
A MOBILE APPLICATION TO EVALUTE SPORTING EVENTS: MEASURING CONSUMERS' SELF-REPORTS CONTINUOUSLY

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All authors:

Maximilian Stieler (corresp), Claas Christian Germelmann

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Synopsis:

Abstract:

AIM OF PAPER

Although a sporting event might be a dynamic and diverse episode, sport marketers heavily rely on self-report measurement methods at the end of the event when capturing visitors' evaluations. However, visitors might not remember what they have experienced at the beginning of the event properly (Baumgartner, Sujan & Padgett, 1997). Thus, consumers' statements are retrospectively biased. They will answer the questionnaire with regards to the peak and end affect of the sporting event. Building on experience sampling (Csikszentmihalyi & Larson, 1987), we introduce an Android-based mobile application to measure event consumers' real-time responses towards a continuous stimulus. The ubiquity of mobile devices may foster the development of such marketing research tools and might be an opportunity to evaluate sporting events from a different angle. The purpose of this paper is to introduce a portable measurement tool which might help researchers and practitioners to better understand the dynamics of a sporting event.

THEORETICAL BACKGROUND

Empirical research in the social sciences often face biases resulting from retrospective measurement tools. In the field of psychology, there have been attempts to track respondents' answers to illustrate changes over time. The Experience-Sampling Method has been developed to catch respondents' answers during an episode (e.g. a day or a week) (Csikszentmihalyi & Larson, 1987). This method is especially useful for long-term oriented episodes and

relatively slow-changing constructs (e.g. the shift of moods over the course of a day). This approach relies on a relatively low sampling frequency which means that respondents repetitively fill out the same short questionnaire a couple of times (Totterdell & Folkard, 1988). As sport and event researchers are often confronted with more fast-changing psychological states (e.g. emotions) and episodes in this contexts have shorter durations, it is essential to enhance sampling frequency considerably. Common real-time response measurement (RTR) tools capture consumers' self-reports more than once per second. However, high sampling frequency inhibits the application of questionnaires, but it builds on single-item measures instead (Aaker, Stayman & Hagerty, 1986).

The problem with the existing hand-held RTR devices is that they are not portable, so that researchers cannot conduct field research studies, as they need a connection to a central unit that stores and visualizes the data (Biocca, David & West, 1994). Thus, sport events as research objects, cannot be analyzed as they do not take place in a laboratory environment. A mobile device may enable researchers to get real-time data from consumers in field research situations. Therefore, it overcomes the retrospective bias, when it comes to the evaluation of an episode. When you think about a football game, a visitor's answers at the end of the game are heavily biased by the end result of the game. Visitors might experience ups and downs when supporting their favorite team, so that their statement at the end of the game will not reflect the changes in their psychological states.

MOBILE APPLICATION DEVELOPMENT

We developed an Android-based mobile application to make the real-time response measurement accessible for field research. The user interface is the screen itself, which means that the user can slide with his finger up and down to report his moment-to-moment evaluation of the event. The system records every movement of the finger, but every tenth of a second at the most to keep the overall data volume low. The researcher can freely select a suitable theoretical construct for the measurement episode. Researchers can choose whether the user has to rate on one (e.g. aroused to not aroused) or two dimensions (arousal, plus e.g. pleasant to unpleasant). At the edges of the screen, we integrated a haptic feedback to signal the end of the screen. Laboratory and field studies are underway to test validity and usability of the mobile application. First beta tests show that visitors of a sporting event enjoy using the mobile application during the sport experience. Furthermore, first results indicate high reliability and validity of the measures.

DISCUSSION AND IMPLICATIONS

Continuous data help us to better understand in the dynamics and the flow of a sporting event. In this respect, mobile phones as input devices are especially useful for marketing research purposes as participants can easily give moment-to-moment feedback. This allows event organizers to track consumers' evaluations in a realistic context and is relatively cheaper than classical RTR

tools. This mobile application might help us to understand when event organizers should integrate brand appearances, when and how to integrate sponsors' activities, and which part of the event the visitors did not like.

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