

# Decision Making of Football Referee and Assistant Referee in Liga 1 Indonesia

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**Abstract:** The decision of a football referee in a match will affect the outcome of a match, whether it is a violation or a simulation, the player is in an offside or outside position. Many events in a match must be decided by the referee and referee assistant. In Liga 1 Indonesia, a lot of factors that affect the decision of referees and assistant referees one of them is the host factor, distance and point of view, and mental of referee itself, so that researchers have a desire to know how many times football referees and referees assistants decide a decision related to the match in League 1 of 2016/2017. In this study researchers used descriptive method with population of 5 FIFA referees and 5 referee assistants and samples using purposive sampling so that only 3 referees and 3 assistants who became the sample. The results of observations obtained the referees make decisions in the game entirely are 1077 decisions consisting of non-infringement 41.13%, violation 45.4%, and bias 13.46% and referee assistant taking offside decision total is 64, correct decision 93.75% while bias 6.25%. The conclusion of this research is that decision-making conducted by referees and referee assistants have a very small bias level.

## 1 INTRODUCTION

The existence of a factor of pleasure, joy, sadness, cheating, injustice and other parts of it is a factor that often occurs in sports games, football is no exception. When a team loses then the player, official, the audience will release their sadness, a joy will come when the victory is achieved by a team and the audience will spark their victory, and there is also anger made by the audience or players because of an injustice from the referee in the lead (Coakley: 1994). There's no exception in Indonesia, the chaos that occurred in the competition one of them caused by the decision of the referee. In the football game many elements are involved in it, players who play on the field, reserve players, coaches, managers, referees, health workers, media, and also the audience. All the elements involved are one and the other have their respective duties, in their duties with each other must have a sense of mutual respect for each other for the game can run in accordance with the rules that apply. (Catteuw, Helsen, Gilis, and Wagemans: 2009). In

this study researchers only see from the element and the role of the referee in leading the game in Liga 1 Indonesia.

A referee in the lead requires very good physical skills, they must always move to get the ideal position, so that every event will be seen clearly and can decide the event based on what is seen, not based on the response of other things. The soccer referees in a game should move about 10-12 km with 10-15% of high speed physical activity, while for referee assistants move about 6-7 km with 15-20% high speed (Mallo, Navarro, Garcia-Aranda, and Helsen: 2009).

The referee must always move and seek an ideal position in order to make his decision in accordance with the rules and be sure of his decision, a football referee when leading the game takes a decision about 140 decisions from an average of 41 incidents (Helsen and Bultynck: 2004). The number of decisions a referee will make in a match requires that a referee has a high level of concentration, and high concentrations can be possessed if they have excellent fitness. In good condition or fit, a referee will have a

distance between events with a relatively close position, and also has a very clear and open viewpoint, so the decisions taken will be convincing and not hesitated. In the English league the minimum distance between the events with the referee covers 20 m and the average English referee moves and follows the ball groove spaced 17.7 m (Szczepanik, 2009). Then, in what level the Indonesian referee is at? There is no research that discusses it for the development of referees Indonesia.

A referee in charge of the match is assisted by two assistant referees who have the duty of assisting the referee in any incident not seen by the referee, in particular is to see or detect the offside position performed by the attacker in accordance with the rules of game 11 in the rule of the game FIFA (2016/2017). The assistant referee in detecting an offside player in an offside position should move following the last second defender during the game. (Mallo, Navarro, Garcia-Aranda, and Helsen: 2009). In addition to following the last second defender, the assistant referees should also be able to predict who is feeding the attacker, where the ball is played, in what situation the ball is played and where the player's position is before the ball is played, from these positions an assistant referee must have an angle the ideal view (Catteeuw, P., Gilis, B., Wagemans, J., and Helsen, W 2010).

The decision of the referee and the referee assistant is sometimes wrong or biased in his decision-making, but the decision will be based on a deliberate or accidental mistake. Unintentional action decided by referees and assistant referees is based on the fact that referees are human beings who are inseparable from a mistake, this is the nature of man (Hoseini, Aslankhani, Abdoli, and Mohammadi, 2011). The deliberate decision of the referee must be motivated by the element of psychological pressure or disturbance from the referee before and during the lead so the decisions he makes will be biased (Philippe, et al. 2009). Basically a referee will not harm a team, because they have been sworn in as a court in the field and they will bear the consequences of the decisions that have been taken.

A referee and an assistant referee in carrying out his duties must comply with FIFA rules and regulations (2016/2017) and this applies throughout the world, not least in the Indonesian League, they must carry out the rules during the game. In this study the authors only see the referee's decision based on article 12 (violation and unsportsmanlike behavior), while for the assistant referee is the decision taken under article 11 (offsaid). It is expected that from what has been written can provide a reference to PSSI

(Football Association of All Indonesia) for the development of referees and assistant referees, so that will improve the quality of referees in Indonesia.

## 2 METHOD

The method used in this research is descriptive method. The population in this study is the entire FIFA Indonesia referee who amounted to 5 referees and 5 assistants. The sample in this study was taken using purposive sampling technique, where researchers took 3 referees and 3 assistants who served in Liga 1 Indonesia in 2017. In the data retrieval conducted by researchers is each referee and assistant referee only taken when served in League 1 in half the season. In the data retrieval researchers only make observations of the video match, so it can be known how many times the referee gives a decision about the violation or not, and whether the violation should be given a yellow card or red card. The instruments used are the decision of the referee in making the decision of article 12 or violation and unsportsmanlike behavior (FIFA: 2016/2017), while the assistant referees are only the decision of Article 11 which is about offside (FIFA: 2016/2017). The data analysis used is the percentage, by calculating the percentage of each decision taken by the referee and the assistant referee.

## 3 RESULTS AND DISCUSSION

### 3.1 Result

After the data from the sample is found out, then the author analyzed the data obtained. The test results and data analysis are calculated to get the average value and standard deviation. The results of the referee's decision in League 1 Indonesia are as follows:

Table 1: Result of calculation of average score and standard deviation.

Name	Total	Average Score $(\bar{X})$	Standard Deviation (S)
<b>Referee</b>	1077	63,35	9,96
<b>Referee Assistant</b>	64	3,05	1,6

From table 1 it can be explained that the result of observation data of referee decision making in League 1 Indonesia obtained average score, and standard deviation, for referee 1077 total decision taken by referee, 63,35 average value, and standard deviation 9, 96, and assistant referee total offside decisions were 64 decisions, averaging 3.05 and standard deviation 1.6. Having known the value of the average, and standard deviation, then the author continues the process and analysis of data.

Table 2: Percentage results of referee's decision in liga 1 Indonesia 2017.

Name	No Violation	Percent %	Violation	Percent %	Bias	Percent %
Referee 1	132	37,29	171	48,31	51	14,41
Referee 2	187	%	205	%	63	%
Referee 3	124	41,1 %	113	45,05	31	13,85
		46,27		%		%
		%		42,16		11,57
				%		%
Total	443	41,13 %	489	45,4 %	145	13,46 %

From the calculation of the percentage, that the decision of the referee to declare an incident is not punishable violation is about 443 violations or 41.13% consisting of 37.29% for referee 1, referee 2 41.1%, and referee 3 46.27%. This states that the referee saw the incident in the field there was no elements of violations that are adjusted to the law of the game FIFA 2016/2017. While the referee declared a violation incident about 489 violations or 45.4% consisting of referee 1 48.31%, referee 2 45.05%, and referee 3 42.16%. It states that the referee sees an offense in accordance with the rules of article 12 (FIFA 2016/2017). While the bias is stated that any incident that should be referee violation does not mention it is a violation, and vice versa that should not violate the referee considers it a violation. Of these can be obtained a total of 145 decisions or 13.46%, which consists of referee 1 14.41%, referee 2 13.85% and referee 3 11.57%.

Table 3: Decision percentage result of assistant referee in liga 1 Indonesia 2017.

Name	Offside	Percent %	Bias	Percent %
Assistant referee 1	23	95,83 %	1	4,17 %
Assistant referee 2	21	91,31 %	2	8,69 %
Assistant referee 3	16	94,12 %	1	5,88 %
Total	60	93,75 %	4	6,25 %

From the calculation of the percentage, that the decision of the assistant referee who declared an offside punishment event is about 95.83% for assistant referee 1, 91.31% for assistant referee 2, and 94.12% for assistant referee 3. While the bias stated that any incident that should be punished offside by the referee declared onside and vice versa. It can be obtained that percentage of assistant referee 1 was 4.17%, assistant referees 2 was 8.69% and assistant referees 3 was 5.88%. The overall total result of the assistant referee's decision on the offside was 93.75% and the fault made by the assistant referee in the offside decision was 6.25%.

### 3.2 Discussion

From the calculation of the data, it can be seen that the referee and assistant referee in providing a lot of decisions in the field, with a total decision of 1077 decision or average 63 decisions in every game and must adjust to the rules that apply is not an easy thing, the referee should be able to predict and make sure the decision is taken, whether there is a violation or not, whether it should be a yellow card or a red card. From every decision taken it is very likely the existence of an error or bias, because of the function of the human itself. (Hoseini, Aslankhani, Abdoli, and Mohammadi, 2011). In this study there is a small biased decision. But the small bias value remains a problem for a referee and an assistant referee because with that bias is likely to have an effect on the final score of a match (Dawson and Dobson, 2010). The results of this referee's research took a decision in an average game of 63.35 while the assistant referees in decision making offside 3.05 per game. From the decision taken there is a decision that is considered referee bias regarding the decision of the violation is 13.46% referee fault in the violation decision and 6.25% for the assistant about the offside decision. These results certainly do not reflect the overall match in Indonesia, due to the referee's sampling and the few tending matches. In another study stated that there was an error rate of 14.2% for referees and 12.7% for assistant referees (Mallo et al 2007).

The occurrence of bias or false decisions made by the referee occurs due to several factors can be intentional or unintentional and the decision is based on the influence of within the self or influence from outside. There are several factors according to the author of the background of the referee's decision that physical condition, psychological, and understanding the rules of the game.

### 3.2.1 Physical Condition

This first aspect is an obligation for a referee and an assistant referee before they will be on duty. They must pass a physical test before the competition, if they do not pass the physical test then they are not allowed to lead a match. In the Indonesian league, any referee who will be involved in the competition must follow referees conducted by PSSI, every referee must follow the activity if they want to serve in League 1 Indonesia. The function of physical ability itself in the performance of the referee is that the referee must always move in the game and strive to always close to the event so that the decision given will be accurate, besides the referee and the assistant referee must always move in a match following the game and asked not far from the incident. (Mallo, Navarro, Garcia-Aranda, and Helsen, 2009). The referee must find the right point of view to decide an event, so the referee must be strived to move if his position is obstructed. For the assistant referee in the offside determination, the assistant referee must have a good point of view between parallel to the last two defenders, following where the ball will be played, where the starting position of the attacker will touch the ball and where the ball will be played (Catteeuw et al: 2010). In the author's observation of the position of the referee in every decision, especially when the counterattack is very far from the event that resulted in the decision becomes doubt. In addition to the assistant referee is often left behind or not aligned with the last two defenders, although the decision is true, and the assistant referee who was too hasty in deciding an event, but who will control the ball is a player who is not in an offside position. This becomes an issue that must be fixed by Indonesian football organizations.

### 3.2.2 Psychological

In psychological terms it is associated with a threat to referees that occur before, during, and after the game. In this case the threat that is often experienced by football referees in Indonesia is the presence of a pressure from the audience, players, and official. A referee who has experienced a threat will affect psychological, concentration, performance, and motivation so that the decisions taken will be inaccurate. (Coakley, 1994). A threat or pressure experienced by the referee is divided into two forms: physical and verbal, (Folkesson, Nyberg, Archer, and Norlander, 2002). Many improvements made by PSSI and the opponents of the New Indonesia league to anticipate the threat factor made by players, coaches,

managers, and also the audience to referees and assistant referees, namely by issuing strict rules on threats to referees, the result is in Liga 1 Indonesia decreasing the level of physical threats made by players, coaches, official and spectators to the referee. But verbal threats are still often experienced by referees, both from players, coaches, and spectators. In addition to the existence of an external threat, the motivation in the self affects the referee itself, a referee who has his own desire to become a referee will have better self-control, compared to the referee who is motivated because of their economic factors will be forced in duty and will even affect its performance (Dohmen, 2008).

Understanding the rules of the game is a must for a referee, how an umpire will decide a problem if he does not control the rules. Football rules every year there is always a change, so referees and assistant referees should always update the latest regulations. Regarding this understanding, not only the referee who must master, but the coach, players, spectators must master and know the rules that apply, so that there will be mutual respect between professions. One study says that the understanding of the rules of game players, coaches, spectators, media and related components of football is very low (Gilis, B., Helsen, W., Catteeuw, P., Van Roie, E., and Wagemans, J. 2009).

## 4 CONCLUSIONS

From the results of the research that has been done, it can be concluded that the decision of the referee in leading football match in Liga 1 Indonesia on article 12 or violation and unsportsmanlike behavior has a relatively small bias value, while the assistant referee on article 11 or offside obtained the very low score of bias.

## REFERENCES

- Catteeuw, P., Helsen, W., Gilis, B., Wagemans, J. 2009. Decision-making skills, role specificity, and deliberate practice in association football refereeing. *Journal of Sports Sciences*, 27, 1125–1136.
- Catteeuw, P., Gilis, B., Wagemans, J., Helsen, W. 2010. Offside decision making of assistant referees in the English Premier League: Impact of physical and perceptual-cognitive factors on match performance. *Journal of Sports Sciences*, 28, 471–481.
- Catteeuw, P., Gilis, B., Wagemans, J., Helsen, W. 2010c. Perceptual-cognitive skills in offside decision making:

- Expertise and training effects. *Journal of Sport and Exercise Psychology*, 32, 828–844.
- Coakley, J. 1994. *Sport in society* (5th Ed). St. Louis: Mosby-Year Book
- Dawson, P., Dobson, S. 2010. The influence of social pressure and nationality on individual decisions: Evidence from the behaviour of referees. *Journal of Economic Psychology*, 31, 181–191.
- Dohmen, T. 2008. The influence of social forces: Evidence from the behavior of football referees. *Economic Inquiry*, 46, 411–424.
- Fédération Internationale de Football Association 2016/2017. *Laws of the game and universal guide for referees*. Zurich: FIFA.
- Folkesson, P., Nyberg, C., Archer, T., Norlander, T. 2002. Soccer referees' experience of threat and aggression: Effects of age, experience, and life orientation on outcome of coping strategy. *Aggressive Behavior*, 28, 317–327.
- Gilis, B., Helsen, W., Catteeuw, P., Van Roie, E., Wagemans, J. 2009. Interpretation and application of the offside law by expert assistant referees: Perception of spatial positions in complex dynamic events on and off the field. *Journal of Sports Sciences*, 27, 551–563.
- Helsen, W., Bultynck, J.-B. 2004. Physical and perceptual-cognitive demands of top-class refereeing in association football. *Journal of Sports Sciences* 22, 179–189.
- Hoseini, S. H., Aslankhani, M. A., Abdoli, B., Mohammadi, F. 2011. The relationship between number of crowds with anxiety and the function of the soccer premier league referees. *Procedia – Social and Behavioral Sciences* 30, 2374–2378.
- Mallo, J., Navarro, E., Garcia-Aranda, J. M., Gilis, B., Helsen, W. 2007. Activity profile of top-class association football referees in relation to performance in selected physical tests. *Journal of Sports Sciences*, 25, 805–813.
- Mallo, J., Navarro, E., Garcia-Aranda, J. M., Helsen, W. 2009. Activity profile of top-class association football referees in relation to fitness-test performance and match standard. *Journal of Sports Sciences*, 27, 9–17.
- Mallo, J., Navarro, E., Garcia-Aranda, J. M., Helsen, W. 2009. Physical demands of top-class soccer assistant refereeing during high-standard matches. *International Journal of Sports Medicine*, 30, 331–336.
- Philippe, F. L., Vallerand, R. J., Andrianarisoa, J., Brunel, P. 2009. Passion in referees: Examining their affective and cognitive experiences in sport situations. *Journal of Sport and Exercise Psychology*, 31, 77–96.
- Szczepanik, N. 2009. *Ancelotti enjoys warm glow of a Cole-fired performance*. The Times, October 26, p. 8 (The Game).