ABSTRACT

Based on self-monitoring theory, this study integrates the constructs of group climate, game design, leadership self-efficacy, and leadership experiences to investigate leadership behavior in MMORPGs. The authors adopted questionnaires (138 samples) as a means to observe leadership behaviors in MMORPGs. The research results show that group climate, game design and leadership self-efficacy have a positive influence on leadership. From a theoretical viewpoint, the authors’ studies confirm that leaders adjust and control their behavior according to what kind of group climate they perceive, how confidently they act as leaders and what functions are provided by the online game system. A practical implication of this study is that MMORPGs provide an opportunity for players to effectively and quickly learn leadership skills. The authors suggest that leaders who are lacking in social skills initiate social interactions with others on MMORPGs; this can help them develop leadership self-efficacy or manage their team through effective game designs.

Keywords: Game Design, Group Climate, Leadership, MMORPG

1. INTRODUCTION

Collaboration in online contexts can substantially improve learning interest and attitude, as well as facilitate improvements in learning performance, cognitive capacity, learning efficiency, and learning satisfaction (Ounnas et al., 2009). For example, massively multiplayer online role-playing games (MMORPGs) provide opportunities for learners to share resources to improve their learning productivity in a group-based learning system (Choi & Kim, 2004; Cole & Griffiths, 2007; Jang & Ryu, 2010).

Several studies have indicated that learning outcomes are improved when the learners can collaborate over the Internet (Kuo & Yu, 2009; Jang & Ryu, 2010). Online collaboration is cru-
cial in shaping leadership behavior because virtual groups can facilitate improvements in group climate, teamwork, leadership self-efficacy (Ee & Cho, 2012), communication, and coordination to enhance leadership performance (Cole & Griffiths, 2007). In previous studies, the leadership behavior usually discussed is about real life, such as in an organization or in-class and extracurricular activities for students (Foreman & Retallick, 2013; Hadley et al., 2011; Momeni, 2009; Anderson et al., 2008; Kelloway et al., 2000). MMORPGs have emerged as a popular leisure activity that everyone can enjoy. Players can engage in a variety of social interactions between guild leaders and members. Collaborative groups in MMORPGs have a hierarchical leadership structure that enables game players to complete missions in groups. Therefore, leaders can train their leadership skills easily in the context of MMORPGs.

However, in MMORPGs, communication content and direction are temporal, and their relationships in a virtual context are tenuous (Prax, 2008). Under these conditions, leaders can experience difficulty motivating other players, consolidating group goals, shaping climate perceptions, mentoring, and performing management functions, particularly when MMORPG players are online at various times, or if they use asynchronous communication media. Therefore, research on the determinants of leadership behavior in an MMORPG context is crucial to the designers of online-game systems and educators.

Leadership is an important skill that players can build in the context of MMORPGs (Jang and Ryu, 2010; Chen, Sun & Hsieh, 2008). A previous study defined game leadership as the multiple leadership roles that game players have while playing games, such as performing strategic group activities, giving value and motivation to group members, building members’ trust and respect, and providing a vision to other players (Jang and Ryu, 2010). Previous study has proposed that leadership involves a socialization process whereby leaders direct subordinates to achieve group goals (Cronshaw & Ellis, 1991). Previous research has indicated that people who are susceptible to environmental factors (e.g., group climate or game design) adjust their behavior and public appearance to fit certain social situations (Cronshaw & Ellis, 1991). These people typically emerge as group leaders because they carefully maintain an appropriate style of leadership behavior (Cronshaw & Ellis, 1991). However, another study has indicated that some leaders emerge because of particular charismatic traits that they possess (Day & Zaccaro, 2007). These people are typically uninterested in adapting their social behavior and attitude according to social climates because their approach to leadership is expressing their thoughts and beliefs.

Aligning with the premise of collaborative learning, in which leadership behavior is perceived as being driven by social interactions among people, social cognitive theory explains learning as triadic reciprocal causations among environmental factors, personal traits, and behaviors (Bandura, 1986). Thus, social cognitive theory provides a suitable foundation for exploring leadership behavior in MMORPGs by investigating the dynamics between external stimuli in the game design or group climate and personal traits among the players, which collectively drive a particular leadership outcome. We integrated environmental factors and personal traits to investigate how MMORPGs improve leadership outcomes through the mediation of leadership self-efficacy.

To summarize, leaders are embedded in a social context, and their behaviors are functions of both their personal traits and social context. This research was designed to elucidate the effects of environmental factors and personality traits on leadership behavior in MMORPGs.

2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

According to social cognitive theory (Bandura, 1986, 1997), leadership behavior results from a combination of personal resources (e.g., leadership self-efficacy and experience) and contextual
B2B E-Commerce Institutionalization in SMEs in Less Developed Countries: A Model and Instrument
www.igi-global.com/article/b2b-e-commerce-institutionalization-in-smes-in-less-developed-countries/109786?camid=4v1a

QR Codes and Mobile Technology Used in the Blended Learning Approach
www.igi-global.com/article/qr-codes-and-mobile-technology-used-in-the-blended-learning-approach/172518?camid=4v1a