

Competition and Motivation: How it effects players overall effort

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**Abstract**

This study was used to see if competition would increase effort in tasks. The study was conducted by observing a total of four teams and having raters rate the drill on intensity and effort, based on a scale created. There was a total of 30 drills observed. The results showed that both intensity and effort were high by about one point on the scale when there was competition. The significance number ended up being less than 0.001 ( $P=.05$ ). This shows that the results were both significant and that there was an extremely low chance of this occurring by chance. There were limitation such as the sample size only being four teams and 30 drills. Another limitation was that the scale could have been not detailed enough. The study can be furthered by implicating it to different situations other than sports teams such as offices or classrooms. Another way to further this study is by testing to see if players enjoy the drills when there is competition.

*Keywords:* competition, effort, intensity

## **Method**

### *Instrument*

The instrument created used a scale from one to four for both intensity and effort. The definition of intensity and effort was a combination of multiple coaches' definitions (See Appendix 2). There were 5 different coaches that were interviewed about their definitions. The definition of intensity and effort are in Appendix 1, as is the actual instrument that was used. Using the instrument, there three people rated each drill in the observed practices. Whether the drills had competition or if the coach added competition (Eisenberg & Thompson, 2011) later was tracked as well in order to see if it made a difference in the players' effort.

### *Raters*

All raters are athletes from a small western university. All the raters have experience with sports. The sports that they have participated in are soccer, football, track, softball, and basketball. They have been around sports for almost their entire life and understand competition, intensity, and effort. These raters had an 86.4% interrater reliability on intensity. They also had a 93.07% interrater reliability on effort.

### *Sample*

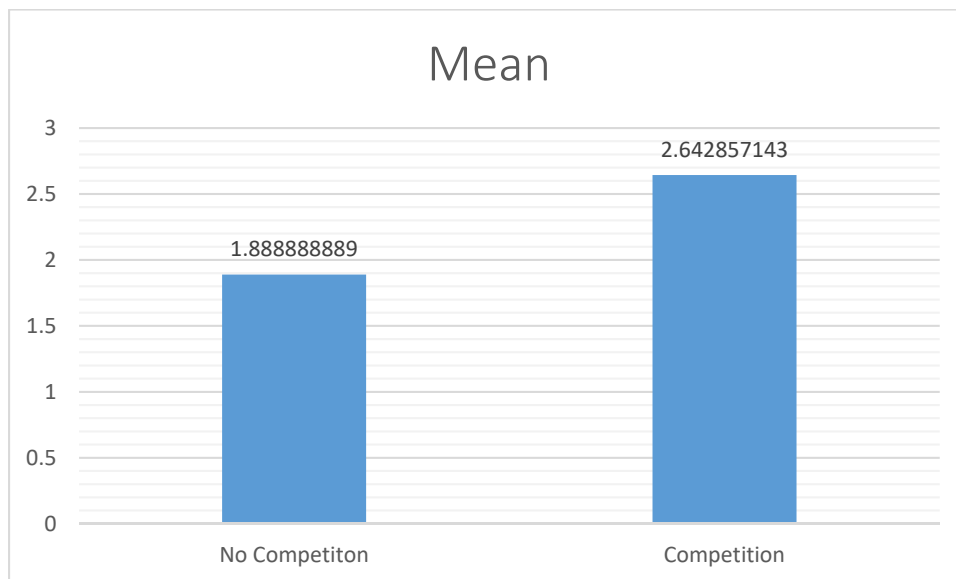
The sample consisted of four teams, the small western university's men's and women's soccer team and the men's and women's basketball team. There were a total of 48 males with ages ranging from 17 to 24. There were a total of 35 females with ages ranging from 17 to 23. There were five practices that we watched and the number of drills varied per practice. The soccer practices had less drills than the basketball practices. Each drill was rated on a scale from one to four, and if there was some sort of change added to the drill by the coach that was recorded, the raters rescored the intensity and effort. There was a total 30 drills that were

(N=30). Each drill had a total of three scores for intensity and three scores for effort, one from each rater, which means that there were a total of 90 scores made throughout this study. The sample that was chosen was made up of small western university athletes therefore making it a purposive sample.

## Results

### *Effort*

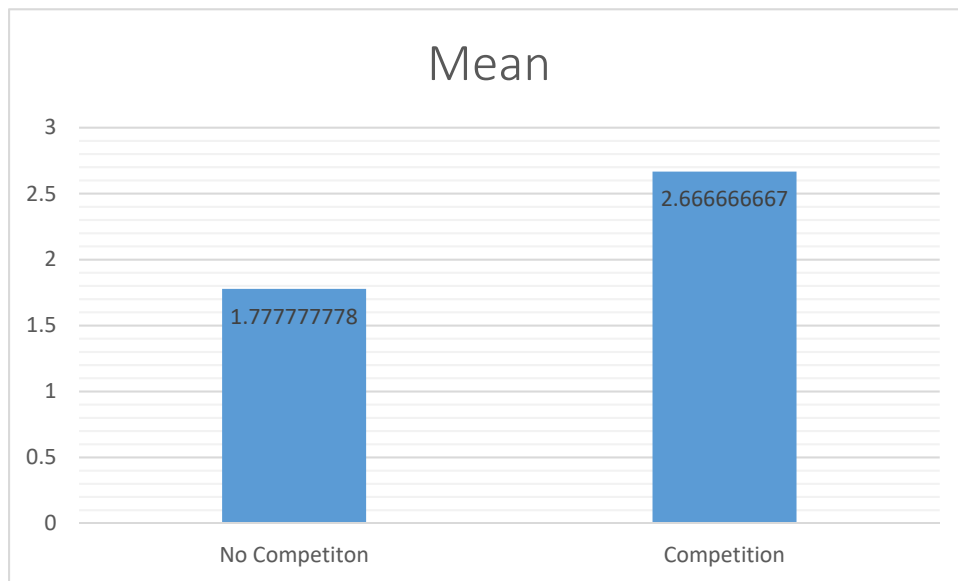
Effort was evaluated for both competition and no competition drills. For no competition there was a total of 45 results ( $N_1=45$ ) and for competition there was 42 ( $N_2=42$ ). The mean for both of the types of drills were  $M_1=1.889$  and  $M_2=2.643$ . This means that when there was no competition in the drill the average score for the players effort was 1.889 and the average score for drills with competition was 2.643.



### *Intensity*

Intensity was evaluated for both competition and no competition drills. For no competition there was a total of 45 results ( $N_3=45$ ) and for competition there was 42 ( $N_4=42$ ). The mean for both of the types of drills were  $M_3=1.778$  and  $M_4=2.667$ . This means that when

there was no competition in the drill the average score for the players intensity was 1.778 and the average score for drills with competition was 2.667.



### *Overall Results*

The significance was less than 0.001 ( $P=0.05$ ). Since the significance number was extremely low this means that the overall study was very significant. The significance number all shows that the results of this study are unlikely to occur by chance. The means for both intensity and effort were about 1 point higher when there was competition compared to when there was no competition.

### **Discussion**

The results show that competition does in fact increase effort. There are multiple reasons why the results proves that competition effects effort. The first reason is the significance number because this shows that there was very little to no reason why the results would occur by chance. Another reason how the results prove that competition effects effort is by the difference in the means. For both intensity and effort the means were about one point higher when there was competition than when there was no competition.

*Limitation*

Although the study was significant there are some limitations that should be considered. The first limitation is the sample size. There was only four teams observed and there was only 30 drills observed. By having such a low sample size it can be difficult to say that this is true for all drills. The other limitation was the scale. The scale might not have been detailed enough for the raters to fully understand what each number on the scale meant. Although the raters chose the same number for intensity and effort most of the time, it can be that all of the raters could be just as confused by the scale.

*Future Directions*

There are a couple ways this study can be enhanced. The study showed that competition increases effort in drills but what it did not show if the players enjoyed drills with competition. One of the reasons that effort might have been increased was that the players enjoy drills with competition more. To accomplish this there would need to be another quantitative study but it would include interviewing players after playing drills with competition and drills without competition to see how many of them enjoyed the competition drills more.

Another way to enhance this study is by taking it off the field or court. In another study places like offices or classrooms would be observed to see if competition in the workplace increased workers effort. The study would need to be modified to fit the office setting because employees are not going to be doing physically demanding drills. In order to do this study, effort would need to be redefined and intensity would need to be redefined to fit different tasks.

By taking in consideration on how this study can be enhanced can help improve it and implicate it into daily lives. Applying these results to the workplace managers can increase the

effort of their employees meaning that overall performance would increase. Overall this study can be applied to different situations.

## References

- Eisenberg, J., & Thompson, W. F. (2011). The effects of competition on improvisers' motivation, stress, and creative performance. *Creativity Research Journal*, 23(2), 129-136.  
doi:10.1080/10400419.2011.571185

**Appendix 1**

The definition that was used for intensity is an activity or task that requires high levels of exertion, physically and mentally.

Scale for Intensity

1-not mentally and/or physically demanding

-down time between reps

2-requires some physical and mental activity but is not over demanding

-not strenuous but requires focus

3-Requires mental focus; not a simple task

-Players have to focus and have to strenuously be active through almost entire drill

4-strenuous activity

-highly demanding both physically and mentally

-little to not rest between reps

The definition that was used for effort is working outside their comfort zone and having strenuous physical and mental exertion.

Scale for Effort

1-are not physically exerting themselves at all

-players are breathing easily and have time to talk to teammates without strain

2-showing signs of fatigue but are still not exerting themselves

-breathing is above a normal level

3-breathing heavy but are still able to talk

-players are putting in about 70-80% of maximum effort

4-players are putting in maximum effort with little to no breaks

-hard to breathe, are entirely focused on drill not the other players or anything else of the field.

## Appendix 2

*Intensity*

Using your competitive spirit to elevate your play. (Nelson Larson, Portland City United Soccer Club)

How long and how thorough they apply their effort. (Rick Lorenz, Central Catholic High School)

Activity outside of a player's comfort zone. (Jeff Enquist, Portland City United Soccer Club)

Task or drill that has a high degree of needed energy. (Brandon Porter, Oregon Tech)

Drills that make the players work harder than they typically would. (Andrew Sharp, Central Catholic High School)

*Effort*

Working as hard as you can to get better, but also working smartly. (Nelson Larson, Portland City United Soccer Club)

How a person applies him or herself to the task at hand. (Rick Lorenz, Central Catholic High School)

The work they put in that is outside of their comfort zone. (Jeff Enquist, Portland City United Soccer Club)

Exerting themselves both physically and mentally throughout entire drill. (Brandon Porter, Oregon Tech)

Fully utilizing their abilities. (Andrew Sharp, Central Catholic High School)