

Institution: Newman University

Unit of Assessment: 26: Sport and Exercise Sciences, Leisure and Tourism

Title of case study: Judging and performance in the sport of Muay Thai

1. Summary of the impact (indicative maximum 100 words)

The Case Study focuses on the work of Tony Myers, a Senior Lecturer in Physical Education and Sports Studies who joined the department in 2001. Myers' research on judging in the sport of Muay Thai has had an impact on the sport nationally and internationally. Several of the sport's governing bodies have changed judging practices as a result of the research, including the Independent Board of Muay Thai Officials (IBMTO), the Scottish Thai Boxing Association (STBA) the Irish Muay Thai Council (IMC), and the New Jersey Athletic Commission, USA.

2. Underpinning research (indicative maximum 500 words)

The body of work on nationalistic bias, judging consistency, and influences upon officials in the sport of Muay Thai builds upon the published research PhD thesis of Myers. The research has been driven by his involvement in the sport of Muay Thai and his experience as a coach and judge. The research builds and expands upon existing work in the areas of judging bias and crowd noise (e.g. Nevill, Balmer & Williams, 2002; Unkelbach, & Memmert, 2010).

The results from the article on judging consistency (Myers, Nevill and Al-Nakeeb, 2010), incorporating two studies, suggests that the judging criteria used in Thailand is significantly more consistent than that which is commonly used by UK judges and frequently applied in international Muay Thai fights, and that the use of very clearly defined criteria and the operationalization of otherwise subjective concepts has had a major impact on this. The authors argue that it may be useful to examine the impact of modifications to judging criteria on consistency in a range of subjectively judged sports. The research is based upon two innovative computational methods. The first method compared differences in the range of the highest versus lowest points awarded by judges for each bout. The second method compared homogeneity of variance between judges' scores.

Myers, Nevill and Al-Nakeeb's (2012) article adds to previous findings in other sports and points to the potential for crowd noise to contribute to the home advantage (the advantage afforded sports teams and individuals who compete at a 'home' venue) through referee or judges' decisions. The experimental repeated measures design involved ten experienced Muay Thai judges observing video footage of a Muay Thai contest in two different conditions: one with and one without crowd noise. The findings suggested that crowd noise affects judges' decisions when officiating Muay Thai. This adds to previous findings in others sports and points to the potential for crowd noise to contribute to home advantage through referee or judges' decisions. Several explanations are proposed that could help explain this, including informational conformity, the use of a noise heuristic, or cue learning where judges have previously associated crowd cheers with a scoring blow. Equally, it may be that judges' perceptual accuracy was compromised by crowd noise, with differing responses the result of unidentified individual differences.

Building upon this, the results of the Myers and Balmer (2012) study suggest that crowd noise in an ecologically and externally valid setting has a statistical and, to an extent, a practical effect on the judgments of Muay Thai officials. The results provide the first experimental evidence of the impact of live crowd noise on officials in sport. Overall, the combination of experimental, observational, and archival findings makes a compelling case for crowd influencing officials' decisions. The article is innovative in several ways; the way it is designed (controlling the noise condition in a live setting) and analysed by applying multiple regression analysis (using specialist statistical software, Mlwin).

Impact case study (REF3b)



3. References to the research (indicative maximum of six references)

Myers T, Nevill A M, and Al-Nakeeb Y. (2010) An Examination of Judging Consistency in a Combat Sport. *Journal of Quantitative Analysis in Sports*. 6 (3): Article 3. DOI: 10.2202/1559-0410.1178.

Myers T and Balmer N (2012) The impact of crowd noise on officiating in MuayThai: achieving external validity in an experimental setting. *Frontiers in Psychology*. 3: 346. DOI: 10.3389/fpsyg.2012.00346.

Myers T, Nevill A M, and Al-Nakeeb Y (2012) The influence of crowd noise upon judging decisions in Muay Thai. *Advances in Physical Education*. 2 (4): 148-152. DOI:10.4236/ape.2012.24026.

4. Details of the impact (indicative maximum 750 words)

Prior to the research being conducted, Muay Thai scoring principles in the West were based largely on the model used in boxing, with each round judged as an individual 'event' and the resulting points totalled and a winner determined. Myers' research resulted in the wider application of the system used in Thailand, where fights are judged holistically as if a continuous event, rather than a series of separate events. Research demonstrated that the later system was far more consistent and gave a clear direction to athletes and coaches. A number of governing bodies requested training in this method and have their officials assessed in the Thai judging system. These included the IBMTO, STBA and IMC. In addition, the research formed part of the evidence considered by the Association of Boxing Commissions (ABC) in formulating unified Muay Thai rules for the United States of America (presented on 3 August, 2011). The research of Myers was the only empirical study to be used as evidence.

Several seminars and training courses have been delivered by Myers to judges and athletes around the United Kingdom, Republic of Ireland, Denmark, Canada and the USA, as well as on a range of websites and discussion forums around the world. The research has informed policy and the application of the rules in the UK, Ireland and the USA. This has happened specifically by the officials in those countries receiving focussed training and assessment in the application of judging criteria. More than 50 seminars have been held across the UK and Ireland, as well as seminars in Calgary, Canada (18 April 2004), Denmark (30 January 2005; 24 March 2007), and New Jersey, USA (1 December 2012).

2,078 coaches, judges and athletes have attended judging seminars held by Myers across the UK and Ireland. Globally, 2,014 individuals have watched the same judging seminar on the Internet, and 2,942 have watched another online video with Myers talking through how to score a fight. General non-academic articles on scoring written by Myers have been presented on 24 Muay Thai related websites around the world. In addition, academic articles related to scoring have been accessed numerous times, for example "The Impact of Crowd Noise on Officiating in Muay Thai: Achieving External Validity in an Experimental Setting" has been accessed 1,910 times, and is in the top 5% of all articles published by the journal (94th percentile; ranked by attention).

Collaboration between Myers and the IMC has resulted in the development of a three-phase course for Irish officials to understand the correct scoring of Muay Thai as set by the Sports Authority of Thailand and delivered by Myers, informed by his research on judging. Judges are required to complete the training and pass the assessment. The situation is similar in the UK with all judges working for the IBMTO and STBA being required to train and pass assessment before being able to work at events. These groups officiate on 80% of all events in the UK. In addition, four UK judging assessors are currently being trained by Myers to deliver judging courses and assessment. While many more have taken the assessment, 189 judges have actually passed and are qualified to work as a judge in the UK and Ireland. Officials working in New Jersey, Canada and Denmark have also attended seminars, with additional online training and support provided for judge educators in the USA.

An IBMTO source stated that the standard of competition and the understanding of the scoring

Impact case study (REF3b)



system have been "positively improved" by Myers' research and contributions. Furthermore, that through running judging and refereeing courses "the standard of officiating has been exceptionally improved". Myers' work resulted in the formation of the IBMTO. The dissemination of research has also helped the STBA understand the difference between the Thai scoring system compared to their own "thus making Muay Thai in Scotland as authentic as possible". Furthermore, Myers' input has resulted in a set of scoring and officiating policies that 70 clubs now adhere to.

A representative of the Canadian MuayThai Council, stated that the seminars were extremely informing to those who compete in the sport as well as officials, and helped promoters to "pass awareness on the nuances of the sport to the general public informing them how the sport works and is scored as well". Myers research was used in the USA to pass Professional Muay Thai rules throughout that country. Furthermore, the ABC was assisted by Myers' in its drafting of recommended unified rules and policies for the sport of Muay Thai. As the sport of Muay Thai in the USA is not as developed and established as in other countries, input from Myers has helped to build understanding and acceptance of the sport from regulators and officials.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- 1. Director of the Independent Board of Muay Thai officials (IBMTO)
- 2. Canadian Representative and Executive Member of the World Muay Thai Council
- 3. Deputy Attorney General of the New Jersey State Athletic Control Board
- 4. Vice President of the Irish MuayThai Council (IMC)
- 5. National Secretary of the Scottish Thai Boxing Association
- 6. Online videos of seminars delivered on how to apply criteria to score a fight http://www.mymuaythai.com/archives/tony-myers-scoring-seminar/
- 7. Australian cite using the principles for scoring a fight http://www.nrfaustralia.com.au/muay-thai-scoring-principles-tony-myers-scoring-seminar-excerpt/
- 8. US site for how to score a fight http://8limbs.us/muay-thai-thailand/balance-control-keys-muay-thai-scoring-tony-myers
- 9. Video commentary on how to score a flight http://www.mymuaythai.com/archives/tony-myers-scoring-commentary/
- 10. Register of those in the UK who have passed the assessment for judges http://muaythaijudging.com/judging-register.php