The effect of service quality and coach competency on the motivation and achievement of Riau basketball student-athletes

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ABSTRACT

The aim of this study was to assess the correlation between each variable of service quality and coach competency and their impact on the achievement of basketball athletes, with motivation acting as a mediating variable in this relationship. This study is a correlational descriptive study using the Structural Equation Model (SEM) approach with the help of smart PLS. The study comprised a sample of 100 basketball student-athletes from Riau province. Data collection involved the use of questionnaires; however, to complement this quantitative approach, interviews with athletes are still considered necessary as a qualitative method. The results revealed that the coach’s competency significantly relates to the achievement, with a p-value of 0.004, the competency of the coach to the motivation with a p value of 0.000, the motivation to the achievement (p < 0.000), the quality of service to the achievement of (p < 0.001), the quality of service to the motivation (p < 0.003), the competency of the coach to the achievement of the motivation (< 0.000), the quality of service to the achievement of the motivation (p < 0.007). The quality of service and competence of basketball coaches has a strong relationship with the achievements of basketball athletes. Motivation also plays an important role as a mediating variable, demonstrating that the quality of service and the competence of basketball coaches can significantly enhance the achievement of student basketball athletes through motivation. It is expected that the results of this study can be used as a reference to coaches, sports academics, official basketball clubs, and related parties in basketball to pay more attention to the quality of service, especially training sites and competent coaches.

KEYWORDS

Service Quality; Coach Competency; Motivation; Basketball Achievement
1. INTRODUCTION

Achievement in sports is the athlete’s success in winning the competition. A rivalry that runs tightly in the competition will make athletes more experienced. One sport that has fierce competition is basketball (Vázquez-Guerrero et al., 2020). The success of achievement in basketball is determined by several factors, namely teamwork and team cohesion (Leicht et al., 2017; Pérez-Sánchez et al., 2019; Rösch et al., 2021) as well as the individual abilities of basketball athletes (Gasperi et al., 2020). In addition, basketball athletes’ success in achieving achievements is also obtained from other factors. Another factor that plays a role in improving the performance of basketball athletes is motivation (Atta et al., 2021). Motivation plays an essential role in performing any activity in any particular sport achievement. So, with increasing motivation, then will from within the basketball athlete to achieve high (Šimková & Válková, 2020). Facts on the ground prove that a student's desire to become a basketball athlete is largely influenced by motivation, this motivation comes from friends, seniors, sports teachers, promising basketball clubs, basketball sports shows or a strong desire to become a great basketball athlete. But research on achievement motivation as mediating variable to improve basketball achievement is still not discussed. Achievement factors in basketball athletes are also determined by other factors besides motivation, such as the quality of service (Putro et al., 2020) and the competency of basketball coach (Kao et al., 2017). In addition, the quality of service and competence of the coach will be felt by athletes for the first time during training.

Quality of service is also essential to make athletes more active in training. Athletes expect a high quality of service received and highly meet expectations, so it will help improve basketball achievement (Günel & Duyan, 2020). With the support of good quality service, it will indirectly increase the motivation and performance of basketball athletes for achievements in sports or competitions (Berber & Mollaoğullari, 2020; Putro et al., 2020). Basketball athletes, practicing sports carried out with high intensity, need facilities and infrastructure that must be supported with a quality of service that is exceptionally qualified to avoid unwanted things such as injuries. Then, the competency factor of the coach is no less important because, without the help of the coach, the athlete can not improve the quality of playing basketball (Rodrigues et al., 2020). A good coach must be able to work diligently and persistently for his players and his team. Because basketball is a team sport, the basketball team’s success is not only from athletes. Experienced coaches are able to see the performance of the team and its athletes such as technical, physical, tactical, and mental (Koh et al., 2017). However, the relationship between service quality and basketball achievements’ success has not been studied. In addition, the coach’s competency certainly affects basketball team athletes’
performance. However, without the existence of good service quality, it will affect the performance of athletes and basketball teams and coaches to be not optimal when in the process of training.

Previous research has suggested that good quality of service, such as suitable facilities, affects the satisfaction and trust of athletes in the basketball club (Putro et al., 2020). Further research shows that the quality of service has a vital role in the satisfaction and performance of basketball athletes, but with the support of other variables, such as financial and other social support (Nugroho et al., 2021). Then, the competency of coaches with academic education background, past experience as an athlete, and experience when already a coach has an influence on the success of the basketball team, although the most widely used in coaching is academic knowledge (Mendes et al., 2021). The other competencies of the coach in basketball are knowledge of training techniques, tactics, strategies, physical and mental (Hidayatullah, 2019). Furthermore, the study of coach competency, namely motivation, understanding game strategies, character cultivation, and basketball skills, can affect the level of motivation in athletes and basketball teams (Mu’ammal et al., 2022). Therefore, from limited research, it can be assumed that the quality of supportive service and high competency of coach with achievement motivation can affect achievement in athlete and basketball team.

The aim of this study is to assess the correlation between each variable of service quality and coach competency and their impact on the achievement of basketball athletes, with motivation acting as a mediating variable in this relationship. This study is important as a benchmark for every club in the area, school, or university to pay more attention to the desired quality of athlete, team, and the competency of the coach worthy of a basketball team. Research on the direct effect of service quality and coach competence on student basketball athlete achievement through motivation has been carried out but has not been scientifically published. In addition, without the support of these two independent variables, the motivation of basketball athletes will be unstable so that it will affect the performance of athletes and basketball teams.

2. METHODS

This study was a correlational descriptive study. The sample in this study was 100 basketball athletes in Riau Province with an active student category. The reason we chose Riau province student basketball athletes is because for the past 5 years the achievements of the Riau student basketball team have always increased at the Indonesian level based on the results of POPNAS (Indonesian National Student Sports Week) which is held once in 2 years and PON (National Sports Week) which is held every 4 years very. Then athletes who graduate from senior high schools throughout Riau
province, can have a career in basketball clubs spread throughout Indonesia in the IBL (Indonesian Basketball League) competition or defend the Indonesian national team in the ASEAN Games competition. The data collected in this study used a set of questionnaires that had received the recommended validation and revision. However, interviews are conducted to get more qualitatively accurate information.

The first step was collecting information from observation and interviews in the field and carried out by FGD (focus group discussion). This open discussion group was attended by lecturers with a minimum qualification of doctor of sports from the Riau physical education university, basketball coaches who have national coach licenses, professional basketball club coaches and former coaches of the Indonesian national team. After the data was collected, then compile instrument indicators supported by a literature review that is in accordance with this study. So that the service quality variable is found to consist of tangible, empathy, reliability, responsiveness, assurance (Martono, 2019; Nurrohim, 2020; Sukma et al., 2021). The coach competency variables consisted of motivation competency, game-strategy competency, character building, technique competency (Mu’ammal et al., 2022). Variable motivation consisted of intrinsic and extrinsic (Hardiyono, 2020; Cahya & Pradipta, 2021; Sulaiman & Matakupan, 2021). Variable performance of basketball athletes is measured based on technical ability, quality of practice, and discipline (Kurniawan & Setijono, 2021). The next step is the instrument validation stage which involves experts in the academic sector. The scale used is 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). Figure 1 presents the study design.

Figure 1. Study design
Based on the research design, we raised 7 hypotheses as following:

- **H1**: There is a relationship between coach competency and achievement.
- **H2**: There is a relationship between coach competency and motivation.
- **H3**: There is a relationship between motivation and achievement.
- **H4**: There is a relationship between service quality and achievement.
- **H5**: There is a relationship between service quality and motivation.
- **H6**: There is a relationship between coach competency and achievement through motivation.
- **H7**: There is a relationship between service quality and achievement through motivation.

3. RESULTS AND DISCUSSION

The analysis that researchers used in this study was the Structural Equation Model (SEM) approach with the help of smart PLS. The first step was to measure the validity and reliability of the instrument in the PLS Algorithm. The instrument contained 36 items. Its’ validity was assessed through the measurement of outer loading. It is considered valid if it attains a loading factor value exceeding 0.7.

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Outer Loadin g</th>
<th>No</th>
<th>Code</th>
<th>Outer Loadin g</th>
<th>No</th>
<th>Code</th>
<th>Outer Loadin g</th>
<th>No</th>
<th>Code</th>
<th>Outer Loadin g</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>TAN</td>
<td>0.746</td>
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<td>0.781</td>
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<td>TC1</td>
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<tr>
<td>2</td>
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<td>MC1</td>
<td>0.750</td>
<td>20</td>
<td>TC2</td>
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<tr>
<td>3</td>
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<td>12</td>
<td>MC2</td>
<td>0.769</td>
<td>21</td>
<td>TC3</td>
<td>0.762</td>
<td>30</td>
<td>EKS</td>
<td>0.785</td>
</tr>
<tr>
<td>4</td>
<td>EMP</td>
<td>0.859</td>
<td>13</td>
<td>GSC1</td>
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<td>22</td>
<td>INS1</td>
<td>0.752</td>
<td>31</td>
<td>AA1</td>
<td>0.840</td>
</tr>
<tr>
<td>5</td>
<td>REL1</td>
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<td>14</td>
<td>GSC2</td>
<td>0.847</td>
<td>23</td>
<td>INS2</td>
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<tr>
<td>6</td>
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<td>15</td>
<td>GSC3</td>
<td>0.914</td>
<td>24</td>
<td>INS3</td>
<td>0.809</td>
<td>33</td>
<td>AA3</td>
<td>0.813</td>
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<tr>
<td>7</td>
<td>RES1</td>
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<td>16</td>
<td>CB1</td>
<td>0.883</td>
<td>25</td>
<td>INS4</td>
<td>0.833</td>
<td>34</td>
<td>AA4</td>
<td>0.767</td>
</tr>
<tr>
<td>8</td>
<td>RES2</td>
<td>0.892</td>
<td>17</td>
<td>CB2</td>
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<td>18</td>
<td>CB3</td>
<td>0.829</td>
<td>27</td>
<td>EKS2</td>
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<td>AA6</td>
<td>0.840</td>
</tr>
</tbody>
</table>

Based on the results of the outer loading (Table 1), all statement items got a value of more than 0.7, meaning that this instrument is valid for research. The second step was to measure the
instrument’s reliability based on construct reliability and validity (Table 2).

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Rho-A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
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</thead>
<tbody>
<tr>
<td>ACHIEVEMENT_(Y)</td>
<td>0.905</td>
<td>0.909</td>
<td>0.927</td>
<td>0.680</td>
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<tr>
<td>COACH COMPETENCY_(X2)</td>
<td>0.955</td>
<td>0.956</td>
<td>0.961</td>
<td>0.691</td>
</tr>
<tr>
<td>MOTIVATION_(M)</td>
<td>0.940</td>
<td>0.942</td>
<td>0.950</td>
<td>0.678</td>
</tr>
<tr>
<td>SERVICE QUALITY_(X1)</td>
<td>0.950</td>
<td>0.952</td>
<td>0.957</td>
<td>0.693</td>
</tr>
</tbody>
</table>

Based on the instrument’s value (Table 2), it is said to be reliable if the Cronbach’s Alpha value is above 0.6, so it can be concluded that the instrument in this study is reliable for research. The coefficient of determination (R-Square) is used to measure how much the endogenous variable is affected by other variables.

Figure 2. The relationship or correlation between indicators and variables
The score obtained in Table 3 indicates that the adjusted R-Square value for the Achievement variable, as explained by the quality of service and competence of coaches mediated by motivation in Riau basketball student-athletes, is 97.8%. Then the adjusted R-Square value of the motivation variable described by the quality of service and competence of coaches in Riau basketball student-athletes is 99%. At the same time, the rest of the two explanations are explained by other variables not included in this research table.

<table>
<thead>
<tr>
<th>Table 3. R Square Results</th>
</tr>
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<tbody>
<tr>
<td></td>
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<tr>
<td>R Square</td>
</tr>
<tr>
<td>ACHIEVMENT_(Y)</td>
</tr>
<tr>
<td>MOTIVATION_(M)</td>
</tr>
</tbody>
</table>

The fourth step involves conducting hypothesis testing using bootstrapping to assess the path coefficients of each variable.

<table>
<thead>
<tr>
<th>Table 4. Linear Regression Hypothesis Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Sample</td>
</tr>
<tr>
<td>O</td>
</tr>
<tr>
<td>COACH COMPETENCY_(X2) -&gt; ACHIEVMENT_(Y)</td>
</tr>
<tr>
<td>COACH COMPETENCY_(X2) -&gt; MOTIVATION_(M)</td>
</tr>
<tr>
<td>MOTIVATION_(M) -&gt; ACHIEVMENT_(Y)</td>
</tr>
<tr>
<td>SERVICE QUALITY_(X1) -&gt; ACHIEVMENT_(Y)</td>
</tr>
<tr>
<td>SERVICE QUALITY_(X1) -&gt; MOTIVATION_(M)</td>
</tr>
<tr>
<td>COACH COMPETENCY_(X2) -&gt; MOTIVATION_(M) -&gt; ACHIEVMENT_(Y)</td>
</tr>
<tr>
<td>SERVICE QUALITY_(X1) -&gt; MOTIVATION_(M) -&gt; ACHIEVMENT_(Y)</td>
</tr>
</tbody>
</table>

Based on Table 4, the testing results of the first hypothesis reveal a p-value of 0.004, which is less than 0.05. This suggests that coach competency has a significant effect on the achievement of Riau student basketball athletes. Hence, the hypothesis stating that coach competency significantly influences the achievement of Riau student basketball athletes is accepted. Moreover, the testing results of the second hypothesis show a p-value of 0.000, which is also less than 0.05. This indicates
that coach competency significantly affects the motivation of Riau student basketball athletes. Therefore, the hypothesis suggesting that coach competency significantly influences the motivation of Riau student basketball athletes is also accepted.

Coach competence is one of the factors for an athlete’s success, especially in basketball (Williams et al., 2021). There are many indicators of the competence of basketball coaches. However, the competence of coaches in this study is clear that the competence of coaches can affect the motivation and achievement of basketball athletes (Mu’ammal et al., 2022; Lam et al., 2021).

The third hypothesis was tested, resulting in a p-value of 0.000, indicating that motivation significantly influences the achievement of Riau student basketball athletes. Hence, it can be concluded that coach competency significantly impacts the achievement of Riau student basketball athletes through motivation. The higher the athlete's motivation, the stronger their drive to excel in basketball (Šimková & Válková, 2020). Intrinsic motivation, particularly in students, plays a crucial role in enhancing performance (Vieira et al., 2020).

The fourth hypothesis was also examined, revealing a p-value of 0.001, which is less than 0.05. This suggests that service quality significantly affects the achievement of Riau basketball student-athletes. Additionally, the fifth hypothesis, with a p-value of 0.003, demonstrates that service quality significantly impacts the motivation of Riau basketball student-athletes. Good quality of service is a great expectation for an athlete to be more attentive. The good quality of service is due to the attention to training facilities, infrastructure facilities, assistance to athletes, health insurance, and closeness to athletes (Otto et al., 2019; Günel & Duyan, 2020; Nugroho et al., 2021). If the resulting service is good, the athlete is more motivated to be active in training and will react to the performance provided by basketball athletes.

The results of testing the sixth hypothesis, with a p-value of 0.000 (less than 0.05), indicate that coach competency significantly influences the motivation of Riau student basketball athletes. Therefore, it is affirmed that coach competency notably impacts the achievement of Riau student basketball athletes, mediated by motivation. The competence of a qualified coach has a vital role in every sport of achievement. The success and failure of athletes are also influenced by coaches and motivational support for achievement. The more competency knowledge that the coach has and is supported by great motivation, the chances of basketball athletes winning every competition must also be high (Subijana et al., 2021; Atta et al., 2021; López de Subijana et al., 2022).

The statement supported by the p-values of 0.000 in Table 4 indicates a significant influence of both coach competence and motivation on basketball achievement. In addition, the coach also
needs to be able to be demanded as a motivator, because the coach never knows the state of the athlete during training and matches. The results obtained from testing the seventh hypothesis, with a p-value of 0.007 (less than 0.05), indicate that coach competency can influence the achievement of Riau basketball student-athletes through motivation. Hence, the hypothesis proposing that coach competency significantly impacts the achievement of Riau basketball student-athletes, mediated by motivation, is accepted based on this outcome. An athlete must have a high motivation to produce and improve performance. If supported with good services and according to the expectations of athletes, it can be ascertained that the motivation of athletes will increase, so that the athlete’s performance will also increase with discipline and active training (Šarunas, 2019; Essaoudi & Lotfi, 2021).

4. CONCLUSIONS

The coach’s quality of service and competence is a factor that basketball athletes need to improve motivation and achievement. The results of this study revealed that the achievement variable described from the quality of service and coach competence mediated by motivation in Riau basketball student-athletes was 97.8%. While the motivation variable described by the quality of service and competence of coaches in Riau basketball student-athletes is 99%. This statement is reinforced by the results of testing the seven hypotheses, that all relationships between variables obtain a score of p < 0.05, meaning that all relationships between independent variables to bound and motivation as mediation variables are accepted or significant. It is expected that the results of this study can be used as a reference to coaches, sports academics, official basketball clubs, and related parties in basketball to pay more attention to the quality of service, especially training sites and competent coaches. Further research is expected to further examine the variables that affect motivation and achievement in sports.

5. REFERENCES


AUTHOR CONTRIBUTIONS
All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

CONFLICTS OF INTEREST
The authors declare no conflict of interest.

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