferred; 0.50–0.70 acceptable if AVE is satisfied) and average variance extracted (AVE ≥ 0.50), discriminant validity by cross-loadings and the Fornell–Larcker criterion, and reliability by Cronbach's alpha and composite reliability (≥ 0.70). The structural model was evaluated with SRMR and NFI, R^2 (0.19, 0.33 and 0.66 as weak, moderate and substantial), predictive relevance Q^2 (> 0; 0.25 and 0.50 as medium and high) and effect size f^2 (0.02, 0.15 and 0.35 as small, medium and large). Because all hypotheses and the expected effects of the control variables are directional, path coefficients were tested one-tailed by bootstrapping at a 5% significance level, that is, an effect is significant when $t > 1.645$ ($p < 0.05$) [13]. Mediation was tested through the direct and indirect effects.

4 Results and discussion

4.1 Respondent profile

Table 1 summarizes the 240 respondents. Most are female (70.8%) and aged 26–30 years (58.2%; mean age 27.2 years, SD = 3.9). All hold staff positions and work in accounting (44.6%), finance (30.4%) or tax (25.0%). More than half work in private companies (54.6%). Most respondents have worked 1–3 years in their current organization (67.1%).

Table 1. Respondent profile (n = 240).

Characteristic Category, n (%)	
Gender	Female 170 (70.8%); male 70 (29.2%)
Age (years)[a]	≤ 25: 75 (31.4%); 26–30: 139 (58.2%); 31–35: 18 (7.5%); > 35: 7 (2.9%)
Field of work	Accounting 107 (44.6%); finance 73 (30.4%); tax 60 (25.0%)
Position	Staff 240 (100%)
Type of organization	Private company 131 (54.6%); tax consulting firm 37 (15.4%); MSME 33 (13.8%); accounting or public accounting firm 24 (10.0%); government agency 7 (2.9%); other 8 (3.3%)
Length of employment (years)	< 1: 4 (1.7%); 1–3: 161 (67.1%); > 3–5: 44 (18.3%); > 5: 31 (12.9%)

4.2 Measurement model

In the first estimation, eight indicators (FP3, NK1, PP3, RS1, RS3, RS5, RS6 and RS7) had loadings below 0.70 and were removed. In the second stage, PP5, PP6 and PP7 were also removed: although their first-stage loadings were acceptable, they produced very high cross loadings on the other constructs, especially rationalization, which would have forced the removal of more rationalization indicators. It was judged better to refine the peer pressure indicators than to weaken the measurement of rationalization. The model was then reestimated with the remaining 16 indicators (Table 2). All retained loadings range from 0.732 to 0.903 (the single-item length of employment has 1.000), AVE values range from 0.652 to 0.758, Cronbach's alpha from 0.735 to 0.894 and composite reliability from 0.848 to 0.926. All values exceed the thresholds, so the constructs show convergent validity and reliability. The VIF values of all indicators range from 1.000 to 2.855, below the 3.3 threshold [15].

The inner VIF values of the structural model range from 1.000 to 3.182, also below 3.3, so common method bias is unlikely to be a serious problem in this study [15].

Table 2. Outer loadings, reliability and convergent validity (second estimation stage).

Construct	Indicators (outer loading)	α	CR	AVE
Financial pressure	FP1 (0.815), FP2 (0.903), FP4 (0.732), FP5 (0.850)	0.845	0.896	0.684
Fraud normalization intention	NK2 (0.902), NK3 (0.756), NK4 (0.843), NK5 (0.832)	0.854	0.902	0.697
Peer pressure	PP1 (0.863), PP2 (0.864), PP4 (0.883), PP8 (0.873)	0.894	0.926	0.758
Rationalization	RS2 (0.785), RS4 (0.853), RS8 (0.782)	0.735	0.848	0.652
Length of employment	LK (1.000)	–	–	–

α = Cronbach's alpha; CR = composite reliability (rho_c); AVE = average variance extracted; LK is a single-item construct.

Every indicator loaded highest on its own construct in the cross-loading matrix. In the Fornell–Larcker test (Table 3), the square root of the AVE of each construct is larger than its correlations with the other constructs, which supports discriminant validity. The margin is narrowest for rationalization (0.807 against a correlation of 0.789 with peer pressure), so these two constructs are distinguishable but strongly related, as the theory leads us to expect.

Table 3. Discriminant validity: Fornell–Larcker criterion.

	FP	NK	LK	PP	RS
FP	**0.827**				
NK	0.723	**0.835**			
LK	−0.117	−0.209	**1.000**		
PP	0.699	0.809	−0.149	**0.871**	
RS	0.721	0.788	−0.205	0.789	**0.807**

Diagonal (bold) = square root of AVE. FP = financial pressure; NK = fraud normalization intention; LK = length of employment; PP = peer pressure; RS = rationalization.

4.3 Structural model

The estimated model fits the data acceptably: SRMR is 0.052 (below 0.08) and NFI is 0.906 (above 0.90), with d_ULS = 0.415, d_G = 0.215 and chi-square = 261.524. The model explains 73.6% of the variance in fraud normalization intention (R^2 = 0.736, substantial) and 62.2% of the variance in rationalization (R^2 = 0.622, moderate and close to substantial). Predictive relevance is high for both endogenous constructs (Q^2 = 0.692 and 0.617, both above 0.50). Table 4 and Fig. 1 report the bootstrapping results.

Table 4. Hypothesis testing (bootstrapping) and effect sizes.

							Path β SD *t p* f² Result
H1	PP → NK	0.425	0.070	6.056	< 0.001	0.235	Supported
H2	PP → RS	0.789	0.025	31.780	< 0.001	1.646	Supported
H3	RS → NK	0.287	0.073	3.952	< 0.001	0.098	Supported
H4	PP → RS → NK	0.226	0.058	3.907	< 0.001	–	Supported (partial mediation)
Total	PP → NK (direct + indirect)	0.652	0.055	11.881	< 0.001	–	Significant
Control	FP → NK	0.212	0.065	3.239	0.001	0.074	Significant
Control	LK → NK	−0.062	0.033	1.873	0.031	0.014	Significant

β = original sample estimate; SD = standard deviation; all p values are one-tailed; PP = peer pressure; RS = rationalization; NK = fraud normalization intention; FP = financial pressure; LK = length of employment.

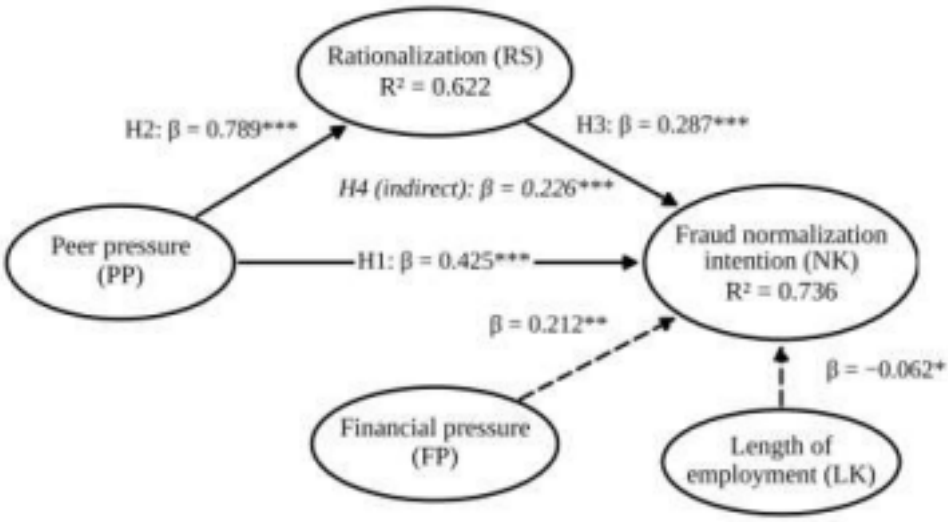

Fig. 1. Structural model with path coefficients and R² values. Solid arrows: hypothesised paths; dashed arrows: control variables. *** p < 0.001; ** p = 0.001; * p = 0.031 (one-tailed).

4. 4 Discussion

H1 is supported: peer pressure has a positive and significant direct effect on fraud normalization intention (β = 0.425, *t* = 6.056, *p* < 0.001) with a medium effect size (f² = 0.235). Staff who feel pushed by coworkers are more inclined to see deviations such as taking office assets home, bending rules or recording numbers inaccurately as ordinary. This agrees with social influence theory, in which conformity to group expectations brings acceptance [5, 9], and with ethical fading, in which pressure

shifts attention away from moral considerations [3].

H2 is supported and the relationship is the strongest in the model ($\beta = 0.789$, $t = 31.780$, $p < 0.001$, $f^2 = 1.646$). Peer pressure alone explains 62.2% of the variance in rationalization. Under pressure from coworkers, staff readily produce justifications such as the need to help family members, the belief that nobody is harmed when office facilities are used, or the view that some discretion over procedures is acceptable to help others; these are exactly the rationalization items that remained in the model. The result is consistent with the finding of Kon et al. [7] that pressure raises rationalization.

H3 is supported ($\beta = 0.287$, $t = 3.952$, $p < 0.001$): the more individuals justify deviant acts, the more they accept them as normal, in line with earlier evidence on rationalization and fraud risk [11, 12]. The effect size is small ($f^2 = 0.098$), so rationalization is one pathway among several.

H4 is supported: the indirect effect of peer pressure through rationalization is significant ($\beta = 0.226$, $t = 3.907$, $p < 0.001$). Because the direct effect remains significant, rationalization partially mediates the relationship. The total effect of peer pressure on the intention, the sum of the direct and indirect effects (Table 4), is 0.652 ($t = 11.881$, $p < 0.001$), of which about 34.7% (0.226/0.652) is transmitted through rationalization. In ethical fading terms, peer pressure erodes moral attention directly and also indirectly, by supplying justifications that further dull moral sensitivity. Since most of the effect is direct, challenging individual justifications alone is unlikely to suffice; the peer norms that create the pressure must be addressed as well.

Among the control variables, financial pressure has a positive effect on fraud normalization intention ($\beta = 0.212$, $p = 0.001$, $f^2 = 0.074$), consistent with the role of pressure in the fraud triangle [6, 7]. Ariffin et al. [8], however, found that financial pressure did not significantly affect asset misappropriation in Malaysian public organizations, so the effect may depend on the outcome studied and on the context. Length of employment has a small but significant negative effect ($\beta = -0.062$, $t = 1.873$, $p = 0.031$), although its effect size ($f^2 = 0.014$) is below the 0.02 threshold. Longer tenure is thus associated with a slightly lower intention, which may reflect firmer professional norms among more experienced staff, but the practical weight of this effect is negligible and needs further testing.

The findings have practical implications. Organizations should treat peers as a target of ethics programs, for example through open ethical communication and training that makes common justifications ("nobody is harmed", "it is only a small discretion") explicit and discussable.

5 Conclusion

Peer pressure increases both rationalization and the intention to normalize fraud among accounting, finance and tax staff in Indonesia, and rationalization partially mediates the effect of peer pressure. Financial pressure raises the intention, whereas length of employment has a small negative effect. These results support the view that normalization of fraud begins with social pressure and self-justification before it becomes fraudulent behavior, so fraud normalization intention can serve as an early-warning signal.

Several limitations apply. The sample of 240 respondents was obtained through non probability sampling, so the results cannot be generalized to all staff in Indonesia. Self reported answers about sensitive behavior may be affected by social desirability, the design is cross-sectional, and the margin of discriminant validity between peer pressure and rationalization is narrow. Future research should test moderators such as organizational ethical climate, and use longitudinal designs to follow how normalization develops over time.

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