

THE IMPACT OF REFEREEING DECISIONS ON MATCH OUTCOMES IN SOCCER: PERCEPTIONS AND REALITIES

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Abstract

The study examined the perceived factors influencing soccer referee decision-making and the perceived effects of soccer referees' decisions on the outcome of football matches. This study employed the exploratory research design. The purposive sampling method was used to select referees, coaches, and players in Division One football in Ghana. The study employed an unstructured interview as a medium of data collection. The data collected from the field were manually transcribed and analysed qualitatively. Themes were generated from the responses of the respondents. It was found that referees' decisions were not always accurate, they sometimes commit some errors. It was evident that several factors are perceived to influence referees' decision-making in football matches. Generally, some perceived factors include ideal decision-making, individual factors, experience factors, and situational factors. It was also found that referees' decisions are either positive or negative. It was concluded that referees can make and unmake games, specifically, football matches. It was recommended that referees eschew any practice or act that will influence their decision during football match officiating. The Ghana Football Association (GFA) was also recommended to continually intensify the training workshops they organise for referees to keep them abreast of current practices and ethics associated with the profession.

Keywords: Crowd interaction, Physical distance, Quality of refereeing, Referees' decision, Soccer referees

Background/Introduction

Referees are assigned the task of implementing the laws of the game and ensuring that players abide by the regulations. Research based on match analysis from the European Football Championship in 2000 suggests that a top official makes 137 observable interventions on average during a game, including awarding free-kicks, penalties, corners, throw-ins, and halting play for serious injury (Biemen, Oudejans, Savelsbergh, Zwenk & Mann, 2022). In the case of free-kicks and penalties, the referee has the discretion to decide whether a foul merits a caution, in the form of a yellow or red card. Since some of these decision-makings are guided by subjective judgment, football referees are often accused of being inconsistent and biased in their decision-making (Çar, Arslan & Kutoğlu, 2022). Even though referees are employed to interpret the rules of football impartially, they can exert considerable discretionary power, particularly when adding extra time,

awarding penalties, allocating yellow or red cards and deciding on free-kicks or offside. Consequently, referees can have a very important influence on the final result of a football match (Castagna, Krustup, Mohr & Póvoas, 2023). In soccer refereeing, decisions that might determine the outcome of the game are made by the referee in a flash of a second, and sometimes even without a clear view of the play. Moreover, many of the calls made in soccer are marginal, require refereeing experience, and are difficult to make even under ideal conditions (Couto & Sayers, 2023). The natural difficulty of making accurate decisions exposes soccer referees to intensive criticism expressed through private (players and coaches during the game) and public (fans and media) communication (Dagaev, Paklina, Reade & Singleton, 2023).

Referee decision-making can affect the course of a game and sports actors' behaviour. Indeed, some decisions can inflame a match, get supporters or coaches excited or lead players to behave in such a way that their misconduct cannot be made up for. Otherwise, referees can also calm down various social tensions and diminish excessive behaviour (Das & Damle, 2023). Studies of referee decision-making in football, for example, tend to focus on two decisions: the decision to add on time at the end of matches and/or the decision to award red and yellow cards (Erikstad & Johansen, 2020; Fernández, Sarmiento, Ramirez-Campillo, Infantes-Paniagua, González-Víllora & Clemente, 2023). Research on several domestic European leagues suggests a home team bias in referee decision-making and identifies social pressure (influence of the crowd) as one of the main reasons for the bias. In contrast, research on North American sports has recently focused on (racial) discrimination in decision-making by match officials (Ferraresi & Gucciardi, 2022). Hu (2023) defined home advantage in team games as the consistent finding that home teams in sports competitions win over 50% of the games played under a balanced home and away schedule. He discusses four major factors that might explain the home advantage: rules, learning/familiarity, travel factors and crowd factors.

Many factors can lead to inaccurate referee decisions. For instance, it has been shown that the position and angle of view of the referee and her assistants can be critical for correctly identifying off-side positions or fouls (Işın, 2023). The referee might also be far from the event, and therefore might not have an optimal view of the play. Refereeing a soccer match requires a substantial physical effort, which can increase when the game becomes more intensive. That physical effort might also affect the quality and correctness of the referee's decisions, especially at the end of the second half, when the referee might find it more difficult to be mobile and stay close to the events (Kumari, 2024). Evidence of inconsistency and bias in decision-making by referees has been found in several European domestic leagues. Lewis, McNicholas, McCarthy and Sherwin (2023), using Spanish data, found a tendency for referees to add more time at the end of matches when the home team is trailing by one goal compared to when the home team is leading, particularly when contests are close. Lin, Aouididi, Chen, Beyer, Pfister and Wang (2023) found that architectural conditions played a key role in the refereeing bias observed, namely: the size of the crowd (absolute size), the attendance-to-capacity ratio (relative size) and the proximity of supporters to the pitch (the presence of a running track). They found that there was more added time in close matches when the crowd was physically close to the field of play. Also, home teams were significantly more likely to be awarded a disputed penalty, with the physical distance between the crowd and the playing field important to this decision. Magee and Wolaver (2023) found similar results for Italian football following the Italian government's decision to enforce clubs with sub-standard stadiums to play home games behind closed doors. The quality of refereeing is associated not merely with the outcome of the game, but also with player injuries, can lead to rage and riots

among the players, and might trigger speculations about game fixing. Since soccer is by far the world's most popular sport that engages billions of fans, referee decisions can even have political or social implications (Parker, Finlayson, Hall, Pitman, Chu & Wallace, 2024).

Soccer referees are required to make instant decisions during the game under non-optimal conditions such as an imperfect view of the incident and substantial pressure from the crowd, the teams, and the media. Some of the decisions can be subjective, such as a yellow card decision after a foul is called, where different referees might make different decisions (Çar, Arslan Kutoğlu, 2022). Referee mistakes have been perceived by some soccer fans as an indication that some referees might favour certain teams (Pizzera, Laborde, Lahey & Wahl, 2022). Although the point of view of soccer fans cannot be considered objective, empirical studies have shown substantial scientific evidence of referee bias in soccer, demonstrating that the subjective point of view of soccer fans might not be completely separated from the reality of soccer refereeing. For instance, referee decisions can be biased by prior knowledge about the teams and players, as well as the crowd noise in the stadium, and the distance between the crowd and the pitch. The referee bias can also be evident from the differences between refereeing in home and road games (Saputra, Komarudin, Subarjah & Hidayat, 2020). Some shreds of evidence have shown referee bias in the stoppage time (extra time) of the game, and differences in the interpretation of tackles (Silva, Filho, Silva, Nunes, Preciado, Barreira & Campaniço, 2023). From the literature, it appears that much work has been done on referees' decisions and their impact on the outcomes of matches. Though referee behaviour has received attention from academics, no study, if any, is known about the influences on decisions in the Ghanaian context. There is therefore an urgent need to investigate the matter in the context of Ghana. The purpose of the study was to examine how referees make and unmake decisions in the case of Division One football in Ghana. Specifically, the study sought to examine the perceived factors influencing soccer referee decision-making, and the perceived effects of soccer referees' decisions on the outcome of football matches.

Research Questions

1. What are the perceived factors influencing referees' decision-making in soccer matches?
2. What are the perceived effects of referees' decisions on the outcome of soccer matches?

MATERIALS AND METHODOLOGY

Research Design

Research design is a framework that specifies or outlines the procedure for carrying out particular research. Research design provides a specific direction for procedures in a research study (Sors, Grassi, Agostini & Murgia, 2022). The choice of a particular research design depends on the issue or problem under investigation. This study employed the exploratory research design. Exploratory research design provides insights and understanding of a problem. Exploratory design intends merely to explore the research questions and does not intend to offer final and conclusive solutions to existing problems. This design was employed to conduct this study because of the problem that has not been delved into. This study is conducted to determine the nature of the problem (how referees make and unmake), this will help to have a better understanding of the problem. Exploratory research however has some shortcomings. Exploratory research generates qualitative information and interpretation of such type of information is subject to bias. Again, these types of studies usually make use of a smaller number of samples that may not adequately represent the

target population. Accordingly, the findings of exploratory research cannot be generalized to a wider population.

Study Area

Ghana, located in West Africa along the Gulf of Guinea and the Atlantic Ocean, has a fascinating history that spans several centuries and a land area of approximately 238,533 square kilometers. Ghana's diverse geography includes coastal plains, forested plateaus, and the northern savannah, contributing to its rich cultural and ecological diversity. It was home to powerful ancient kingdoms, like the Ashanti and the Ghana Empire. These kingdoms were so influential that they turned the region into a major trade hub, especially for gold. This caught the attention of European traders in the 15th century. Fast forward to 1957, Ghana made history as the first sub-Saharan African country to gain independence from colonial rule. Known for its vibrant culture and great economic potential, Ghana continues to be a major player in West Africa. Its influence stretches beyond its borders, making it an important nation in the region (Boakye, 2022).

Data Source and Sampling Procedures

The population for this study consisted of all referees, coaches, match commissioners, and players in Ghana football. Referees were selected because they are the main focus of the study. In addition, they are the actual people who officiate football matches. Coaches, match commissioners, and players were also selected because of the roles they play in football matches. They are in a better position to provide information to study. The study employed an unstructured interview as a medium of data collection. An interview guide was used because of the research questions the study sought to answer. The interview schedule took approximately one hour for each participant. The researchers used one month to gather the data from the participants. The study's sample size was determined by considering the data saturation. Data were analysed using thematic coding. In analysing the data, the researchers allowed the codes to emerge from analysing the interview transcripts. They continually read through the transcripts, finding dominant patterns, working inductively with emerging categories and frequently comparing them. Since the study involved interactions with individuals, extreme caution was taken to avoid harming them and to ensure that their right to privacy was respected. The researchers informed the participants that their involvement in the study was voluntary, and informed consent was sought before data collection. The participants were also told that they had the option to decline or withdraw from the study at any time without any negative consequences. To gather a wide range of detailed information, we used different methods like convenience sampling, purposive sampling, snowball sampling, and criterion sampling. These methods helped us collect lots of juicy data about the phenomenon we were studying.

Analysis

Results

Table 1: Demographic data

Category	Details	Frequency	Percentage
Gender	Males	11	73
	Females	4	27

Age	Below 20 years	3	20
	20-29 years	4	27
	30-39 years	3	20
	40 years and above	5	33
Years in Sports	0-5 years	2	13
	6-10 years	6	40
	11-15 years	6	40
	16-20 years	1	7
Role in Sports	Referees	5	33
	Coaches	2	13
	Players	3	20
	Match Commissioners	1	7
	Fans	4	27

The study comprises predominantly male participants, accounting for 73% of the sample, while females make up 27%. The participants span various age groups, with the largest contingent being 40 years and older, comprising 33% of the sample. Those below 20 years and in the 30-39 age bracket each constitute 20% of the participants, while 27% fall within the 20-29 years age group. The majority of participants have 6-10 years and 11-15 years of experience in sports, each representing 40% of the sample. A smaller portion has 0-5 years (13%) and 16-20 years (7%) of experience. Participants are engaged in various roles in sports, with referees forming the largest group at 33%. Fans represent 27% of the sample, followed by players at 20%. Coaches account for 13%, while match commissioners are the smallest group at 7%. In summary, the study's participants are predominantly male, with a significant proportion aged 40 years and above. Most participants have 6-15 years of experience in sports and are primarily involved as referees and fans.

RQ1: What are the perceived factors influencing referee decision-making in soccer matches?

This research sought to examine the perceived factors influencing soccer referee decision-making, from the perspectives of coaches, referees, and players. An interview was granted to seek the views of respondents on the possible factors responsible for referees' decisions. From the responses of respondents, four main themes emerged. The four categories of themes influencing soccer referee decision-making include ideal decision-making (accuracy, error, regulations, and professionalism), individual factors (personality, concentration, and control), experience factors (experience, personal life) and situational factors (crowd interaction, environmental factors, player reaction, crowd factors). The excerpts of the responses are illustrated as follows: When asked how ideal referees' decisions are, the following were the responses: One respondent (a coach with over 30 years of experience) indicated by saying:

"...my role in sports has mainly been the coaching and the training of youth in football... I found out that football match officiating in Ghana is normally influenced by teams. Not all the referees are corrupt but we do have some referees who are not corrupt in there, some referees are influenced by teams offering them food, drinks, money and other kinds of incentives to officiate in their favour. I think most of the referee's decisions are accurate most of the time but occasionally you get those who due to allowing themselves to influence

buy money or whatever will then decide to cheat in general I will say that most of the referees' decisions are accurate. Most of them are very professional in their dealings."

Another respondent (a player) said:

"...the referees sometimes rob the home team and favour the away team and sometimes too they favour the home team and rob the away teams. Mostly, fifty-fifty balls go to the home team and before it will go to the away team there has to be pressure on him before given to the away team. The referees sometimes make wrong decisions and sometimes too their decisions are correct and on point. So far, I can say that they use some of the rules not all. They are professional in the handling of the game. To me, once the referee is dressed and is on the field his respect has to be given to him. Except for the captain, no other player is expected to go and talk to the referees anyhow. The way football is in Africa has made other players approach the referees and talk to them anyhow which is not right."

A respondent (a referee) said:

"...officiating football matches has given me so much experience..., so football has exposed me to a big environment. When we talk of accuracy and error, in all the matches it does happen, but when you talk of error, we have what is called the quantum of the error, which spectators or officials will look at and say this is a minor and will not use it against you or debate on it. Such a case is when the referee takes a decision on the blank side or when the distance between the referee and the place where the incident occurred is far away, that one can be said to error. Inaccuracy when you are too close to the scene you can make an accurate decision and all the people around you will applaud you for that even the players. Every institution has a regulation and football too has its own rules and regulations which you have to play within, football deals with the rules formulated by FIFA and once it's football you have to play within that context. Your decision can allow people to say this is a professional man when you are going strictly by the laws, people will judge whether you are a professional or you are now a beginner peer by the way you are handling the match or the way you are using the rules."

When further asked how individual factors influence referees' decisions, the respondents replied as follows: One respondent (a coach) said:

"As a referee, you should not be noticed so I don't think your personality plays an important role but a referee has to be a natural person on the pitch, a good referee is a referee you do not notice when you notice the referee then there is a problem. The concentration of the referee can make or unmake a game because as a referee you have to be aware of everything that going on around you, if you are not concentrating on something or the other then you won't have a good game."

Another respondent (a player) also said that:

"...concentration in refereeing is very important. Sometimes if the referees do not concentrate, they can lose control of the match which can affect the outcome of the game."

A respondent (a referee) replied:

"...yes, your personality and your physical appearance, the way you talk to people, the way you are fluent even on the field of play, when you go to a venue and the players and

officials of a team see you be the dull type, they will underestimate you but when they see you to be active, the respect and the attention they will give to you will be higher than the dull one. Your psychological makeup during and after a match depends on the individual going to partake in the activity, when you are fully prepared and psychologically sound that one you are fully concentrated but when things are going on in the mind, at times you lose focus in the game situations and that will course a big error. The ability to make the right decision or control the match, you are on top of the match will influence your decision making because when you are on top, you make decisions that affect the match positively.”

When further asked about experience: A respondent (coach) indicated:

“Yes, a referee’s experience is part of his skill, and experienced referees know how to calm a game down they also know how to get the best out of both teams without it becoming horrible.”

Another respondent (player) replied:

“...experience counts in football because somebody from the coast and has not handled a premiere match before will panic when given a premiere match to handle.”

A respondent (a referee) reported:

“...I have been officiating since 2016, having been a class one and a premier refereeing in Ghana so I have had a lot of experiences so far I have not had the opportunity to officiate plenty of premier matches but the experiences I have is so far from the division two and the division one, I think it has been a mixed feeling sometimes you go to match where there is security you can express yourself and apply the rules of the game, every referee must be fit, firm and must be fair. Also, when all the variables that must enhance your performance such as a better field of play, teams who know the laws of the game and better security are present, you can do a good match but sometimes some of these variables are absent, especially, division one league where we go to the interior without cameras, without logistics and other things sometimes you are forced to look at the people around, your life which is the most important.”

When further asked about situational factors: One coach said:

“This is very important, I think the crowd in Ghana needs more education, they do not really understand the game and as a result go hard on the referees, these referees have just a few seconds to make a decision and the crowd sitting out there and maybe saw it from a different angle will try and intimidate the referee for it to go their way with this I think the crowd influence the decision. Yes, how can a referee go and officiate a match without security, if the crowd is not happy with your decision, they will come to beat you up and we all know is a common occurrence. Well, the player’s reaction I think is the responsibility of the coach to set an example and to make sure that players are disciplined, not to misbehave or abuse or get upset with the referees and their decisions.”

Another respondent (a player) responded:

“...environment does not have any impact on the referee’s decision it all depends on how the game goes and how the supporters behave. ...Yes, some players are not disciplined and if the team is disciplined it can even make the referees help that particular team because

there are some things players say to referees that are not good and can change the referees' mind about that team which can harm the team."

Another respondent (referee) said:

"...when you go to a venue, and concerning my officiating, I think the match that I had crowd was in Nkwakwa and it was Okwawu United versus Accra Great Olympics in 2016. Even from the set-up or the structure of the stadium, you will realize that from the dressing room, you need to walk through the spectators before you get to the field. So when you are on the field and they are chanting and the kind of things, the act of hooliganism, when you are there on the field as a rational human being what is paramount is your safety, some of these reasons do not allow you to interpret the laws as you are supposed to because at the end of the day, you must come back to your wife and children you have left behind when your security is not guaranteed it is better you tone the results towards one direction or do what you have to do to survive. So, I think the crowd is a factor. Even the motivation that you receive that is the remuneration, was inadequate. The take-home, which includes your hotel, your transport and everything you can see is inadequate, so if you are not somebody who has principles and what to live by then you will just do anything to dent yourself or bring the game to disrepute. I must admit that under the peculiar circumstances most of us find ourselves as officials, most of us are doing very well, as for human institutions there is bound to be one or two errors and one or two bad referees who will take the law into their own hands and do what do want but me and most of my other colleges, we are doing what we can to promote the game."

RQ2: What are the perceived effects of referees' decisions on the outcome of soccer matches?

This research investigated the perceived effects of the outcome of soccer referees' decisions on football matches. From the responses of the respondents, referees' decision has both positive and negative outcomes in football matches. The following are some excerpts of their responses: One respondent (a player) said:

"...the outcome is positive. ... not all referees are unfair, it is just some handful of referees who take the law into their own hands sometimes. The heads of our football body should talk to them and also take them through some refresher courses to upgrade them. Supporters should also be taken through some education about the game because football is for fun and they should not follow the game with their hearts. Football is the job we want to do full time so the referees should also help us so we can have a nice game at all venues."

Another respondent (a player) reported:

"...the outcome of the referee's decision is negative; it is negative because of the crowd and players' interaction at the beginning the referee will be fair but due to some misconduct then he will be negative till the end. What they can do to sustain the positive is that the referees should be fair and the supporters should also take their time when things are not going well and they should know how to support their team when they are not performing rather than sending out death threats to the referees."

Discussion and Conclusion

From the responses, it was evident that several factors are perceived to influence referees' decision-making in football matches. Generally, some perceived factors include ideal decision-making, individual factors, experience factors, and situational factors. In terms of the idealness of decision-making, it emerged that decisions made by referees are not so accurate in the sense that they sometimes make some errors. This was a point undeniable as the referees interviewed admitted they are humans and are likely to commit some errors unconsciously. It also emerged even though referees have undertaken a course to warrant the opportunity to officiate, they sometimes make decisions that are not fair. The personality of a referee, his concentration level, and control over football matches were some factors that influenced referees' decision-making in football. Situational factors such as crowd interaction, environmental factors, and player reactions influence referees' decisions in football matches. It is clear from the excerpts that due to the hostile nature of some venues for matches, referees are tempted to officiate in favour of the home team to safeguard their safety. Referees' previous experience also influences the decisions they make when officiating. These findings confirm that of previous studies (Veldkamp, & Koning, 2023; Zhang, Li, Gómez-Ruano, Memmert, Li & Fu, 2022; Zglinski, 2020; Zou, 2023). Veldkamp and Koning (2023) found that soccer referees' decisions during a match are sometimes quite striking. They identified factors such as a team's reputation for aggressiveness, crowd noise, experience, a preceding foul judgment, the haughtiness of the players involved in a foul, individual differences in the referee's ability to cope under pressure, and social pressure as influencing soccer referees' decision-making. Similarly, Zhang, Li, Gómez-Ruano, Memmert, Li and Fu (2022) found that social pressure and nationality influenced the referee's decision when they examined the case of five seasons of European Cup football matches: the UEFA Champions League and the UEFA Cup. It was further found that referees tend to favour home teams when disciplining players in the UEFA Champions League and the UEFA Cup. In addition, referees favoured home teams when awarding yellow and red cards. Zou (2023) found that referees' decisions are influenced by crowd interaction. He observed that officials use prior information to inform the decisions they make. Plessner and Betsch further found that officials are less likely to award a penalty to a team if they have previously awarded the same team a penalty but are more likely to award a penalty if they have awarded a penalty to the opposing team.

From the excerpts of the respondents, the referees' decision could either be positive or negative. Some respondents were of the view that even though referees are likely to commit some errors, the outcomes of their decisions are positive in the sense that such decisions are not intentional for that matter they are pardonable. On the contrary, some respondents indicated referees' decisions have negative outcomes. They indicated some decisions taken by referees give one team privilege over the other. Some teams are being favoured by being a home team. In such a situation, the away team suffers the consequences of the referees' actions. This finding agrees with a couple of studies that the expected outcome of any particular match is a function of the abilities of the home and away team, home advantage, and luck (Ferraresi & Gucciardi, 2022; Hu, 2023; Işın, 2023). Das and Damle (2023) found that individual referees influence the outcome of English Premier League matches. This was because different referees have significantly different levels of home advantage, referees were also responsible for at least some of the observed home advantage in EPL football. The study concluded that the outcome of most of the matches was as a result of home advantage. Dagaev, Paklina, Reade and Singleton (2023) found that referee decision-making influences the course of a game and sports actors' behaviour. It was revealed that indeed, some decisions can inflame a match, get supporters or coaches excited or lead players to

behave in such a way that their misconduct cannot be made up for. The study further found that referees can also calm down various social tensions and diminish excessive behaviour. Couto and Sayers (2023) also found that referees' decisions can destabilize a match, thus, when an unfair decision is in favour of one team. Çar, Arslan and Kutoğlu (2022) found that referees' biased decisions are only the result of a bad day for the referee or whether referees and their decisions systematically influence the result of a football match.

Practical Implications

However, in this regard, Ghana Football Association could strive for more sophisticated training programs that emphasise decision-making in high-pressure situations, thus better-equipping referees to handle any potential scenarios during a match. The integration of advanced simulation technology could be valuable in replicating game situations, enabling referees to practice in a controlled environment and sharpen their decision-making abilities. The widespread use of simulation technology could significantly reduce errors in crucial decisions such as goals, penalties, and red cards, ultimately leading to more precise refereeing decisions. Furthermore, the adoption of goal-line technology would help settle disputes regarding whether the ball wholly crossed the goal line under the crossbar, in between the goalpost, ensuring accurate decisions concerning goals. Establishing clear and consistent rules for refereeing decisions would promote uniformity across various games and leagues, thereby addressing concerns about bias or inconsistency. Providing players and coaches with insight into the rules and the reasoning behind referees' decisions on the field would enhance their acceptance of these decisions. Educational campaigns to improve fan comprehension of refereeing decisions could mitigate negative perceptions towards referees and alleviate undue pressures on them. Providing psychological support and resources could assist referees in handling the pressure and criticism associated with their roles, ultimately leading to calmer and more accurate decisions. In summary, understanding the repercussions of refereeing decisions on soccer match outcomes has practical implications for improvements in training, technology, officiating consistency, education, psychological support, communication, game strategy, and policy changes in the long run. Addressing these areas will enhance the quality and fairness of the game for the benefit of players, referees, and the football community as a whole, and will also strengthen the fan base.

Strengths of this study

Examining the contentious issue of refereeing decisions in soccer, this study aims to analyze the perceptions and realities surrounding this topic. By incorporating viewpoints from various stakeholders such as players, coaches, referees, fans, and analysts, the research seeks to provide a comprehensive understanding of the subject. This inclusive approach will enrich the findings and potentially contribute to advancing the existing literature on sports officiating and decision-making. Furthermore, the insights garnered from this study could have practical applications, potentially influencing policy changes and refining referee training programs to minimize errors and enhance decision-making.

Limitations of the study

The study has several limitations that warrant consideration in interpreting the findings. Firstly, the use of convenience sampling and purposive sampling approaches with a sample size of 15 participants may limit the generalizability of the results. While this sample size is adequate for the study's scope, the findings may not be representative of a broader population. Including a more

diverse and representative sample could enhance the external validity of the study. Secondly, the reliance on self-report measures, such as interviews, to assess academic phenomena introduces the potential for response bias and social desirability. The subjective nature of self-reported data may impact the accuracy and reliability of the results. Incorporating objective measures or multiple data sources could strengthen the validity of the findings and provide a more comprehensive understanding of the constructs under investigation.

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Ethics approval and consent to participants

This research study followed ethical guidelines. Before conducting this study, the researchers obtained informed consent from the participants in compliance with the ethical standards of research. The researchers effectively articulated the objective of the study and emphasized the significance of participants' collaboration in completing the interviews. Nevertheless, it was underscored that participants have the option to withdraw from the study at any time by informing the researchers.

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