THE MASTERY OF COMPETITION RULES, STRESS MANAGEMENT, CONFIDENCE AND CONCENTRATION OF THINKING ON DECISION MAKING

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Abstract. Errors in applying the rules of the match and the inability to manage and reduce the perceived stress situation, as well as lack of confidence in the ability of a referee will have an impact on the decision-making he does. This type of research is quantitative research with a path analysis approach, the purpose of this study is to determine the effect of mastery of regulations, stress management and self-confidence and concentration on referee decision making. The population in this study was all West Sumatra tennis referees, totaling 62 people. The sampling technique used a purposive sampling technique where the population was used as a sample of 40 people. Data were collected using a questionnaire to measure mastery of the rules of the game, stress management, self-confidence, decision making and grid concentration exercise to measure concentration. The results of data analysis showed the following results: (1) there is a direct influence on the influence of mastery of match rules on the decision making of tennis referees in West Sumatra, which is 9.3%; (2) there is a direct influence of stress management on the decision making of tennis referees in West Sumatra, which is 7.6%; (3) there is a direct influence of self-confidence on the decision making of tennis referees in West Sumatra, which is 6.7%; (4) there is a direct influence of concentration of thinking on the decision making of tennis referees in West Sumatra, which is 8.9%; (5) there is an indirect effect of mastery of match rules on decision making through concentration of thinking, which is 2.6%; (6) there is an indirect effect of stress management on decision making through thinking concentration, which is 3.1%; and (7) there is an indirect effect of self-confidence on decision making through thinking concentration, which is 2.5%.
Keywords: *stress management, self-confidence, decision making, rules*

Introduction

Sport is a systematic, tiered, sustainable physical activity to improve, foster, and develop physical, spiritual and social potential. Sport does not only function for health and recreation, but also for education and achievement. In accordance to the National Sports System Law No. 3 of 2005 article 4 which reads: "National sports are aimed at maintaining and improving health and fitness, achievement, human quality, instilling moral values and noble character, sportsmanship, discipline, strengthening and fostering national unity and integrity, strengthening national resilience, as well as increasing dignity and honor of the nation." Considering among of the many sports, tennis is an outdoor activities that involve with the community, which is played by at least more than one player, either in both men and women, young and old, adults and children, etc. Therefore PP. PELTI as the person in charge of national activities hopes that the tennis sport can develop in a better direction, both in quality and quantity. One of the efforts that can be done, among others, is to improve and multiply sports infrastructure, run tiered competitions, socialize the rules of the game to the public and improve the quality of refereeing.

One of the focuses of attention from PP. PELTI is improving the quality of referees. In general, the duties and responsibilities of a tennis referee are to apply the rules of the match, to supervise, control and make decisions in a match. The referee or jury is a person who has the authority to organize and direct the course of a sports competition. As explained by the ITF (International Tennis Federation) 2019: 30 the referee is the final authority on all match rules and the referee's decision is final. Based on the statement of the ITF (International Tennis Federation), stated that knowledge, mastery, understanding of the rules of the match is the foundation for a referee in making the right and accurate decisions in a match. Every mistake related to the rules of the match is something that a referee needs to avoid. Referees are required to perform a variety of different tasks, including evaluating and assessing actions that occur during matches, making quick decisions, managing play, paying attention to various aspects of the game, maintaining order, and resolving disputes (Tuero et al., 2002). The complexity of the referee's job can put pressure on the referee. Pressure that exceeds acceptance will result in a psychological effect on individuals which is often referred to as stress and when it is associated with work is referred to as work stress (Sinaga and Sinambela, 2013). Stress is also likely to occur when perceived role demands are inconsistent with abilities, goals, values or beliefs (Taylor et al., 1990). Someone who experiences stress will find it difficult to control the situation, and concentration will decrease further and experience insomnia (Duru and Balkıs, 2017). A referee has consequences that they will accept for themselves if there is a discrepancy between the decision and the rules, carelessness, wrong decision, delayed response. As a result, decreased concentration in these tasks can lead to stress and fatigue (Karaçam and Pulur, 2017).

The complex task of a referee not only makes his job difficult, but also makes it easy to make mistakes (Guillén and Feltz, 2011). As a result of these conditions can cause pressure conditions on the referee (Balch and Scott, 2007). The duty of a referee is an honorable and professional duty. Any mistakes made in refereeing duties can lead to loss of self-confidence, high anxiety, loss of concentration and increased stress levels on referees (Taylor et al., 1990). Therefore, referees who experience stress will experience a decrease in strong belief in their own abilities. This ability is related to one of the personality characteristics, namely the aspect of belief in self-efficacy or can be called self-efficacy. From the results of the study there is a strong relationship between self-efficacy and performance with work (Stajkovic and Luthans, 1998). This decision making is part of the referee's performance. Speed, precision and accuracy in decision making are cited as one of the most important aspects of referee performance (MacMahon et al., 2007). In other words, someone with low self-confidence takes longer to make decisions than has good self-confidence in decision-making abilities (Hepler and Feltz, 2012). At the tennis championships held in West Sumatra, especially the city of Padang, there were many referees, both regional and national, as well as international referees. There are 4 international certified referees, 7 national level referees, and the rest are regional level referees who can only lead matches at the Regency / City level. In addition, there are still many referees in West Sumatra who have not been optimal in leading the match. This can be seen from several championships held in West Sumatra in the last 2 years such as the 2019 ILUNI Championship, the 2019 Regional Police Chief Cup Championship 2019, the 2019 LPTK Championship, the 2019 Bukit Tinggi Tourism Baveti Championship, the 2019 Unand Rector's Cup Junior National Championship.

In the 2019 ILUNI Championship, for example, from the 20 referees on duty, there were 6 referees who protested regarding the match rules that had not been implemented optimally, such as foot faults during the second serve, late in and out decisions to be declared due to decreased concentration. In the 2019 Kapolda III Cup championship there were 4 referees who incorrectly stated the match score, causing disputes on the field, there were 4 referees who became line judges in the semi-final / final match and tended to be pensive when the match was in play, thus leading to decision making wrong. At the 2019 LPTK Championship there were 5 referees who protested about the match rules such as not measuring the middle of the net before the match, then in the team party the referee took decisions dictated by the players, the referee hesitated in making In and Out ball decisions, then 6 linesman protested because his decision was different from the referee's decision. Then at the BAVETI championship in Bukit Tinggi 2019 there were also many disputes, including many referees who did not do Ball Mark Inspection (BMI) which aims to see the impact of the ball on the In or Out field, because it is played on a dirt field to see the traces of the ball, many referees who wrong in making decisions in and out. There are so many referee decisions that are not in accordance with the rules stated in the Rull of Tennis, so many coaches and officials protest for various reasons, such as asking the referee to be replaced, asking the referee to change his decision, asking the referral to accompany the referee during the match. , shouting at the referee, scolding the referee, making inappropriate comments to the referee and other match officials. Ideally, the decision must be right, because the mistake of giving a decision from a referee will affect various aspects. Referee errors can have disastrous consequences from an economic and social perspective for clubs and fans, as well as for athletes and teams (Guillén and Feltz, 2011). The sports environment is the most appropriate context for studying decision making (Karaçam and Pulur, 2017). Based on these problems, the author is interested in conducting this research.

Materials and Methods

The method used in this study is a quantitative research method through path analysis to determine cause and effect, with the aim of explaining the direct and indirect effects of a set of variables without manipulating a variable (Winarno and Taufik, 2018). According to Creswell (2002), quantitative research is consider popular type of educational research in which researchers decide on the purpose of research, formulate specific questions, limit questions, collect measurable data from participants, analyze numbers using statistics, conduct impartial investigations, by based on the objective stated in proposal study. According to Riduwan and Kuncoro (2012), path analysis is used in testing the amount of contribution (contribution) indicated by the path coefficient on each path diagram of the casual relationship between variables. This method aims to determine the effect of mastery of match rules (X_1), stress management (X_2), self-confidence (X_3) and concentration of thinking (X_4) on referee decision making (Y). The research site is the Padang State University Tennis Court which is located in the Padang Air Tawar State University campus complex, Jl. Prof. Dr. Hamka, West Freshwater, North Padang, Padang City, West Sumatra. This research was conducted in from March to April 2021. The populations in this study were West Sumatra tennis referees, totaling 62 respondents. The sampling technique in this study used a purposive sampling technique, so the sample in this study was 40 respondents.

There are two categories of data used in this study, namely primary and secondary data. The research instrument applied questionnaire survey, whereby the questionnaire was compiled using a Likert and Gutman scale. The data analysis techniques used will be describe in detail as below.

Data description

The data in this study includes 5 data variables consisting of 3 independent variables (independent variable), 1 intervening variable (intermediate variable) and 1 dependent variable (dependent variable). The independent variables consist of Mastery of match rules (X_1), Stress management (X_2), and Self-Confidence (X_3), while intervening variable (intermediate variable) is refer as the Concentration (X_4), and the dependent variable consists of referee decision making (Y). Test Requirements Analysis are testing the relationship between variables in the linear model (with path analysis is carry out simultaneously), whereby the definition of the test is applied at the same time having the path analysis by itself and also meet the requirements of regression analysis. The tests carried out are normality tests for each data variable. For the requirements analysis test, the first thing to do is a normality test using the Shapiro-Wilk test to find out whether the data collected is normally distributed or vice-versa. With the test criteria using the provision with the probability is more than 0.05, then the Ho is accepted and the data is considering normally distributed; and if the probability is less than 0.05 means Ho is rejected and the data is not normally distributed.

Linearity test and Regression Significance test with the criteria for linearity requirements if F-count < F-table means the regression equation is not linear; and vice versa if F-count > F-table means the regression equation is linear. As for the significant requirements of the regression coefficient, if F-count > F-table (0.05) it means that the regression equation is significant at 0.05 level; and vice versa if F-count < F-table means that the regression equation is not significant at 0.05. Correlation coefficient value is a calculation number that states the level of strength of the relationship. The strength of the correlation has an acceptable level of significance if t count > t table. According to Riduwan and Kuncoro (2012) for the Path analysis, the steps to test this analysis are: (1) calculating hypotheses and structural equations (Y = yx1 X1 + yx2 X2 + yx3 X3 + yx4 X4 + yx1x4 X41 + ρyx2x4 X42 + ρyx3x4 X43); (2) calculate the coefficient based on the regression coefficient; (3) calculating the path coefficient simultaneously (overall); and (4) calculate coefficient individually. The overall test which refer to the third (3) methods of the statistical hypothesis is formulated based on Ha (yx1 = yx2 = yx3 = yx1x4 = yx2x4 = yx3x4 = yx321x3 = yxk ≠ 0) and Ho (yx1 = yx2 = yx3 = yx1x4 = ρyx2x4 = yx3x4 = yx321x3 = yxk = 0).

Results and Discussion

The effect of mastery of match rules (X1) on decision making (Y), the value of py1 = 0.305 t = 2.579 with p-value = 0.014/2 = 0.007, thus the hypothesis is accepted = 0.05, it can be concluded that there is a direct influence of mastery of match rules (X1) on decision making (Y).

X1 to Y = Pyx1 x Pyx1
= 0.305 x 0.305
= 0.093 or 9.3%

From the analysis above, it can be concluded that there is an influence of mastery of match rules (X1) on decision making (Y) of 9.3%. The results of this study are supported by the theory put forward by Guillén and Feltz (2011), referees realize that thorough knowledge of the game or sport they lead is very important, because mastery of match rules is a strategic performance for referees to make correct interpretations of the game and its rules. This strategic skill implies that the referee must make the correct signals, movements, signs and anticipate actions (Guillén and Feltz, 2011). Referees who have knowledge of match rules will be able to make decisions faster and more accurately (Guillén and Feltz, 2011).

The effect of stress management (X2) on decision making (Y), the value of py2 = 0.276 t = 2.191 with p-value = 0.035/2 = 0.018, thus the hypothesis is accepted = 0.05, it can be concluded that there are the effect of stress management (X2) on decision making (Y).

X2 to Y = Pyx2 x Pyx2
= 0.276 x 0.276
= 0.076 or 7.6%

From the analysis above, it can be concluded that there is a 7.6% contribution of stress management influence (X2) on decision making (Y). The results of this study are supported by the theory put forward by Smith in Badri (2012) explaining that stress management is a skill that allows a person to anticipate, prevent, manage and recover from stress that is felt due to threats and inability to carry out tasks. Then the results of Rainey's research in International Tennis Federation (2021) showed that there were four sources of stress commonly experienced by referees, namely: (1) fear of failure, for example, fear of making the wrong decision, fear of losing concentration; (2) fear of physical aggression, such as aggressiveness by players; (3) timing issues, such as time conflicts regarding family interests and arbitration duties; and (4) interpersonal conflicts, for example facing a coach who is easily offended, afraid of criticism, etc.

The influence of the referee's self-confidence (X3) on decision making (Y), the value of py3 = 0.259 t = 2.1191 with p-value = 0.041/2 = 0.021, thus the hypothesis is accepted = 0.05, then it can be drawn the conclusion that there is a direct influence of the referee's self-confidence (X3) on decision making (Y).

X3 to Y = Pyx3 x Pyx3
= 0.259 x 0.259
= 0.067 or 6.7%

From the analysis above, it can be concluded that there is a direct influence of the referee's confidence variable (X3) on decision making (Y) of 6.7%. The results of this study are supported by the theory proposed by Feltz et al. (2008). In the domain of sports psychology, self-confidence has been studied extensively as a cognitive variable associated with sports achievement efforts and self-confidence affects referee performance, referee stress, athlete rule violations, satisfaction athletes, and supervisor satisfaction. Studies on self-confidence in sports have found a positive relationship between self-confidence expectations and one's performance (Moritz et al., 2000). In

addition, research has supported a strong relationship between self-confidence and work-related performance (Stajkovic and Luthans, 1998).

The effect of thinking concentration (X4) on decision making (Y), obtained the value of py4 = 0.298 t = 2.076 with p-value = 0.045/2 = 0.023, thus the hypothesis is accepted = 0.05, it can be concluded that there are direct influence thinking concentration (X4) on decision making (Y).

X4 against Y = Pyx4 x Pyx4
= 0.298 x 0.288
= 0.089 or 8.9 %

From the analysis above, it can be concluded that there is a direct influence of the variable concentration of thinking (X4) on decision making (Y) of 8.9%. The results of this study are supported by the theory put forward by Downward in Sin (2015) to make the right and accurate decisions, referees are asked to be very concentrated because the presence of large crowds and increased noise can disturb the referee and increase stress on the decision-making process. Furthermore, the results of research from Julian et al. (2019) in the Tennis Referee Mental Skills, concentration is one of the components included in cognitive abilities, where this is one aspect of supporting the quality of the mental skills of tennis referees.

The effect of mastery of match rules (X1) on thinking concentration (X4), obtained p14 = 0.282 t = 2.187 with p-value = 0.035/2 = 0.018, thus the hypothesis is accepted = 0.05, it can be concluded that there is a direct influence of match rules (X1) on concentration (X4).

X1 to Y X4 = Pyx1 x x1x4 x Pyx3
= 0.282x 0.298 x 0.305
= 0.026 or 2.6%

From the analysis above, it can be concluded that there is an indirect influence of the variable mastery of the rules of the game (X1) on decision making (Y) through the variable concentration of thinking (X4) of 2.6%. The results of this study are supported by a theory that contains the roles and functions of sports officials, quite a lot and varied including assessing, deciding, ordering, measuring, assessing, evaluating, estimating, punishing, regulating, etc. Behind these different terms lies a complex phenomenon, namely the decision-making process (Dosseville et al., 2013; Bar-Eli and Raab, 2009; 2006; Dosseville and Garncarzyk, 2007; Plessner and Haar, 2006). Now the model applied to the assessment of sports actions it becomes clear that wrong decisions can occur as a result of smaller errors, knowledge or misinformation from various stages of processing information derived from certain match rules (Plessner and Haar, 2006).

The effect of stress management (X2) on thinking concentration (X4), obtained p24 = 0.389 t = 2.973 with p-value = 0.005/2 = 0.003, thus the hypothesis is accepted = 0.05, it can be concluded that there are direct effect of stress management (X2) on thinking concentration (X4).

X2 to Y X4 = Pyx2 x x2x4 x Pyx4
= 0.276 x 0.389 x 0.298
= 0.031 or 3.1%

From the analysis above, it can be concluded that there is an indirect contribution of stress management variable (X2) on decision making (Y) through thinking concentration variable (X4) of 3.1%. The results of this study are supported by the theory put forward by Munandar (2001) defining stress management as an effort to prevent stress, increase the stress threshold of the individual and accommodate the physiological consequences of stress. Understanding and practical skills about tips for dealing with stress while on the field is important for a referee (Weinberg and Richardson, 1990). According to Kaufman (2003) in USTA (United States Tennis Association) Chair Umpire Handbook, referees must prepare themselves psychologically before the match, during the match and after the match, because controlling the course of a match requires good psychological control.

The influence of referee self-confidence (X3) on thinking concentration (X4), obtained p34 = 0.324 t = 2.470 with p-value = 0.018/2 = 0.009, thus the hypothesis is accepted = 0.05, it can be concluded that there is a direct influence of the referee's self-confidence (X3) on the concentration of thinking (X4).

X3 against Y X4 = Pyx3 x x3x4 x Pyx4
= 0.259 x 0.324 x 0.298
= 0.025 or 2.5%

From the analysis above, it can be concluded that there is an indirect contribution of the referee's confidence variable (X3) on decision making (Y) through the variable concentration of thinking (X4) by 2.5%. The results of this study are supported by the theory put forward by Kaufman (2003) in USTA (United States Tennis Association) Chair Umpire Handbook stated that a professional referee is equipped with knowledge, experience, understanding, mastery of the rules of the game, the ability to reduce pressure, confidence and skills in making decisions. Referee decisions are often the subject of controversial discussion by the teams involved or by the media. At least for this reason, the research has emerged in recent years with regard to sports refereeing decision making (MacMahon and Plessner, 2007).

Conclusion

In conclusion, there is a direct influence between mastery of the rules of the game on decision making. This means that the better the mastery of the referee's match rules, the better the decision making will be. The results of the analysis show the coefficient of determination is 0.093. This means that 9.35% of the variance in decision-making is explained by the variable mastery of the rules of the game. Secondly, there is a direct influence between stress management on decision making. This means that the better a referee can manage the pressure or stress that comes from inside or outside, the better the decision-making will be. The results of the analysis show the coefficient of determination is 0.076. This means that 7.6% of the variance in decision making is explained by the stress management variable. Followed by direct influence between the self-confidence of the referee on decision making, where the better the confidence to lead a match, the better the decision making will be. The results of the analysis show the coefficient of determination is 0.067. This means that 6.7% of the variance in decision making is explained by the self-confidence variable. Continuously, there is a direct

influence between the concentration of thinking on decision making. This means that the more focused and/or concentrated a referee is, the better the referee will be in making decisions. The results of the analysis show the coefficient of determination is 0.089. This means that 8.9% of the variance in decision making is explained by the variable concentration of thinking.

There is an indirect influence between mastery of the rules of the game on decision making through concentration of thinking. This means that the better the mastery of the referee's match rules in leading, the better the decision-making will be through thinking concentration. The results of the analysis show the coefficient of determination is 0.026. This means that 2.6% of the variance in decision making is explained by the variable mastery of the rules of the game through thinking concentration. Not to forget the indirect between stress management on decision making through concentration thinking. The better the referee manages and manages stress, the better the referee will be in making decisions through thinking concentration. The results of the analysis show the coefficient of determination is 0.031. This means that 3.1% of the variance of decision making is explained by the stress management variable through thinking concentration. Lastly, an indirect influence between the referee's self-confidence on decision making through concentration of thinking are also listed from the outcome. This means that the better the referee's self-confidence, the better the decision making through the concentration of thinking. The results of the analysis show the coefficient of determination is 0.025. This means that 2.5% of the variance of decision making is explained by the variable of self-confidence through thinking concentration.

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Conflict of interest

The authors confirm that there are no conflict of interest involve with any parties in this research.

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