

Assessing the efficacy of video telestration in aiding memory recall among elite professional football players

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ABSTRACT

Elite football clubs have invested heavily in the use of video telestration software in recent years, however, little is known regarding the benefits of this technology in aiding players' ability to recall events. Thus, the purpose of this study was to explore the effectiveness of video telestration in aiding memory recall of information amongst professional male football players. A randomised controlled trial was conducted, where an experimental group ($n = 7$) experienced telestration and a control group ($n = 7$) experienced no telestration over five sessions in 15 days. Following watching either telestrated or non-telestrated clips, each individual completed a questionnaire 24-hours later comprising of questions regarding possession, chances creation and set-pieces. The study revealed statistically significant differences ($p < 0.001$) in recall percentages for total recall, possession, chance creation and set-pieces categories between the telestrated and non-telestrated groups. Set-pieces information was recalled the most when supplemented with video telestration and recalled the least in its absence ($86.86\% \pm 7.20\%$ vs $48.00\% \pm 9.24\%$). Subsequently, the results validate the investment in this technology, and it is suggested analysts and coaches should consider the use of telestration to support the wider performance analysis and coaching process to aid recall and facilitate player learning.

WHAT IS TELESTRATION?

Initially popularised within sports broadcasting by market leaders such as PIERO (Ross Video, Ontario, Canada) and Coach Paint (Chyron, New York, USA), telestration software provides performance analysts with the capability to manipulate game footage to deliver meaningful tactical and technical information via visually-stimulating graphics.

PURPOSE

With the established importance of performance analysis, seminal research into the use of video telestration in professional football and its possible benefits in developing players, this research seeks to explore the effectiveness of video telestration in aiding memory recall of information amongst professional male football players. Video telestration provides augmented information to the viewing audience and has been theorised to enhance information retention.

RESULTS

The data revealed that video telestration significantly enhanced the memory recall of tactical information in possession, chance creation and set-pieces, supporting the present study's hypothesis that telestration would aid the retention of information. In particular, participants in the telestrated group achieved overall recall rates of 84.00% ($SD \pm 3.69\%$). In comparison participants in the non-telestrated group correctly recalled 52.57% ($SD \pm 5.44\%$).

CONCLUSION

Based on the following research, video telestration holds considerable promise within the performance analysis and coaching process, enhancing the knowledge of players and providing potentially match-winning information that can be recollected on the field of play.