

論文の和文概要

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(博士論文の題目)

大学女子テニス選手におけるアンフォースドエラーの原因の因子構造

(博士論文の概要)

本博士論文では、大学女子テニス選手を対象に、アンフォースドエラー（以下：UE）の起こる状況や原因とそのメカニズムについて検討することを目的とした。

第2章では、実際の試合におけるUEの実態を明らかにし、大学女子選手がゲームを取得するための方策をUEから検討することを目的とした。

その結果、大学女子選手がゲームを取得するための方策として、①クロスラリー、サーブ、2ndサーブに対するリターンへのUEを減らす、②連続してUEをしないためにエラーしたポイントを引きずらず、次のプレーに対してやるべきことを明確にしてプレーに入る、③後半でのUEは焦りや動揺により技術的な微妙なずれを生じさせUEが起きる可能性が高まるため減らすことが必要と考えられた。

第3章では、公式戦の試合におけるUEを対象に面接調査を行い、発話データに含まれるUEの原因について探索的に分析した。その結果、UEがよく起こる状況での正しい判断の必要性と、その場の状況だけでなく、競技レベルにあった戦術的・経験的知識に基づいた予測を行うことの重要性が示唆され、また心理面の問題が状況判断過程や技術的な問題にも影響を及ぼしていることが明らかになった。

第4章では大学女子テニス選手のUEの原因について質問紙からUEの因子構造とその因果関係について検討した。その結果、大学女子テニス選手のUEの原因として、状況判断過程に関わる「注意散漫」「判断の迷い」の因子、技術的な問題に関する「準備動作の遅れ」の因子、心理的な問題に関わる「不安」の因子があり、競技レベルが上がるにつれて「注意散漫」から「不安」、「不安」から「準備動作の遅れ」で高い因果関係が認められた。また、指導者からみた選手のUEの原因について競技レベルごとにみた結果、「注意散漫」「準備動作の遅れ」「不安」でUEの原因に違いがみられた。

以上のことから、本研究によって大学女子テニス選手のUEの原因の因子構造が明らかになった。

論文の欧文概要

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The factorial structure of causes of the unforced-error in women collegiate tennis players

(Abstract)

The purpose of this study was to clarify the causes and the mechanism of occurrence of unforced-errors (UE).

In chapter 2, the purpose of this study is to clarify the current status of unforced errors in games by collegiate women tennis players. It is intended to obtain basic data and aims to reduce players' errors. Breakdown of the points performed by collegiate women tennis players resulted:

1. unforced error 662 points (55.1%), forced error 188 points (15.7%) and winning 351points (29.2%). There were a lot of forehand strokes and cross-court shot errors. In addition, about 20% was the return of serve errors and double faults. Referring to positioning, errors occurred more often in the defensive zone.
2. The trend of errors was much the same whether you win or lose the game. However, in losing games, more than two errors were seen as well as consecutive errors, and these errors were apt to be seen more in the latter half of the game.
3. Cluster analysis was performed on error structure. The errors in winning games tend to be the result of offensive plays, while the error structure shows a various kinds of factors in losing games.

In chapter 3, the purpose of this study is to investigate the causes of unforced-error from interviews with the collegiate women tennis players.

1. The results of the interviews could be classified into three groups, "Situational decision-making processes", "Skill issues" and "Psychological issues".
2. In situational decision-making processes, the difference in the recognition and the prediction of the orbit of the ball caused of UE.
3. In Skill issues, the lateness of preparing the stroke in relation to the impact point and timing.
4. In Psychological issues, UE were related to the delay of a prediction. And psychological issues affected to "situational decision-making processes" and "skill issues"

In chapter 4, the purpose of this study was to provide a resource to the tennis players and educators by identifying the cause of unforced-errors (UE) found among university level female tennis players while in competition setting.

1. Exploratory Factor Analysis and Confirmatory Factor Analysis identified four possible causes of UE: "Distraction", "Hesitation", "Delay in the ready" and "Anxiety".
2. Pass Analysis identified a link between several causes of UE such as; "Delay in the ready" caused by "Distraction", "Delay in the ready" caused by "Hesitation", "Anxiety" caused by "Hesitation" and "Delay in the ready" caused by "Anxiety". The outcome was sufficient to conclude the relevance of the modelling used.
3. The multiple group structural equation modelling has found certain UE relationships are significant at the competitive level, but not at non-competitive level. UE relationships such as "Anxiety" from "Hesitation", and "Delay in the ready" from "Anxiety" were significant in high- competitive players but not in low-competitive players.
4. We also found differences in scores for (a) coaches of high-competitive players versus low-competitive players on three factors: "Distraction", "Delay in the ready" and "Anxiety"; and (b) coaches of low-competitive players versus low-competitive players in the Distraction aspect of UE.

Therefore, this study was to clarify the situation, the causes and the mechanism of UE in the collegiate women tennis players.