

Motivational Video vs Self-Selected Song as a Pre-Task Prime for Maximal Anaerobic Performance

Angela Hadizadeh-Marin, Kylee McPhedrain & Courtney Sommerfeld | Ken Anderson | SPSC 4256

Introduction

Music and video are widely used in pre-performance routines as motivational tools. Our study seeks to investigate if priming with a motivational video in comparison to priming with music will result in a greater anaerobic performance.

Purpose

To determine which of the two primes, music or a motivational video, presented prior to a 30-second maximal Wingate test, will result in a greater anaerobic capacity, anaerobic power and lower fatigue index.

Procedure

5 Point Likert Scale Questionnaire:
1 = Strongly disagree 5 = Strongly agree

Question	1	2	3	4	5
How motivated are you?					
How aroused are you? (1 = low arousal, 5 = high arousal)					
How do you feel? (1 = negative emotion, 5 = positive emotion)					

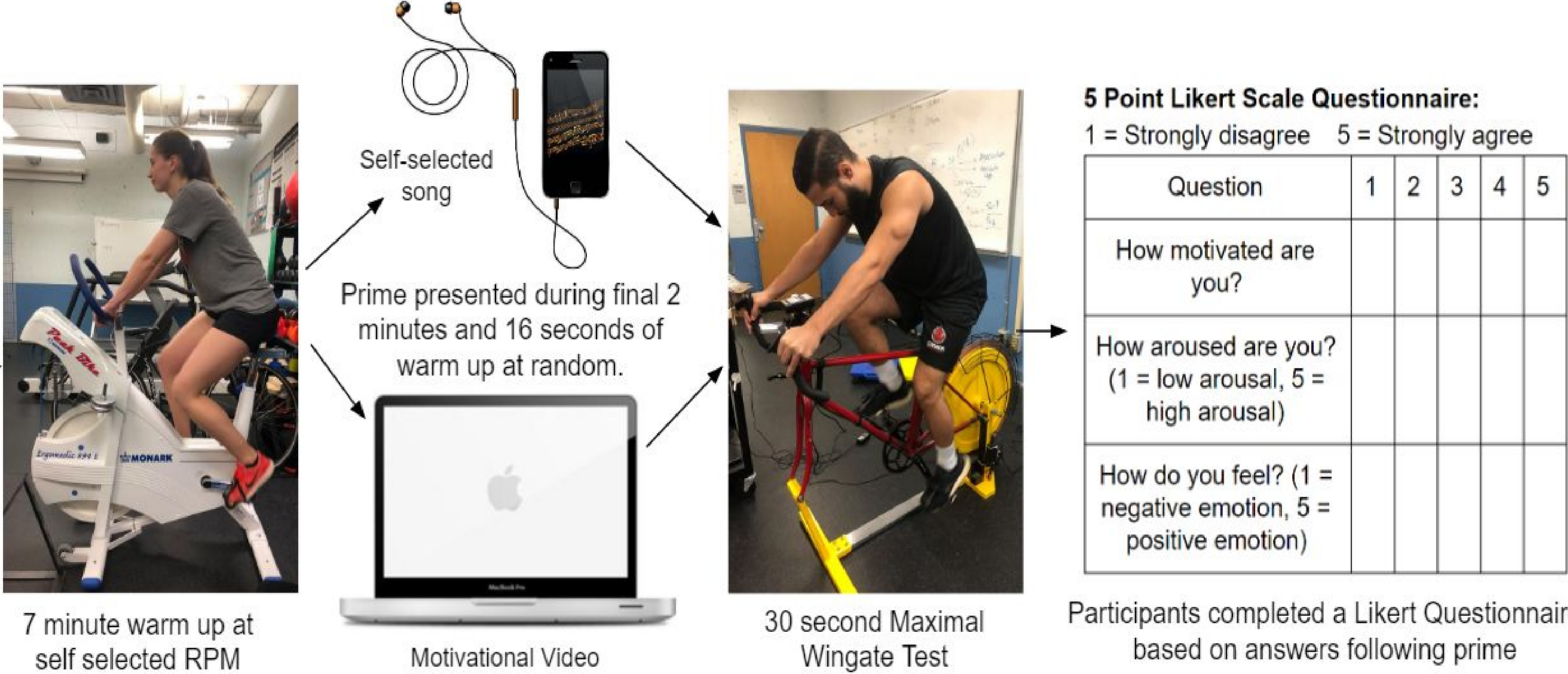


Figure 1.1 Our methods consisted of 2 conditions, a motivational video and a self-selected song used as pre-task motivational primes.

Discussion

- Neither of the motivational primes had a significantly greater anaerobic capacity, anaerobic power or a lower fatigue index.
- Music significantly increased perceived motivation, arousal and valence, but video only significantly increased motivation and valence.
- Video and music did not have a significant difference compared to each other for increasing perceived motivation, arousal and valence.

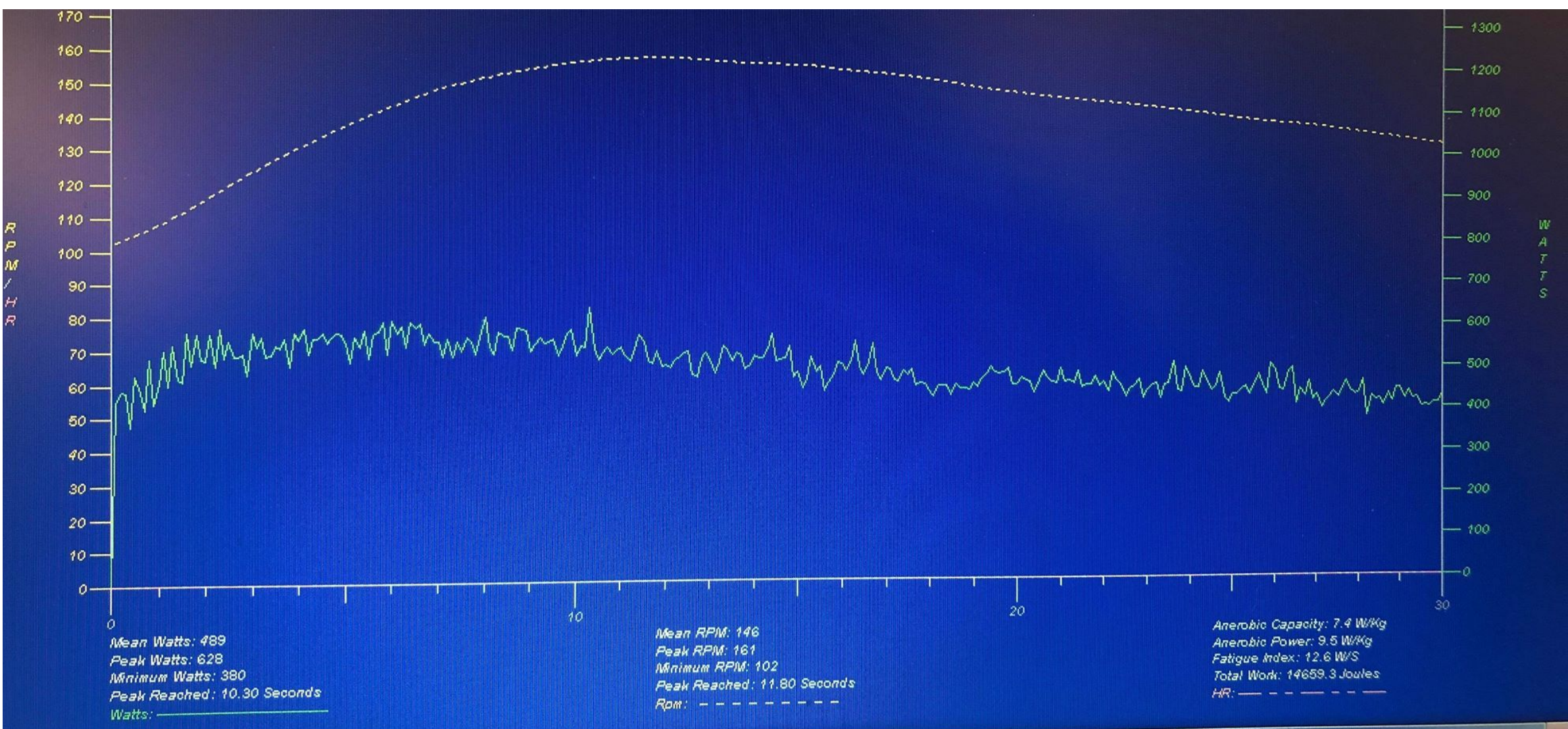


Figure 5.1 30 second maximal Wingate test was used to collect anaerobic capacity, anaerobic power and fatigue index.

Conclusion

Video and music used as a pre-performance motivational prime have no significant difference on maximal anaerobic performance and perceived motivation.

Work Cited

Loizou, G., & Karageorghis, C. I. (2015). Effects of psychological priming, video, and music on anaerobic exercise performance. *Scandinavian Journal of Medicine & Science in Sports*, 25(6), 909–920. Retrieved from <https://0-search-ebshost-com.orca.douglascollege.ca/login.aspx?direct=true&db=s3h&AN=111115473&site=ehost-live&scope=site>

Results

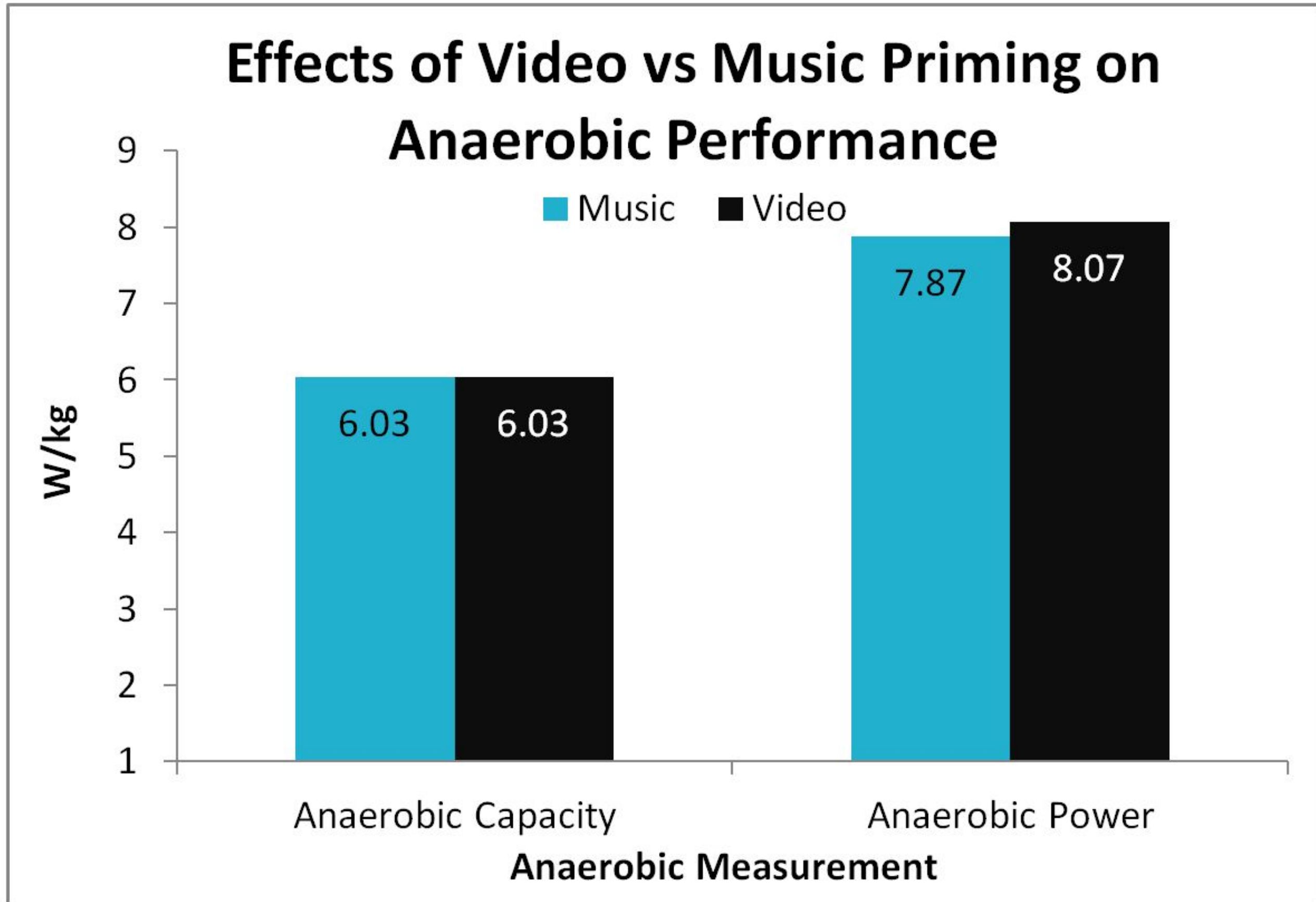


Figure 2.1 An insignificant difference was found between physiological results following video and music priming. P-values: anaerobic capacity: 1, anaerobic power: 0.73.

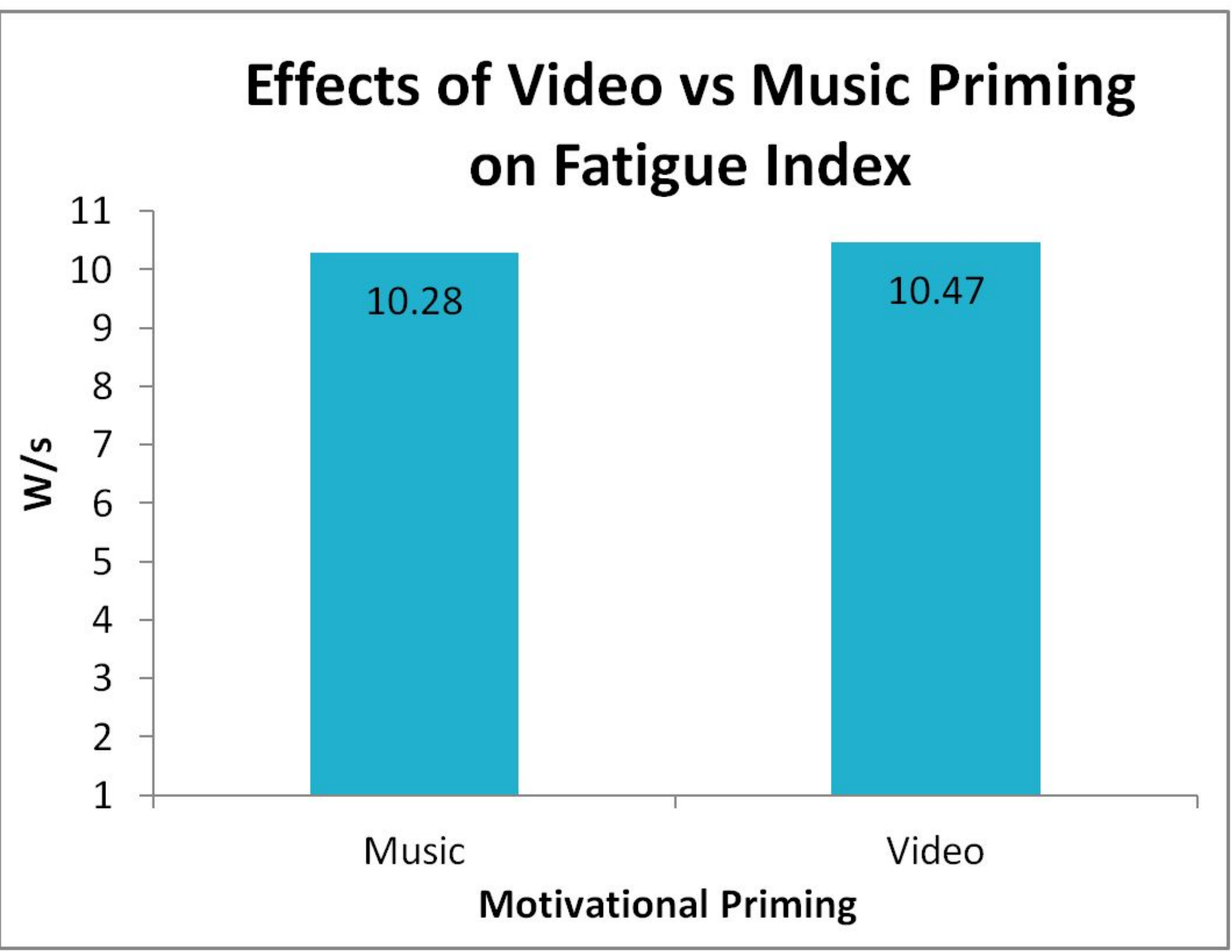


Figure 2.2 An insignificant difference was found for fatigue index following video and music priming. P-value: 0.91.

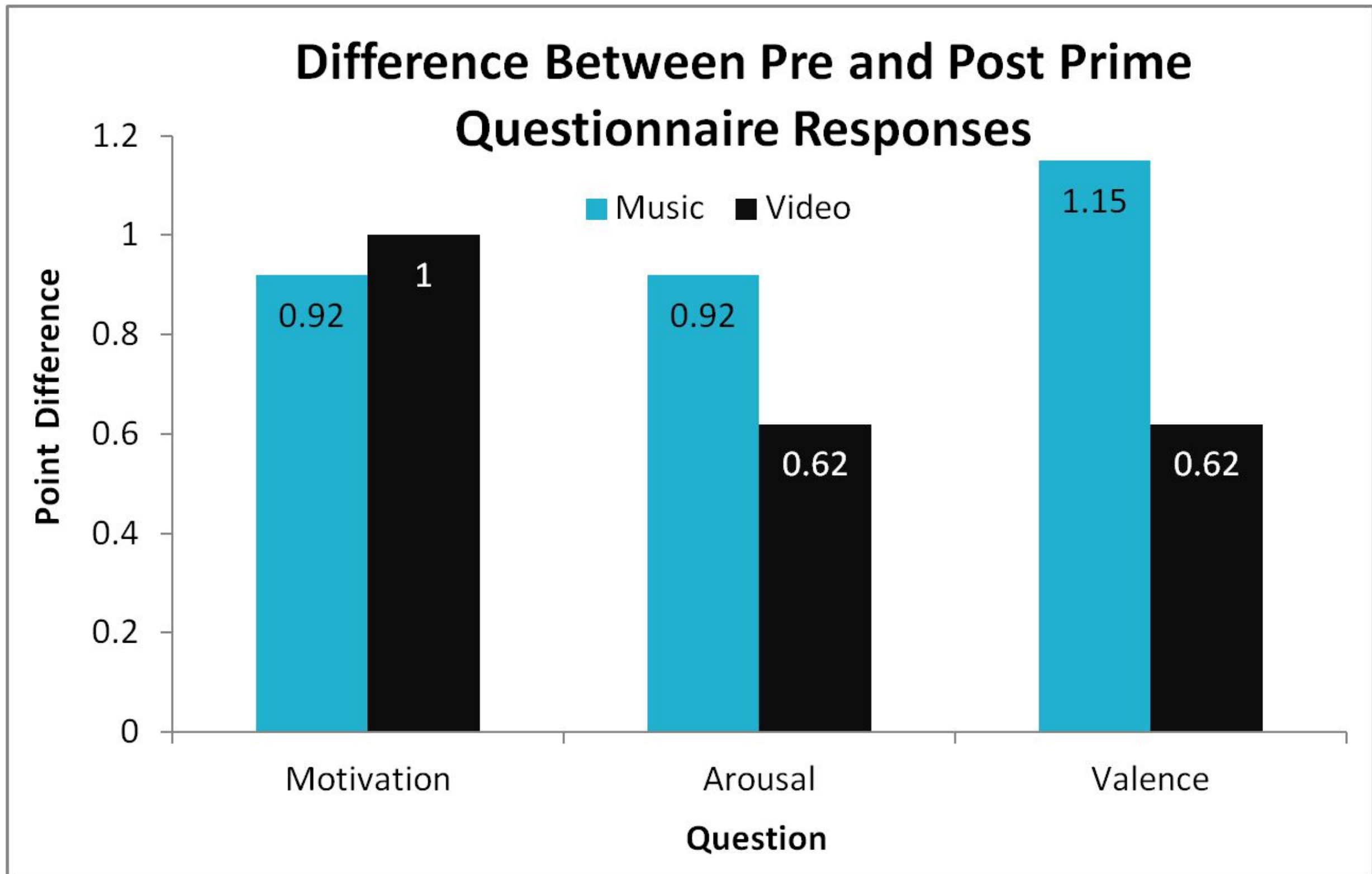


Figure 3.1 The difference between pre and post prime questionnaire answers on a 5 point Likert Scale. P-values comparing music and video results were insignificant: motivation: 0.85, arousal: 0.58, valence 0.24.

*Valence is a term which encompasses positive and negative emotion.

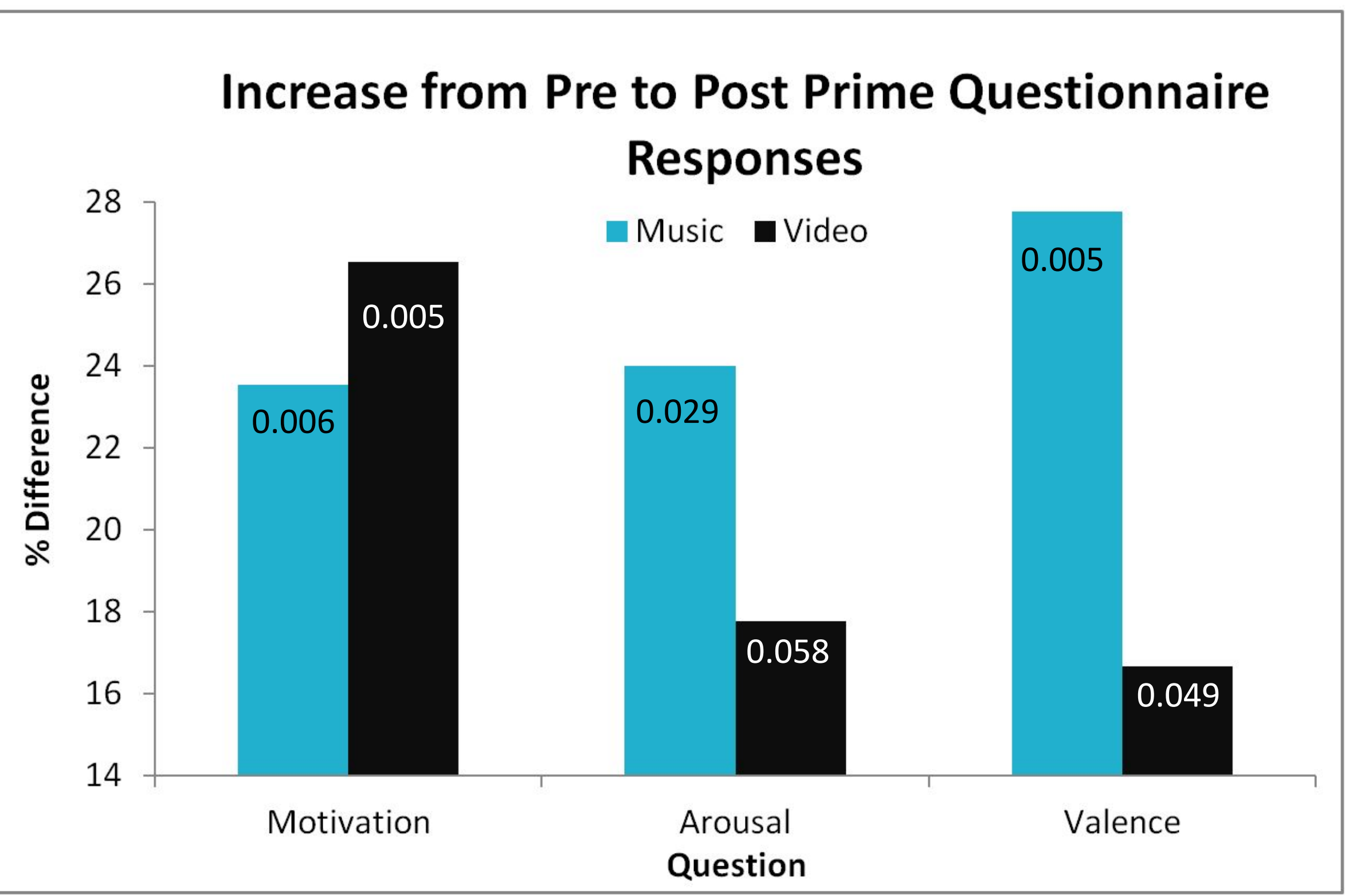


Figure 4.1 Music significantly increased perceived motivation, arousal and valence, but video only significantly increased motivation and valence. P-values are numbered in the bars above.