Over the last 30 years, sport mega-events (SMEs) have become complex and transformative undertakings with costs often exceeding USD $10 billion (Müller, 2015). Cornelissen and Swart (2006) describe SMEs as “complex affairs which originate from specific sets of economic objectives but which have political and social corollaries that usually extend far beyond the event itself” (p. 108). While scholars have commented on the complexity of SMEs, there has been no comprehensive attempt within the literature to shed light on this complexity. Using systems theory, the primary purpose of the paper is to identify and develop a model that describes the elements of complexity unique to SMEs. A secondary purpose of the paper is to propose a model whereby SME complexity influences SME legitimacy.

A central assumption within organization science is that organizations are an intrinsic feature of the social world and that business organizations are thought to be organized in one way or another (Tsoukas & Hatch, 2001). Anderson (1999) suggests that organizations have been studied as open systems because they exchange resources with the environment (open) and consist of interconnected parts that work together (systems). Organizations have also been described as complex systems (Dooley & Van de Ven, 2011). In the case of SMEs, these are highly complex systems that involve collaborative efforts between multiple organizations from a variety of industries. This form of collaborative complexity which we term ‘SME complexity’ is characterized by the complexity of its newly formed structure, but also by the behavioral complexity of the shared decision-making concerning the event, and the cognitive complexities around the shared knowledge of the event. Each of these three forms of complexity reside at both the individual, organization, and group level. We argue that due to these structural, behavioral and cognitive factors, higher level (e.g., first-order) SMEs will exhibit greater complexity than lower level (e.g., third-order). SMEs have generally been classified as first-order, second-order or third-order events within the literature (Black 2008; Cornelissen 2004).

Further, we argue that structural factors, behavioral and cognitive factors of complexity influence the legitimacy of the SME.

Structural Factors. Structural complexity comprises vertical, horizontal, and spatial complexity at the individual level (Daft, 1992). Organizations collaborating on SMEs representing multiple industries create industry complexity. Bushman, Chen, Engel, and Smith (2004) suggest these unrelated segments of an industry can have conflicting operational styles or corporate cultures. First and second-order events involve multiple countries that may create geographic complexities. Information complexities may arise due to geographic dispersion, multiple currencies, differing legal systems, and cultural and language differences (Bushman, et al., 2004). Thus, we propose the following:

Proposition 1: The higher the degree of complexity related to structural factors positively influence the complexity of SMEs.

Proposition 2: The higher the degree of complexity related to the structure of the SME is directly related to higher-order SMEs.

Behavioral and Cognitive Factors. Organizers of SMEs must operate within an environment that is both behaviorally and cognitively complex. Carmeli and Halevi (2009) argue that “just as individual leaders can develop behavioral complexity, teams, through enabling processes can be characterized as high or low on behavioral complexity” (p. 210). The collaborations of individuals within multiple organizations leads to the creation of knowledge which is constructed, shared, and distributed among groups of individuals (Gruenfeld & Hollingshead, 1993) that are unique
not to the individuals or organizations, but rather to the SME itself. With respect to behavioral and cognitive complexity, we propose the following propositions:

Proposition 3: The higher the degree of complexity in making behaviorally related decisions positively influences the complexity of SMEs.

Proposition 4: The higher the degree of complexity in making behaviorally related decisions about a SME is directly related to higher-order SMEs.

Proposition 5: The higher the degree of complexity in understanding knowledge specific to the SME positively influences the complexity of SMEs.

Proposition 6: The higher the degree of complexity in understanding knowledge specific to the SME is directly related to higher-order SMEs.

Legitimacy of a Sport Mega-Event. SMEs can be deployed as political instruments by governments to which activities of legitimization can be aligned (Cornelissen, 2010). Kostova and Zaheer (1999) suggest that organizational complexity has significant implication for theories of organizational legitimacy because they affect both the nature and process of legitimacy. In this respect, we postulate the following:

Proposition 7: The overall complexity of a SME positively influences the legitimacy of the event.

The model developed here adds to the extant literature on both organizational complexity and SMEs. The purpose was to identify and propose a model that describes the elements of complexity unique to SMEs and whereby complexity influences legitimacy. Theoretically, complexity adds to the current definitions and classifications of SMEs. It also adds to the literature on social systems theory and complexity theory. From a more practical standpoint, the model points sport event planners to structural, behavioral and cognitive areas of focus. While the model is an initial attempt to explain the complexity of SMEs, further study should seek to provide empirical analysis. Future research may also add additional factors of complexity and also include additional types of events beyond just SMEs.