Evaluating the Trust, Confidence and Cooperation Model (Earle & Siegrist 2006); Terrorism at the 2012 London Olympic Games

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In the summer of 2012, London will play host to the Olympic Games, with an expected nine million tickets likely to be sold (Home Office, 2009). The threat of international terrorism at the Games is a major concern for the government, with an assumed terrorist threat level categorised as severe. This concern is evidenced in the increased funding of an estimated £838 million in the Olympic Security Board (OSB) which is responsible for the safety of the event. The OSB proposes a safety and security strategy which includes the creation of the Olympic Security Directorate (OSD) to be employed alongside the existing national counter-terrorism strategy (Home Office, 2009). The OSD co-ordinates high level government officials, government departments, emergency services and police authorities to create a security strategy. The Home Office (2009) state that the success of the strategy depends upon intelligence and public support. They elaborate that a focus on communication and community engagement is necessary, including ‘measures to raise public awareness and ensure co-operation, to manage expectations and to instil confidence’ (Home Office, 2009, pg.10).

This study asks whether the Trust, Confidence and Cooperation model, proposed by Earle and Siegrist (2006), can be applied to the question of whether trust and confidence in the OSD will affect the public’s intention to attend the 2012 London Olympic Games.

So why research this? Historically, terrorist groups have targeted major events, including sporting events, with a recorded 168 incidents of terrorism from 1972-2003 (Taylor & Toohey, 2007). Large events are seen as desirable targets, to ‘generate media attention, inflict massive casualties, maximize economic impact and build coalition support for their cause’ (Paraskevas, 2009, pg. 280). Paraskevas (2009) suggests that there will always be a threat from terrorism at large events due to the effectiveness of the method, causing large numbers of civilian casualties and inflicting gross psychological impact (Paraskevas, 2009). Therefore, it is important to research the effects of this upon public behaviour.

Psychological research into terrorism has largely focused on public attitudes, risk perceptions and responses (Wilson & Lemanski, 2010). Lee and Lemyre (2009) suggest that previous research focuses on the outcome of a specific attack on a community and research into communities not attacked is minimal limiting the applicability of previous findings to the public in general. Lee and Lemyre propose that the importance of studying the general public is that it informs policy makers of approaches to promoting preparedness and fostering resilience in instances such as a suspected, threatened or physical attack. Wilson and Lemanski (2010) agree, suggesting that research into terrorism needs to be advanced from the focus upon demographic factors that affect the perception of risk, to the impact this has upon the public’s lives, specifically their travel behaviour and leisure. Lee and Lemyre (2009) state that risk perception research has shown that responses can change routines, travel plans and limit activities or time spent in places perceived to be of high risk. Solberg and Preuss (2005) support this suggesting that the public are likely to avoid events if concerned with potential threats; in 2004 the Athens Olympic Games experienced a low crowd attendance hypothesised to be due to the threat of terrorism (Pelley & Cowan, cited in Taylor & Toohey, 2007).
Could the 2012 London Olympic Games suffer similar effects if the perceived threat of terrorism is high? Taylor and Toohey (2007) suggest that by understanding public perceptions, effective security initiatives can be implemented to encourage attendance to events.

Taylor and Toohey’s (2007) study is, to the author’s knowledge, the only study to specifically focus upon perceptions of terrorism at the Olympic Games. They found that contrary to their hypothesis, participants did not consider terrorism or their safety to be a consideration for their attendance at the 2004 Athens Olympic Games. Although they did find that those who did express concern had increased risk estimates. The implications of this study are, however, limited; participants were attendees of the Games and non-attendees were not sampled. It is possible that non-attendees did perceive terrorism to be a threat and due to concerns for safety did not attend and were thus not studied as acknowledged by the researchers themselves.

**The Trust, Confidence, Cooperation (TCC) Model**

Earle and Siegrist (2006) proposed the TCC model with the aim to unify confusing and contradictory research into one accepted theory of trust and confidence in others. They state that alternative theories, such as the Trust Asymmetry Hypothesis (Slovic, 1993) and Organisational Trust (Dirks and Ferrin, 2001), exclude connections made between ‘(a) morality-relevant information, agency and trust; (b) performance-relevant information, objectivity, and confidence; and (c) trust, past performance and confidence’ (pg. 390). Their proposed model does not exclude these features and they claim it to be a more complete model.

The TCC model makes distinction between morality-relevant information and performance-relevant information which is available to a person when making trust judgments. The distinction between morality-relevant and performance-relevant information led Earle and Siegrist (2006) to hypothesize a distinction between trust and confidence. They suggest that the antecedents of trust are indicated by morality-relevant information and the antecedents of confidence are indicated by performance-relevant information. They further suggest that these combine to support the notion of cooperation. These elements provide the basis of their proposed TCC model.

(Figure)

**Figure 1- The TCC Model (Earle & Siegrist 2006)**

The TCC model has been successfully utilised in various contexts, including the perceived risk of electromagnetic fields (Siegrist, Earle & Gutscher, 2003) and the 2008 financial crisis (Earle 2009).

**Current Study**

This study aims to test the TCC model within a forensic context, considering public perceptions of terrorism occurring at the 2012 London Olympic Games. The study questions the levels of trust and confidence in the OSD, their perceptions of terrorism occurring at the Games, and whether this affects cooperation, measured as the public’s intention to attend the Games.
Method

Design

A quantitative methodology has been selected for the current study. The study is non-experimental, with a correlational design.

Sample

One hundred and ninety three participants completed the questionnaire (39% male and 61% female), mean age of 29.28 (SD11.9) years. Of this sample, 75% reported that they intended to attend the 2012 London Olympic Games.

Materials

Questions were designed in accordance to the antecedents of the TCC model variables; value similarity, perceived performance, trust, confidence and cooperation. For example, Earle and Siegrist (2006) proposed that the antecedents of value similarity included perceptions of good intentions, treating others fairly, having good morals and having similar values. Participants were asked how much they agreed or disagreed with a statement on a seven point Likert scale.

Participants were questioned in relation to the subcategories of the OSD, which includes the Police Force and the Ministry of Defence (MOD). Participants were asked about cooperation levels to attend the 2012 London Olympic Games and to indicate their perceived level of threat of terrorism occurring at the 2012 London Olympic Games.

To ensure the variables in the questionnaire represented the constructs of the TCC model (Earle & Siegrist, 2006) a Factor Analysis, using principle axis factoring, was completed separately for the Police data and MOD data to create a measurement index. The reliability of these indices concluded all Cronbach Alpha Scores exceeded 0.8, indicating good reliability of measures of the TCC constructs. A small pilot study was conducted (N=20), which indicated that the variables did measure the intended constructs and that participants could understand the questions.

Procedure

The questionnaire was accessible through an internet link. Participants were recruited, using a snowballing method, via email and the social networking site ‘Facebook’. Forty-nine sports clubs were contacted via email requesting their participation in the study and dissemination of the questionnaire link through their contacts. A ‘Facebook event’ was created detailing the study and providing the questionnaire link, which could be accessed by all users of Facebook. Access to the internet link was made available for six weeks.

Results

Using structural equation modelling it was found that the initial model, using Police data, did not fit; $\chi^2(4)= 19.70, p=0.00$. Therefore the TCC Model could not be replicated. After using modification indices model fit improved, $\chi^2(2)= 5.75, p=0.06$, but these made little conceptual sense, so were excluded. The MOD data signified a good model fit, $\chi^2(4)= 7.01, p= 0.14$. However, both results indicate that trust and confidence have no significant relationship with cooperation.

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concluding that intention to attend the 2012 London Olympic Games is not apparently influenced by trust and confidence in the OSD agencies; the TCC Model does not appear to apply in this context.

Subsequent regression analysis revealed that the perceived level of the likelihood of terrorism occurring at the 2012 London Olympic Games did not predict participant’s intention to attend the Games; those who did not intend to attend the Games gave reasons that were unrelated to terrorism and were more mundane such as to not being interested in Olympic sport and not being able to afford a ticket.

Key Findings

The findings of this research indicate that intention to attend the 2012 London Olympic Games is not primarily influenced by trust and confidence in the security services. The structural equation modelling findings, in part, replicate the TCC model. The theory that the level of social trust is influenced by value similarity, confidence is impacted by levels of perceived past performance, and social trust affects levels of perceived past performance and confidence, is confirmed for both Police and MOD data. This indicates a distinction between trust and confidence, preceded by morality-relevant information and performance-relevant information respectively, as suggested by Earle and Siegrist (2006). However, the relationship between trust and confidence with cooperation could not be established in the current study. The TCC model could not be replicated in this context.

Regression analysis indicated that for those intending to attend the Games, perceived likelihood of terrorism had no significant effect. The analysis also signified that for those participants that did not intend to attend the Games the reason was due to not being interested in Olympic sport and not being able to afford a ticket; participants were not concerned with security issues.

Taken together, these findings could be explained by appealing to the idea that the intention to go to the 2012 London Olympic Games is internally driven and that external factors, such as confidence in the police’s ability to prevent terrorist attacks, will have little effect on their intentions. Put simply, if a person really wants to attend an Olympic event, they will, despite security threats. It could also be suggested that intention to attend the Games is not perceived as a form of cooperation by the public, despite Government intentions to encourage attendance. Therefore the TCC model in this context may not applicable and would explain the findings of the current study.

Limitations

A recognised contentious limitation of the methodology is the use of internet research. Using an internet link to access the questionnaire may have biased the sample from which data was collected. It could be suggested that the sample is limited to those that use the internet for email and ‘Facebook’ use, disregarding those that may not have computer access. However, it could be argued that those applying for tickets for the 2012 London Olympic Games would need to apply on the internet for the ticket ballot, so therefore would need access and knowledge of the internet to be able to buy tickets to attend.

The variables used to measures the TCC constructs are a further point of discussion of this study. The factor analysis undertaken on the variables found that some of the variables failed to achieve simple structure, with some variable present in two factors. This indicates that the variables
used to create index measurements of the TCC constructs may be questionable. The researcher decided to separate Factor II, into Past Performance and Confidence, was based upon the proposed concepts of the TCC model proposed by Earle and Siegrist (2006). The researcher is confident that the measures have quantified the concepts which Earle and Siegrist (2006) intended. Potential criticism on this point could be the measure of cooperation. It could be argued that intention to attend the 2012 London Olympic Games may not reflect the actual attendance of the Games.

**Implications**

The current study concludes that the intention to attend the 2012 London Olympic Games is not influenced by trust and confidence in the police and MOD. In this context the Trust, Confidence, Cooperation (TCC) model does not explain the interactions of trust and confidence with cooperation; other considered factors are impacting upon intentions. The findings of the current study do not support the TCC model, however, this does not take away from the usefulness of the TCC model in highlighting a distinction between morality-relevant and performance-relevant information as antecedent for trust and confidence, respectively.

Other implications of this study are that public perceptions of safety and security need not be the driving force in strategies employed by those responsible for major events, including the Olympic Security Directorate. The current findings suggest that the public will continue to attend major events if they have a desire to, irrespective of security concerns.
References


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Figure 1- The TCC Model (Earle & Siegrist 2006)