Consumer Misbehavior: Pay-Per-View Broadcasts and Peer-to-Peer Smartphone Streaming Apps

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On May 2, 2015, Floyd Mayweather defeated rival Manny Pacquiao in the most lucrative boxing match in the history of the sport. The event generated an astounding $73 million in live gate revenues, supplemented by a record-breaking 4.4 million pay-per-view (PPV) subscriptions (Rafael, 2015). At the expense of additional revenues for host networks HBO and Showtime (Kang & Hobson, 2015), industry experts suspect that a more concerning record may have been set that evening: the number of consumers who viewed the event without paying via peer-to-peer (P2P) live streaming smartphone apps, Meerkat and Twitter owned, Periscope (Kanno-Youngs, 2015). Despite efforts from the apps’ administrators to stop users from streaming the copyrighted material, dozens of channels were able to pass screening - resulting in countless viewers reveling they were able to watch the event without paying. After the conclusion of the fight, social networking sites were set afire when Twitter executive Dick Costolo declared Periscope the true winner of the marquee sporting event (Sikes, 2015).

For mixed martial arts (MMA) and professional boxing, the two sports most impacted because of their significant reliance on PPV revenues, the long-standing expectation is that consumers will purchase the event, or view it at a sports bar that has paid to offer it. Non-payment, or what event organizers refer to as theft or piracy (“Sports Network Heads,” 2015), constitutes behavior that “violates the generally accepted norms of conduct in consumption situations, and thus disrupts the consumption order” (Fullerton & Punj, 1997, p. 336). These acts, broadly recognized as forms of consumer misbehavior, can be detrimental to businesses and industries, and could have far-reaching impacts on the supply and demand (Albers-Miller, 1999) for PPV events. Given the present threat to combat sports, the focus of the current study is to examine consumer misbehavior within the context of P2P app streaming of these sporting events.

The theory of planned behavior (TPB) (Ajzen, 1991) postulates that individuals’ behavioral intentions are predicted by their attitudes, perceived behavioral control (PBC), and subjective norms (Chang, 1998; Yoon, 2012). TPB provides an optimal lens through which to view digital piracy, as previous research has used the base model to investigate consumer misbehavior - primarily in analyses to examine intentions to pirate music (Yoon, 2011) and computer software (Cronan & Al-Rafee, 2008). Research in this area has generally found a relationship between the components of TPB and intentions to engage in digital piracy (Peace et al., 2003), but has not been explored within the context of P2P smartphone apps and streamed sporting events.

Based upon previous research on digital piracy, the following hypotheses are proposed:

Hypothesis 1: Subjective norms toward smartphone app streaming of PPV combat sport events will positively affect an individual’s behavioral intentions to watch these events without paying.

Hypothesis 2: Attitudes toward smartphone app streaming of PPV combat sport events will positively affect an individual’s behavioral intentions to watch these events without paying.

Hypothesis 3: Perceived behavioral control will positively affect an individual’s behavioral intentions to watch these events without paying.

Yoon (2011) asserts that factors in addition to the TPB model’s base components may contribute to digital piracy; thus, a secondary purpose of this study is to assess the role fan identification with combat sports plays in the TPB-intention relationship. Previous spectator sport investigations have provided evidence that identification has a direct relationship with behavioral intentions (Trail et al., 2000; Trail et al., 2003) and moderates the relationship between various antecedents and intentions (Trail et al., 2012). However, the relationship between identification and consumer misbehavior is not known. This study examines these relationships within the context of the TPB and combat sports through the following research questions:
Research Question 1: Is there a relationship between fan identification with combat sports and an individual's behavioral intentions to watch these events without paying?

Research Question 2: Does fan identification with combat sports moderate the relationship between subjective norms, attitudes, and perceived behavioral control, and an individual's behavioral intentions to watch these events without paying?

A cross-sectional survey research design will be employed for this investigation. The target population for this study is combat sports fans. The sample for this study will be composed of a panel of 500 self-selected combat sports fans who were randomly selected for inclusion. An online survey protocol will be employed using Qualtrics. The survey instrument consists of 22 items. To test the TPB model and behavioral intentions, the measures for attitude (4 items), subjective norms (3 items), behavioral control (3 items), and intentions (3 items) were adapted from Yoon (2012), who examined these relationships within the context of digital piracy. A three item measure of combat sport identification was adapted from Robinson and Trail (2005). All five multi-item measures have shown adequate reliability and validity in previous studies (Cronan & Al-Rafee, 2008; Robinson & Trail, 2005; Yoon, 2012). Finally, six items were developed to provide a demographic profile of respondents. The survey will be deployed in early November and data collection will conclude in early December.

Preliminary tests of scale properties will be conducted. Confirmatory factor analysis (CFA) and Average Variance Extracted will be examined for construct and convergent validity, respectively. Cronbach's alpha coefficients will be examined for scale reliability. In order to examine the proposed hypotheses and research questions, a Structural Equation Model (SEM) will be developed to examine direct effects of attitudes, subjective norms, and behavioral control on misbehavior intentions and the potential moderating effect of combat sports identification on these relationships. The structural model will be assessed through an analysis of $\chi^2$/degrees of freedom ratio and fit indices including CFI, RMSEA, and SRMR.

Results will provide a better understanding of smartphone P2P consumer misbehavior through the framework of the TPB. Further, sport identification will be examined in this context to determine its role in explaining piracy intentions. From a practical standpoint, these findings will provide insight into consumer misbehavior within an environment where event organizers rely heavily on event subscription fees as a primary source of revenue.