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Pressing Intensity and Team Performance in Indonesia's BRI Liga 1 2024/25: Evidence from OHDA and DLH

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Abstract
This study examined pressing intensity in the 2024/25 Indonesia Liga 1 season by analysing defensive line height, defensive actions in the opponent's half, and their relationship with team performance. Using a cross-sectional design, secondary aggregate data from all 18 clubs were analysed through descriptive statistics, Spearman correlation, and regression analysis. Defensive line height reflected the average positioning of a team's defensive unit, while opponent-half defensive actions represented the frequency of pressing in advanced areas. The results showed a negative correlation between defensive line height and final league ranking, indicating that teams with higher defensive positioning tended to achieve better standings. Defensive actions in the opponent's half were positively associated with total points, suggesting that more aggressive pressing may contribute to improved performance. Regression analysis revealed that defensive line height explained 32% of the variance in points obtained. Sensitivity analysis further suggested that lower defensive line height may support counterattacking effectiveness, whereas higher opponent-half defensive actions were linked to goals from open play. Overall, pressing-related indicators provide valuable insights into team performance and may help coaches design tactical periodization and position-specific conditioning programs.

Keywords: DLH; football performance; HIIT; OHDA; team performance

1. Introduction

Pressing has become a central tactical and physical component of modern football because it requires teams to coordinate defensive pressure, control space, and sustain repeated high-intensity actions throughout the match (Bradley & Ade, 2018; Fernandez-Navarro et al., 2020; Hewitt et al., 2016; Alimsyah, 2025). In elite football, pressing is closely linked to attempts to regain possession in advanced areas, disrupt the opponent's build-up, and create attacking opportunities after turnovers (Fernandez-Navarro et al., 2020; Alimsyah, 2025). Previous studies have shown that pressing-related demands are associated with physical performance indicators, including high-intensity running, sprint frequency, repeated-sprint ability, and neuromuscular resilience (Bradley & Ade, 2018; Hostrup & Bangsbo, 2023; Bahtra et al., 2023; Pamungkas et al., 2023; Utama & Mardhika, 2025). Therefore, pressing should not be understood solely as a tactical choice but also as a performance behavior that depends on the interaction among team organization, player fitness, match tempo, and positional structure (Bradley & Ade, 2018; Hewitt et al., 2016; Low et al., 2021; Beato et al., 2023; Fahrezi & Bulqini, 2025). The tactical meaning of pressing varies across competitive contexts (Fernandez

Navarro et al., 2018; Fernandez-Navarro et al., 2020; Alimsyah, 2025). In European competitions, high pressing and counterpressing are often associated with proactive defending, a compact team shape, and rapid ball recovery in advanced zones (Fernandez-Navarro et al., 2020; Low et al., 2021). Similar tendencies have also emerged in highest-level football, where teams increasingly adapt their pressing schemes to opponent quality, game state, and physical capacity (Fernandez Navarro et al., 2018; Modric et al., 2023; Alimsyah, 2025). However, the application of pressing in Southeast Asian football may differ from that in European contexts due to environmental conditions, effective playing time, squad depth, tactical culture, and player physical profiles (PT Liga Indonesia Baru, 2025; Utama & Mardhika, 2025). These contextual differences make it necessary to examine pressing with data from the specific league environment rather than assuming that findings from European football can be directly transferred to Indonesia (Fernandez Navarro et al., 2018; PT Liga Indonesia Baru, 2025; Pamungkas et al., 2023).

In the 2024/25 season, Indonesia's BRI Liga 1 showed a tactical pattern that deserves closer analysis (Waskita et al., 2025; Prasetya & Phanpheng, 2025). The league technical report indicated changes in defensive line height and defensive actions in the opponent's half compared with the previous season (PT Liga Indonesia Baru, 2025). These changes suggest that some teams may have moved away from constant high pressing and adopted more selective pressing, medium block defending, or transition-based strategies (PT Liga Indonesia Baru, 2025; Fernandez-Navarro et al., 2020; Alimsyah, 2025; Forcher et al., 2024). At the same time, the emergence of goals from counterattacks suggests that deeper defensive structures may also confer tactical advantages when teams exploit space after regaining possession (Fernandez-Navarro et al., 2020; PT Liga Indonesia Baru, 2025; Forcher et al., 2023; Alimsyah, 2025). This situation shows that pressing intensity in Liga 1 cannot be evaluated only by how often teams press, but also by how high they position their defensive block (Fernandez-Navarro et al., 2020; Forcher et al., 2024). Existing research has commonly used data-driven indicators and pressure-analysis approaches to measure pressing behavior, including Passes Allowed per Defensive Action, pressure relationships, and tracking-based defensive pressure measures (Andrienko et al., 2017; Forcher et al., 2022; Forcher et al., 2024; Waskita et al., 2025). Nevertheless, such indicators are not always available in every league dataset, especially when proprietary event tracking systems are limited (Waskita et al., 2025). In this condition, opponent half-defensive actions and defensive line height can be used as practical proxy indicators (PT Liga Indonesia Baru, 2025; Forcher et al., 2024). Opponent half defensive actions represent the frequency of defensive actions conducted in advanced zones, while defensive line height reflects the structural aggressiveness of a team's defensive block (Fernandez-Navarro et al., 2020; Forcher et al., 2024). Used together, these indicators allow pressing to be examined from both action-based and positional perspectives (Forcher et al., 2022; Waskita et al., 2025).

The main research gap lies in the limited quantitative evidence on how pressing-related indicators are associated with team performance in Indonesian professional football. Previous studies have examined pressing in elite European football and highest-level football contexts, but empirical research on Southeast Asian leagues remains scarce (Fernandez-Navarro et al., 2020; Low et al., 2021; Modric et al., 2023). More specifically, there is still limited evidence on whether teams with more opponent-half defensive actions and higher defensive line height achieve better competitive outcomes in Liga 1. The gap is not only geographical, but also methodological, because most available discussions on Indonesian football remain descriptive and have not tested the predictive relationship between pressing proxies and season-level performance outcomes (PT Liga Indonesia Baru, 2025). Addressing this gap is important for both tactical analysis and training design. If opponent half defensive actions and defensive line height are associated with total points or final ranking, these indicators may help coaches, analysts, and strength and conditioning practitioners monitor how tactical identity relates to competitive outcomes (Hewitt et al., 2016; Lepschy et al., 2020). However, the relationship may not be linear or uniform. A team may perform many defensive actions in the opponent's half but fail to gain points if pressing is poorly coordinated, while a team with a deeper

defensive line may still perform effectively through counterattacking play (Fernandez-Navarro et al., 2018; Low et al., 2021; Lepschy et al., 2020). For this reason, the present study also considers the possible interaction between opponent half-defensive actions and defensive line height as an exploratory component.

Therefore, this study aims to examine the relationship between pressing intensity indicators and team performance in the 2024/25 season of Indonesia's BRI Liga 1. Specifically, the study analyzes whether opponent-half defensive actions and defensive line height predict team performance using season-aggregate data from all 18 clubs. The study also explores whether defensive line height moderates the relationship between opponent half defensive actions and team performance. Based on the theoretical and empirical considerations above, the following hypotheses are proposed:

H1: Opponent half defensive actions positively predict total points in Indonesia's BRI Liga 1 2024/25 season.

H2: Defensive line height positively predicts team performance, as reflected by higher total points and better final league position.

H3 Exploratory: Defensive line height moderates the relationship between opponent half defensive actions and team performance, such that the association between opponent half defensive actions and performance may differ according to the height of a team's defensive block.

2. Method

Study Design

This study used a quantitative, cross-sectional, observational design based on secondary-season aggregate data. The design was selected because the study aimed to examine the association between pressing intensity indicators and team performance across the complete Indonesian BRI Liga 1 2024/25 season, without manipulating tactical behavior or match conditions. The unit of analysis was the club, and all variables were analyzed at the team-season level.

The main data source was the Technical Report of Indonesia's BRI Liga 1 2024/25 season, compiled by the league's Technical Study Group. The report provides standardized competition data, including tactical indicators, defensive actions, defensive line height, performance outcomes, and match dynamics. The use of a single official data source allowed consistent comparison across clubs and reduced measurement inconsistency between teams.

Sample and Sample Size Justification

The sample consisted of all 18 professional clubs competing in Indonesia's BRI Liga 1 2024/25 season. Because the study included every club in the league, the dataset represents a census of the target population rather than a selected sample. Therefore, the sample size was determined by the structure of the competition itself, not by random sampling or recruitment procedures.

The use of a full league census was considered appropriate because the research objective was to examine macro-level tactical and performance patterns across the complete Liga 1 population for the 2024/25 season. Including all 18 clubs minimized selection bias and ensured that the findings reflected the whole competitive environment of that season. However, because the number of clubs was limited, the statistical findings were interpreted cautiously, with greater attention given to effect size, confidence intervals, and robustness checks rather than p values alone.

Data Sources and Variables

The independent variables were opponent half-defensive actions and defensive line height. Opponent half defensive actions measured the number of defensive actions performed in the opponent's half during the season and were used as an action-based proxy for pressing intensity. Defensive line height measured the average height of a team's defensive block and was used as a positional proxy for structural pressing aggressiveness.

The main dependent variable was total league points, as it provides a direct, continuous measure of team performance throughout the season. The final league ranking was used as a secondary performance outcome because it reflects each club's ordinal competitive position at the end of the season.

Effective playing time was included as the control variable when club-level data were available. Effective playing time was selected as a single control variable because match continuity may influence the opportunity to perform pressing actions. Matches with longer effective playing time offer more continuous passages of play, which may increase the frequency and sustainability of pressing. Given the small number of observations, only one control variable was included to avoid model overfitting and to preserve degrees of freedom. If effective playing time was unavailable at the club level, it was reported descriptively rather than included in the regression model.

Data Extraction and Processing

All relevant data were extracted from the official Indonesia BRI Liga 1 2024/25 season Technical Report into a standardized spreadsheet. The extracted variables included opponent half defensive actions, defensive line height, total points, final ranking, and effective playing time when available. Data were checked through a two-step verification process. First, values from tables, figures, and textual summaries in the report were cross-checked. Second, total points and final ranking were compared with the official league table to ensure consistency.

Data Analysis

Descriptive statistics were calculated for all study variables, including mean, standard deviation, median, minimum, and maximum values. The Shapiro-Wilk test was used to assess the distribution of continuous variables because the dataset comprised only 18 clubs. Given the small number of observations and the possibility that football performance data may not follow a normal distribution, Spearman's rank correlation was used to examine bivariate associations between pressing indicators and performance outcomes. The strength of the correlations was interpreted as an effect size, with attention given to the direction and magnitude of the coefficient rather than statistical significance alone.

The multivariable regression model was treated as exploratory rather than confirmatory because the analysis was based on a league-level census of 18 clubs. Total league points were used as the primary dependent variable, while opponent half defensive actions and defensive line height were entered as predictors of pressing intensity. When effective playing time was available at the club level, it was included as a single control variable to account for differences in match continuity. The adjusted exploratory model was specified as follows:

Total points = $\beta 0$ + $\beta 1$ opponent half defensive actions + $\beta 2$ defensive line height + $\beta 3$ effective playing time + error.

The final league ranking was analyzed as a secondary outcome using Spearman's correlation, since it is an ordinal variable. Regression outputs were reported using unstandardized coefficients, standard errors, 95% confidence intervals, variance inflation factor values, and p-values. The interpretation prioritized the direction, magnitude, confidence interval width, and model stability of the coefficients. P values were used only as supporting information and were not treated as the sole basis for inference.

Model assumptions were checked before interpretation. Linearity was assessed through scatterplots and partial residual patterns. Residual normality was examined using residual plots and the Shapiro-Wilk test. Homoscedasticity was assessed by plotting standardized residuals against fitted values. Influential observations were inspected using standardized residuals, leverage values, and Cook's distance. Multicollinearity was evaluated using variance inflation factor (VIF) values; VIFs below 5 were interpreted as indicating no serious multicollinearity problem.

To evaluate robustness, nonparametric bootstrapping with 5,000 resamples was used to estimate bias-corrected 95% confidence intervals for each regression coefficient. Robust standard errors were also used as an additional sensitivity check to reduce the influence of heteroscedasticity and small-sample bias. Findings were considered more stable when the coefficient direction remained consistent across the conventional regression model, the robust standard-error model, and bootstrapped confidence interval estimation. Because of the limited number of observations, all regression findings were interpreted cautiously as exploratory associations rather than definitive predictive evidence.

Ethical Considerations

This study used publicly available, deidentified, secondary aggregate data from the official Indonesian BRI Liga 1 2024/25 season Technical Report. No individual player data, personal identifiers, or direct human participant involvement were included. Therefore, formal ethical approval was not required. The data were used only for academic analysis and reported at the club level.

3. Result

Descriptive Statistics

All 18 clubs from Indonesia's BRI Liga 1 2024/25 season were included in the analysis. Descriptive statistics revealed substantial variation in pressing intensity and team performance across the league. OHDA averaged 329.44 actions per team (SD = 48.11; range: 245–419). DLH averaged 35.01 meters (SD = 2.10; range: 30.60–38.90 m). Total points averaged 46.28 (SD = 11.46; range: 25–69). These results indicate that higher OHDA and DLH scores were observed among certain teams, as detailed in Table 1.

Table 1. Descriptive statistics of pressing intensity and performance outcomes (Indonesia's BRI Liga 1 2024/25)

Team	Mean	SD	Range
OHDA	329.44	48.11	245 – 419
DLH (m)	35.01	2.10	30.60 – 38.90
Point	46.28	11.46	25 - 69

Mean = average value; SD = standard deviation; Range = minimum and maximum values. OHDA = opponent half defensive actions; DLH = defensive line height in meters; Point = total league points. Data are based on season aggregate values from all 18 clubs in Indonesia's BRI Liga 1 2024/25.

Three main descriptive patterns emerged. First, pressing activity in the opponent's half varied considerably among clubs, reflecting differing tactical aggressiveness across the league. Second,

defensive line height also varied, indicating differences in how teams positioned their defensive blocks. Third, higher OHDA and DLH values were generally more prevalent among clubs with greater point totals, although this trend was not consistent across all teams. These observations suggest that pressing indicators are associated with performance but do not independently account for competitive outcomes

Correlation Analysis

Spearman correlation analysis identified a moderate positive association between OHDA and total points, indicating that teams with more defensive actions in the opponent's half tended to accumulate more points during the season. Figure 1 illustrates this upward trend, although the distribution demonstrates that pressing frequency alone does not fully account for team performance. Consequently, the relationship between OHDA and points should be interpreted as a bivariate association rather than evidence that advanced pressing directly determines competitive success.

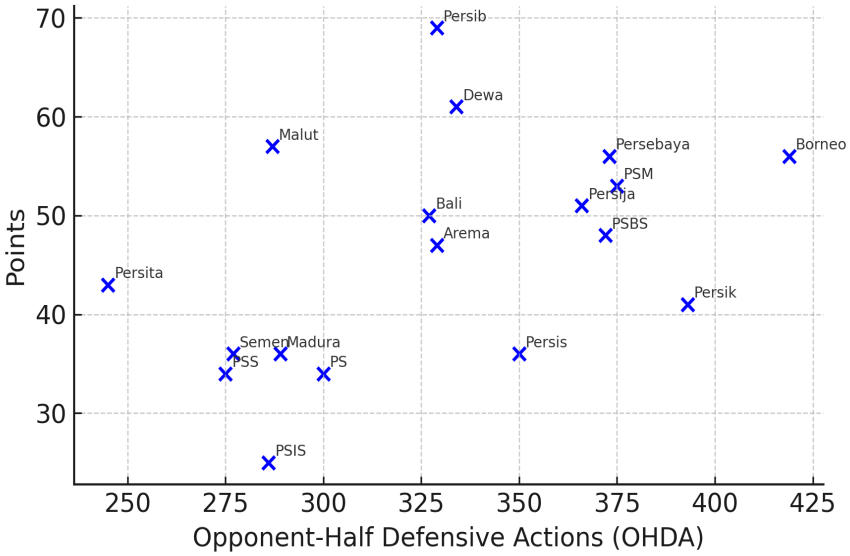

Figure 1. Relationship Between Opponent-Half Defensive Actions (OHDA) and Points in Indonesia's BRI Liga 1 2024/25 Season

DLH demonstrated a moderate negative association with final league ranking. As shown in Figure 2, teams with higher defensive lines tended to achieve better league positions. Since final ranking is an ordinal variable where lower values indicate superior performance, the negative correlation indicates that more advanced defensive positioning is linked to stronger final standings. This finding implies that the positional structure of pressing is relevant to team performance, though the relationship remains associative.

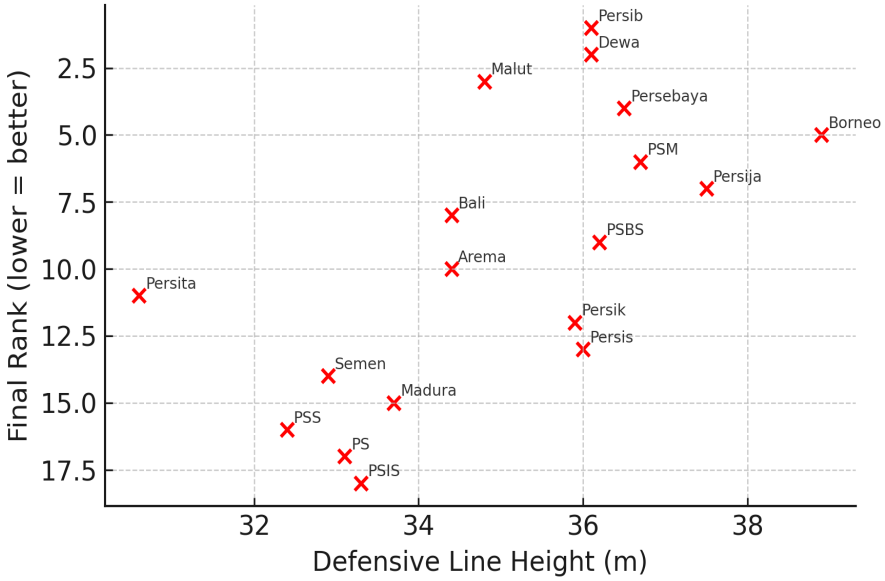

Figure 2. Relationship Between DLH and Final Rank in Indonesia's BRI Liga 1 2024/25 Season

The association between DLH and total points showed a similar pattern. As shown in Figure 3, teams with higher defensive line height generally tended to accumulate more points. This supports the interpretation that defensive line height captures an important positional dimension of pressing intensity. However, the spread of data points also indicates that a high defensive line was not sufficient on its own to guarantee higher points, because team performance is also influenced by attacking efficiency, defensive balance, squad quality, and tactical execution.

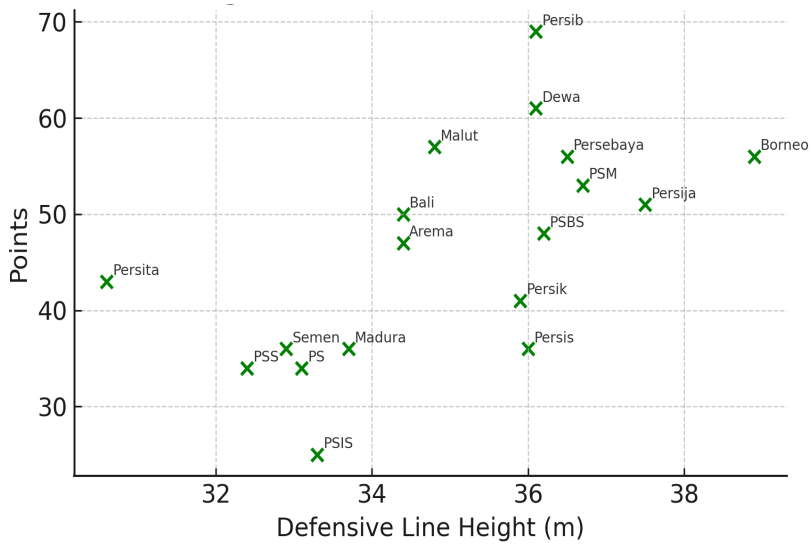

Figure 3. Relationship Between DLH and Points in Indonesia's BRI Liga 1 2024/25 Season

The difference between the OHDA result in the correlation analysis and the regression analysis should not be treated as a substantive contradiction. In the bivariate correlation, OHDA was associated with points because it was examined independently. However, in the multivariable regression model, OHDA was analyzed together with DLH. Since OHDA and DLH are conceptually related indicators of pressing intensity, part of the variance explained by OHDA may overlap with that explained by DLH. This shared variance may reduce the independent contribution of OHDA once DLH is included in the same model. Therefore, the nonsignificant OHDA coefficient in the regression model

should be interpreted as limited independent precision due to a small sample size, rather than as evidence that OHDA has no tactical relevance.

Regression Analysis

An exploratory multiple regression model was conducted to examine whether opponent-half defensive actions and defensive line height were associated with total league points. As shown in Table 2, the model explained 32% of the variance in total points. This indicates a moderate model-level effect size. However, because the analysis was based on only 18 clubs, the model should be interpreted as exploratory rather than confirmatory. Therefore, the interpretation focuses on the direction of the coefficient, the effect size, the confidence interval width, and theoretical plausibility, rather than the p-value alone.

Table 2. Multiple linear regression analysis of pressing intensity indicators (OHDA and DLH) as predictors of league points in Indonesia's BRI liga 1 2024/25

Term	Coef	Std. Err	t	p	95% CI Lower	95% CI Upper
Constant	-144.599	62.144	-2.327	0.034	-277.056	-12.143
OHDA	-0.177	0.118	-1.495	0.156	-0.429	0.075
DLH	7.123	2.746	2.594	0.020	1.269	12.976

Coef = unstandardized coefficient; CI = confidence interval; VIF = variance inflation factor. The model was interpreted as exploratory because the analysis used season aggregate data from all 18 clubs. Robust standard errors or bootstrapped confidence intervals should be reported as a sensitivity check when available.

As shown in Table 2, defensive line height showed a positive coefficient of 7.123, with a 95 percent confidence interval from 1.269 to 12.976. This means that, after accounting for opponent half-defensive actions, each additional 1 m increase in defensive line height was associated with approximately 7.12 additional league points. The confidence interval indicates that the plausible range of additional points may be from about 1.27 to 12.98. Although the direction of this association is positive, the confidence interval is relatively wide, suggesting limited precision in the estimate. This level of uncertainty is expected in a league-level dataset with only 18 observations.

Table 2 also shows that opponent-half defensive actions had a coefficient of -0.177, with a 95 percent confidence interval from -0.429 to 0.075. This means that, after defensive line height was included in the model, additional defensive actions in the opponent's half were not clearly associated with higher points. Because the confidence interval crosses zero, the independent association between opponent half-defensive actions and total points remains uncertain. This result should not be interpreted as evidence that pressing actions in the opponent's half reduce performance. Rather, it suggests that opponent half-defensive actions may share explanatory variance with defensive line height, and that the small sample size limits the precision of the regression estimate.

Overall, Table 2 suggests that defensive line height had a clearer independent association with total points than opponent half defensive actions in the exploratory multivariable model. The findings indicate an associative pattern in which higher defensive positioning may relate to stronger season-level performance, while opponent-half defensive actions may be more informative when interpreted together with structural pressing indicators such as defensive line height. Therefore, the regression results should be read as exploratory evidence of association, not as definitive evidence of causation.

Sensitivity Analysis

Sensitivity analysis was conducted to examine whether the interpretation of the main findings remained consistent when pressing indicators were related to tactical-specific performance outcomes. The analysis focused on the direction and practical meaning of the associations rather than statistical significance alone, because the dataset consisted of only 18 clubs and the regression model was treated as exploratory. The results suggested that opponent half defensive actions were more closely aligned with goals from open play, indicating that teams with more frequent defensive actions in advanced zones may also be more involved in sustained attacking phases after regaining possession. However, this pattern should be interpreted cautiously, as opponent half-defensive actions did not retain a clear, independent association with total points in the multivariable regression model after defensive line height was included.

Defensive line height showed a more consistent tactical interpretation. Teams with stronger defensive lines tended to show stronger season-level performance, while teams with weaker defensive lines appeared more connected to transitional or counterattacking patterns. This interpretation is consistent with the tactical logic that deeper defensive blocks may create more space for fast attacking transitions after ball recovery. Nevertheless, these findings should be viewed as exploratory and associative. They do not demonstrate that a lower defensive line directly produces counterattacking effectiveness, nor that a higher defensive line directly causes better performance.

Overall, the sensitivity analysis supports the main interpretation that opponent-half defensive actions and defensive line height capture distinct yet related dimensions of pressing. Opponent half-defensive actions reflect the action-based frequency of pressure in advanced zones, whereas defensive line height reflects the positional structure of the defensive block. The sensitivity results, therefore, strengthen the need to interpret both indicators together rather than treating either as a standalone determinant of performance.

Summary of Findings

The results produced four main findings. First, descriptive statistics showed meaningful variation in pressing intensity and performance across the 18 Liga 1 clubs. Opponent half-defensive actions varied widely across teams, and defensive line height also differed substantially, indicating that clubs used different defensive and pressing profiles during the Indonesia BRI Liga 1 2024/25 season.

Second, the correlation analysis showed that opponent-half defensive actions had a moderate positive association with total points. This suggests that teams that took more defensive actions in the opponent's half scored more points. However, this was a bivariate association and should not be interpreted as evidence that pressing frequency alone determines competitive success.

Third, defensive line height showed a clearer relationship with team performance. Higher defensive line height was associated with better final league position and higher total points. In the exploratory regression model, defensive line height had a positive coefficient, meaning that each additional 1 m increase in defensive line height was associated with approximately 7.12 additional league points after accounting for opponent half defensive actions. However, the confidence interval was relatively wide, indicating limited precision in the estimate.

Fourth, the difference between the correlation and regression results for opponent half defensive actions should be understood as shared variance with defensive line height. Opponent half-defensive actions were associated with points at the bivariate level, but their independent association became uncertain when defensive line height was included in the regression model. This pattern does not mean that opponent half-defensive actions are tactically irrelevant. Rather, it suggests that pressing frequency and defensive line positioning are related dimensions of team pressing behavior.

Overall, the findings indicate that pressing-related metrics can provide useful insight into team performance monitoring in Indonesia's BRI Liga 1 2024/25 season. Defensive line height showed the clearest independent association with points, whereas opponent-half defensive actions were more informative when interpreted together with defensive line height. Because the study used season aggregate data from only 18 clubs, the findings should be treated as exploratory and associative rather than causal.

4. Discussion

Overview of Findings

This study examined the association between pressing-related indicators and team performance in the 2024/25 season of Indonesia's BRI Liga 1. The results showed that opponent-half defensive actions had a moderate positive bivariate association with total points, while defensive line height showed a stronger relationship with both total points and final league position. In the exploratory regression model, defensive line height showed a clearer independent association with points than opponent-half defensive actions. This pattern suggests that team performance was not only related to how often a team applied defensive pressure in the opponent's half, but also to how the team positioned and coordinated its defensive block across the pitch. Therefore, pressing should be interpreted as part of a broader game model rather than as an isolated physical or tactical action.

Tactical Interpretation through Game Model

From a game model perspective, opponent half-defensive actions and defensive line height represent two related but different dimensions of defensive organization. Opponent half-defensive actions reflect the action-based component of pressing, namely, how frequently a team performs defensive actions in advanced zones. Defensive line height reflects the structural component of pressing: how high the team's defensive line is positioned from its own goal. This distinction is important because a team may record many defensive actions in the opponent's half without necessarily maintaining compactness between the forward, midfield, and defensive lines. Hewitt et al. (2016) argue that game style should be understood as repeated and recognizable patterns of team behavior across moments of play, rather than as a single, isolated performance indicator. In this sense, opponent half-defensive actions describe the frequency of pressure, while defensive line height describes the spatial organization that gives that pressure its tactical meaning. A high-pressure game model requires not only repeated pressure on the ball but also compact spacing between units, coordinated pressing triggers, and a rest-defense structure that protects the space behind the defensive line (Olthof et al., 2018; Sumpena & Sidik, 2020).

The stronger independent association between defensive line height and total points may indicate that positional structure was a more stable marker of tactical identity than pressing frequency alone. A higher defensive line can help a team compress the playing area, reduce the opponent's time on the ball, and support faster ball recovery after a turnover. However, this advantage depends on synchronization among the defensive, midfield, and forward lines. If a high defensive line is not supported by coordinated pressing and compactness, it may expose the team to passes behind the back line (Forcher et al., 2023; Forcher et al., 2024). Conversely, a lower defensive line should not automatically be interpreted as a weak or passive tactical approach (Forcher et al., 2023; Aranda-Malavés et al., 2024). In some game models, a medium or low block is deliberately used to protect depth, invite the opponent forward, and create space for counterattacking transitions (Forcher et al., 2023; Aranda-Malavés et al., 2024). This interpretation is relevant to the Liga 1 context because the league report showed a tendency toward deeper defending and more transitional attacking patterns.

Therefore, defensive line height should be read as an indicator of tactical orientation, not as a simple measure of whether a team is better or worse (Dalen et al., 2016; PT Liga Indonesia Baru, 2025).

Comparison with Previous and Contrasting Findings

The findings of this study are partly consistent with previous research, which shows that defensive actions in advanced zones are important for understanding team tactical profiles (Fernandez Navarro et al., 2020; Ruan et al., 2022; Forcher et al., 2024). Fernandez Navarro et al. (2020) found that elite teams differ in how they regain possession in advanced areas and that defensive behaviors in these zones are influenced by contextual variables. This supports the present study's interpretation that opponent half-defensive actions and defensive line height should be understood as complementary indicators. Opponent half defensive actions capture the frequency of advanced defensive pressure, while defensive line height captures the structural positioning that allows or limits that pressure (Forcher et al., 2024; Alimsyah, 2025). The positive bivariate association between opponent half defensive actions and points in this study is therefore tactically plausible, because teams that defend more actively in advanced zones may create more opportunities to regain possession closer to the opponent's goal (Fernandez Navarro et al., 2020; Lepschy et al., 2020; Ruan et al., 2022; Forcher et al., 2024; Alimsyah, 2025).

However, the results also need to be compared with findings that show high pressing is not always superior. Low et al. (2021) demonstrated that different pressing strategies can elicit distinct tactical behaviors and that high pressing may create vulnerabilities when the defending team becomes stretched or loses compactness. This helps explain why opponent half-defensive actions were associated with points in the correlation analysis but did not retain a clear independent association in the regression model after defensive line height was included. The issue is not that opponent half-defensive actions are tactically irrelevant, but that pressing frequency may only become effective when supported by a coherent team structure (Bradley et al., 2011; Low et al., 2021). A team can press often in the opponent's half, but if the defensive line is not connected to the pressing action, the press may be bypassed, leaving the team exposed in transition (Low et al., 2021; Dalen et al., 2016).

The findings also align with research showing that the effectiveness of playing styles depends on match context. Fernandez Navarro et al. (2018) showed that match status, venue, and opposition quality can influence the effectiveness of different styles of play, including high pressure, counterattack, direct play, and possession-based styles. This is important for interpreting Liga 1 because teams may adjust their pressing strategy based on the scoreline, opponent strength, player availability, or environmental conditions (Fernandez Navarro et al., 2018; Lepschy et al., 2020). Therefore, a deeper defensive line may not always indicate inferior tactical performance. It may reflect a deliberate game plan to control space behind the defensive line and exploit transition moments. This also explains why the present study should not be read as evidence that all teams should adopt a high pressing model. Instead, the findings suggest that the relationship between pressing and performance depends on how pressing behavior fits within the team's wider tactical system (Bradley et al., 2011; Low et al., 2021).

Practical Interpretation

The practical implication of this study is that coaches and analysts should not evaluate pressing only by counting how many defensive actions occur in the opponent's half. Opponent half-defensive actions need to be interpreted together with defensive line height, compactness, pressing triggers, and rest defense. Teams with a stronger defensive line may need strong coordination among units, quick collective reactions after losing the ball, and reliable coverage behind the first line of defense. Teams with a medium or lower defensive line may need to optimize transition speed, the quality of the first forward pass, and attacking spacing after ball recovery. Thus, opponent half-defensive actions and

defensive line height can be useful indicators for monitoring, but their meaning depends on the team's game model, player characteristics, opponent quality, and match context.

Limitations

Several limitations should be considered when interpreting these findings. First, opponent half-defensive actions and defensive line height were used as proxy indicators because more detailed event-based and tracking-based pressing metrics were not available. Second, the study used season aggregate data from 18 clubs, so within-match changes, scoreline effects, venue effects, opponent strength, and phase-specific tactical adjustments could not be fully modeled. Third, the regression analysis was exploratory and should not be interpreted as causal evidence. Future studies should combine opponent half-defensive actions and defensive line height with passes allowed per defensive action, ball recovery zones, compactness, rest defense structure, match status, and opponent quality to better explain how pressing operates across different game models in Southeast Asian football.

5. Conclusion

This study examined the intensity of pressure in the 2024/25 Indonesian BRI Liga 1 season, using opposing team defensive actions and defensive line height as practical indicators. The results show that both indicators were associated with team performance, but defensive line height provided a clearer structural indication. Opposing team defensive actions showed a moderate positive bivariate association with total points; however, their independent association became less precise after including defensive line height in the regression model. Defensive line height showed the strongest association with performance. Teams with a taller defensive line tended to score more points and finish higher in the league. In the exploratory regression model, each 1-meter increase in defensive line height was associated with approximately 7.12 additional league points after considering opposing team defensive actions. However, due to the wide confidence interval and the fact that the study used aggregated data from only 18 clubs, these findings should be interpreted as exploratory and associative, rather than causal. In practice, the opposing midfield's defensive actions and the height of the defensive line can help coaches, analysts, and physical trainers monitor pressing behavior in relation to the team's tactical structure. Teams using a high defensive line should prioritize compactness, coordinating pressing triggers, and effective rest-on defending, while teams using a mid- or low block should optimize transition speed and attacking organization after regaining possession. Future studies should utilize match-level data, tracking data, ball recovery zones, match status, opponent strength, and effective playing time to better explain pressing in Indonesian and Southeast Asian football.

Practical Applications

The findings provide practical indications for coaches, performance analysts, and strength and conditioning staff in monitoring pressing-related behavior during the competitive season. Opponent half-defensive actions and defensive line height may serve as accessible team-level indicators of how frequently a team applies pressure in advanced zones and how high it positions its defensive line. However, these indicators should not be interpreted as direct determinants of success. Their practical value lies in helping practitioners connect pressing behavior with the broader game model, tactical structure, and physical demands of the team. For teams that use a higher defensive line and a more proactive pressing approach, OHDA and DLH can help analysts monitor whether advanced pressure is supported by compact team spacing, coordinated pressing triggers, and effective rest defense. In this type of game model, training design may emphasize repeated high-intensity actions, collective pressing coordination, fast reactions after losing possession, and defensive cover behind the first pressing line. These applications should be adjusted to player capacity, opponent quality, match schedule, and environmental conditions.

For teams that use a medium or lower defensive block, DLH can help identify whether the team's defensive structure is connected with transitional attacking patterns. In this context, practical preparation may focus on transition speed, the quality of the first forward pass, sprint endurance, and attacking spacing after ball recovery. A lower defensive line should not automatically be considered a tactical weakness, as it may reflect a deliberate strategy to protect depth and create counterattacking opportunities. Overall, OHDA and DLH can serve as practical tools for linking tactical identity with physical preparation. Coaches and analysts may use these indicators alongside internal load, external load, match video, effective playing time, opponent profile, and match context. Because this study used aggregate data from 18 clubs, the practical applications should be interpreted cautiously and adapted to each team's tactical model rather than applied as universal training prescriptions.

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Conflict of interest

If the authors have any conflicts of interest to declare.

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