

# THE DIFFERENCES OF MAKING A DECISION IN VARIOUS VIEWPOINTS OF 3D RUGBY IMAGES

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## Introduction

The purpose of this study was to investigate whether the decision is influenced by various viewpoints in rugby game.

## Methods

Twelve male collegiate (age: 20.13 years, SD= 0.83) rugby players participated in this study. Just after being shown randomly fifteen 3D images, i. e. , 5 patterns  $\times$  3 viewpoints; made up by 3D reconstruction software (Google Sketch Up 6, Google) presenting rugby game situations (Fig.1), each subject was asked to make a decision and answer the next one attacking choice of 4 spaces for line brake (Photo1). Both the response time and the decision were recorded and analyzed. Differences on the response time between viewpoints were assessed via two-way ANOVA and on decision between them were assessed via  $\chi^2$ -test on the test. Significant levels where set at  $P \leq .05$ .



Fig.1 Example of the 3D image.

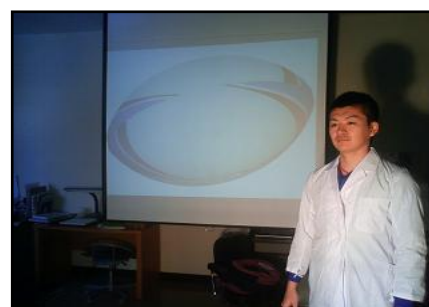


Photo1. The experimental situation.

## Results & Discussion

As for the response time of viewpoints, statistical differences were not found, and also as for the decision of viewpoints, the differences were shown statistically in this study. Both in pattern4; the space between defensive standoff and 1st center player was set 10m and others 5m, and in pattern5; each space between defensive backs players was set 10m, the subjects' decision between viewpoints was shown statistically inconsistent (pattern4:  $\chi_0^2 = 14.43$   $\chi^2 = 12.59$ ,  $df = 6$ , pattern5:  $\chi_0^2 = 14.07$   $\chi^2 = 12.59$ ,  $df = 6$ ).

## Conclusion

It is concluded that some effects of viewpoint on choice to make a decision for rugby players might be found experimentally in this study.

## References

1. Gerald P, et al., (2008). *Res Q Exerc. Sport.* 79(3): 392-398.