An Analytical Framework for Measuring Sport Literacy

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Literacy has long been considered one of the most essential constructs of human development and understanding human behavior (Gee, 2007; Geisler, 1994; Lankshear, 1997). Being literate enhances a person’s perception, experience, and life by adding value and worth to them. Social scientists across several disciplines continue to examine the best ways to identify and improve ‘literacy’ for their fields of study (Hirsch Jr., Kett, & Trefil, 1987; McKenna et al., 2013; Olson & Torrance, 2009; Shor, 1999), which provides an insight that is worth applying in a sport context.

Previous literature on sport literacy emphasizes sport knowledge as it enables an individual to appreciate sport games tactically and strategically, develop capacities to predict and analyze game situations, and increase positive motivation and enthusiasm toward sport spectating, all the while respecting and upholding the rules, rituals, and culture of sport (Bettman & Park, 1980; Corlett, 1991; Melnick, 1993; Trail and Kim; 2011). Pill (2010, p. 33) defines sport literacy as “the capacity to put sport skills and knowledge to functional use for informed and engaged citizenship” which is grounded in an educational context. It also represents a developmental process of individuals’ ability and competency regarding sport knowledge (Arnold, 1979; Healy, 2008; Siedentop, 1994). Although research has started to address this cognitive aspect of sport participation, research on sports spectatorship under the cognitive framework is widely ignored. Questions about what we know, what we might know, and what we should know when watching sport remain unanswered for sport practitioners.

The specificity on the level of sport literacy needed is another difficult subject to tackle. It is fair to say that people need to be literate in sport in order to fully understand what they are watching. Several studies reported that sport fans have a higher level of knowledge about their team, players, and sport than non-fans (James, 1997; Smith, 1988; Wann, 1995). However, some might argue that sport fans have different needs and motives that are not necessarily related to knowledge when it comes to spectating. It could also be inferred that at some point being literate in sport creates a difference in the fan’s overall experience. From the perspective of expert-novice theory, a fan with expertise demonstrates higher levels of comprehension, communication, better decision-making, accuracy, and interpretation when spectating a sport game in comparison to illiterate fans (Chi, Feltovich, & Glaser, 1981; Dodds et al., 2003; McPherson; 1989). However, we know very little about the necessary components for being literate in sport spectating and how to measure sport literacy. The purpose of this study is to develop an analytical framework that will enable sport managers to assess sport consumers’ literacy in a given sport context.

Evidence-centered design (ECD) by Mislevy, Steinberg, and Almond (2003) was employed to develop the sport literacy framework. The ECD is the ‘principled’ approach to assessment design by providing language, concepts, and knowledge representations in the creation of an analytical framework (Mislevy & Haertel, 2006; Mislevy, Steinberg, & Almond, 2003). Based on the EDC framework, the domains and constructs of college basketball literacy were identified using a multiple case study method (Eisenhardt, 1989). Eighteen semi-structured interviews were designed with 18 content experts including college basketball players, coaches, intercollegiate athletics basketball staffs, and college basketball fans. The rationale for the number of interviews follows recommendations for the case study method (Yin, 2009). Data collection is currently underway and ten interviews have been completed. The study will be completed prior to the NASSM conference.

The interview guide was developed based on thorough review of learning theories and sports spectatorship. Content experts reviewed the interview questions to verify its authenticity and impartiality. Sample questions include: What kinds of knowledge help you increase your enjoyment when you watch the college basketball game? What kinds of knowledge help you understand the college basketball game? In addition to the interviews, all participants were asked to watch a 20-minute college basketball video and describe the game as if they were watching the game with novices.
This process was designed to identify empirical evidence in developing knowledge components and discovering additional information regarding participants’ previous statements.

Data analysis encompasses two procedures; 1) within-case analysis for preliminary theory generation, and 2) cross-case pattern search that seeks for inter-group similarities and differences through multiple lenses. From each interview, the researcher will write extensive memos to analyze the collected data connecting concepts and developing categories. This write-up process is often composed of pure descriptions but is central in finding conceptual frames within given questions (Pettigrew, 1988). The study employed coding techniques used in the grounded theory to analyze the transcribed data (Strauss & Corbin, 1990).

The preliminary results of this study have provided some support for the theoretical framework. From the examples and descriptions regarding college basketball, tentative categories of sport literacy were identified (content knowledge, context knowledge and competency). While content knowledge is focused on sport play (e.g., rules, skills, drills), context knowledge stresses on the background of the game (e.g., players, teams, history, subculture, rivalry). Competency was also categorized (e.g., reading plays and strategies, understanding the big picture) indicating that it is an important construct in explaining college basketball literacy. These exploratory results will be continuously compared to other cases in order to identify theoretical properties of sport literacy and further refine the concepts that capture the overarching construct.

The findings are expected to extend the literature on understanding sports spectatorship as well as provide additional insight in developing sports fans. An analytical framework from this study will offer theoretical boundaries for the development of college basketball literacy assessment. This could be beneficial for sport managers who want to measure spectators’ college basketball literacy in order to create and provide tailored programs for potential sport consumers.