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ABSTRACT

Extracurricular activities (ECA) have become an important component of students' school life and many schools invested significant resources on extracurricular activities. Our study suggests three major theoretical frameworks (Zero-Sum, Developmental and Threshold) to explain the impact of ECA participation on students' academic performance. We urge researchers to conduct future research on the impact of ECA participation so as to extend the stream of research in the accounting education literature on determinants of students' academic performance.

Keywords: extracurricular activities; academic performance

INTRODUCTION

As accounting issues become more complex in today's dynamic business environment, demands on higher education institutions to prepare qualified accounting graduates become increasingly important (Byrne and Flood, 2008; Potter and Johnson, 2006). A corresponding stream of research in the accounting education literature focuses on investigating the determinants of students' academic performance in an undergraduate accountancy degree programme (Bergin, 1983; Byrne and Flood, 2008; Clark and Sweeney, 1985; Duff, 2004; Eskew and Faley, 1988; Gammie et al., 2003; Gracia and Jenkins, 2002, 2003; Gist et al., 1996; Guney, 2009; Koh and Koh, 1999; Rohde and Kavanagh, 1996; Seow et al., 2013).

This stream of research contributes to practice as understanding the determinants of students' academic performance may identify existing students who are at risk of academic failure and minimize the likelihood of admitting students whose skill sets are not suited to an accountancy degree programme (Byrne and Flood, 2005; Gammie et al. 2003; Koh and Koh, 1999). Common determinants of students' academic performance that have been examined in the extant accounting education literature include prior academic achievement (Byrne and Flood, 2008; Guney, 2009; Gammie et al. 2003; Koh and Koh, 1999; Seow et al., 2013), mathematical aptitude (Gist et al., 1996; Guney, 2009; Koh and Koh, 1999), critical thinking (Jenkins, 1998; Springer and Borthick, 2007), age (Guney, 2009; Koh and Koh, 1999; Lane and Porch, 2002), gender (Gracia and Jenkins, 2003; Koh and Koh, 1999), prior knowledge of accounting (Eskew and Faley, 1988; Gammie et al., 2003; Koh and Koh, 1999) and working experience (Hartnett et al., 2004; Guney, 2009). The objective of the current study is to highlight another determinant from the general education literature which may affect students' academic performance.

The current study aims to examine the impact of extracurricular activities ("ECA") participation on students' academic performance. Extracurricular activities relate to activities that are "external to the core curriculum" (Shulruf, 2010, pg. 594). Bartkus et al. (2012, pg. 698) defined extracurricular activities as "academic or non-academic activities that are conducted under the auspices of the school but occur outside of normal classroom time and are not part of the curriculum." Bartkus et al. (2012, pg. 698) also stated that "extracurricular activities do not involve a grade or academic credit and participation is optional on the part of the student." The ECA experience has become an important component of students' school life as many students today participate in ECA (Feldman and Matjasko, 2005; 2012). Many schools invested significant resources on ECA (Bartkus et al., 2012, Shulruf, 2010) and are expected to provide a wide range of ECA to provide a balanced education (Holland and Andre, 1987; Shulruf et al., 2008). The impact of ECA participation on students' development has been widely examined in the general education literature (Broh, 2002; Feldman and Matjasko, 2005, 2012; Holland and Andre, 1987; Mahoney et al., 2003; Marsh and Kleitman, 2002; Shulruf, 2010). However, this area of research has not been examined much by researchers in the accounting education discipline.

A search through six leading accounting education journals[1] resulted in limited studies that examine the impact of ECA participation. Ahadiat and Smith (1994) surveyed various employers of accounting graduates and reported that ECA participation was an applicant characteristics sought in entry-level accountants. Chia (2005) also found that the level of students' ECA participation positively affected the number of initial job interviews and final job offers. Wooten (1998) found that ECA

[1] The six leading accounting education journals (in alphabetical order) are Accounting Education: An International Journal; Advances in Accounting Education, Global Perspectives on Accounting Education; Issues in Accounting Education; Journal of Accounting Education; The Accounting Educators' Journal.

participation did not influence students' effort in an introductory accounting course and their academic performances in the course were not affected. On the other hand, Christensen et al. (2002) included ECA participation as a control variable to examine the association between self-efficacy and academic performance and reported mixed results for the effects of ECA participation on academic performance. Last, Brown-Liburd and Porco (2011) found that undergraduate accounting students, who have participated in ECA involving volunteerism or membership in Beta Alpha Psi, demonstrated higher levels of cognitive moral development. Limited studies on whether ECA participation affects the academic performance of students in an undergraduate accountancy programme motivate the current study. By examining the impact of ECA participation, the current study aims to extend the stream of research in the accounting education literature on determinants of students' academic performance.

The remainder of the current paper is organized as follows. First, we present our research method. This is followed by a discussion of the theoretical frameworks to examine the impact of ECA participation on students' academic performance.

RESEARCH METHOD

The content analysis approach of identifying and examining ECA studies involves two steps: identifying relevant articles to be examined and determining the theoretical frameworks (Harris, 2001). Using academic databases (EBSCOhost; JSTOR; Proquest; PsycInfo; and Web of Science,), we conducted a literature search for publications whose titles, abstracts or keywords contain the selected search phrases. The keywords and phrases used in the literature search include "extracurricular activities; ECA; extra school activities; after school activities; non-academic school activities; co-curricular activities; CCA; academic performance;

academic outcome; academic achievement; academic aspirations". We excluded book chapters, working papers, and other articles not subjected to peer-review process. We then examined the selected articles in-depth to determine the theoretical frameworks.

THEORETICAL FRAMEWORKS

Our study suggests three major theoretical frameworks to explain the impact of ECA participation on students' academic performance. The three theoretical frameworks posited that the level of ECA participation has (a) negative effect on academic performance (Zero-Sum framework); (b) positive effect on academic performance indirectly as a result of non-academic achievements (Developmental framework); and (c) positive effect on academic performance up till a certain point beyond which participation leads to negative academic outcomes (Threshold framework).

Zero-Sum Framework

The earliest theoretical framework in the general education literature is the Zero-Sum framework, which arises from Coleman's (1961) seminal study. Coleman (1961) viewed the student's society as a finite system in which commitment to academic, athletic, or social values represents a loss to the other two. As athletic participation was the main determinant of social status in school, Coleman (1961) argued that male students may prefer to invest time and energy in sport ECA and ended up neglecting their academic studies. The Zero-Sum framework theorized that ECA participation has a negative effect on academic performance because students were devoting more time for their ECA activities at the expense of their academic studies (Coleman, 1961).

Many schools in the early 1980s implemented the “2.0 Rule” where students must maintain an overall grade point average of 2.0 before they were allowed to participate in ECA (Joekel, 1985). The motivation behind the “2.0 Rule” was that ECA participation resulted in diminishing academic performance (Joekel, 1985; Camp, 1990). Porter (1991) argued that heavy ECA participation interfere with academic work, resulting in students spending less time on their homework. ECA participation requires time commitments from students, and these time requirements are in direct competition with time that otherwise could have been spent on academic pursuits (Camp, 1990; Coleman, 1961; Joekel, 1985; Marsh, 1992; Marsh and Kleitman, 2002; Porter, 1991).

Developmental Framework

The dominant theoretical framework in the general education literature is the Developmental framework, which theorized that ECA participation has a positive effect on academic performance indirectly as a result of the non-academic and social benefits associated with ECA participation (Anderman, 2002; Broh, 2002; Fejgin, 1994; Finn, 1989; Fredricks and Eccles, 2005; Hansen et al., 2003; Holland and Andre, 1987; Larson, 2006; Lewis, 2004; Mahoney and Cairns, 1997; Mahoney et al., 2003; Marsh, 1992; Osterman, 2000; Valentine et al, 2002).

Broh (2002) argued that there are three ways which ECA participation indirectly boosts students’ academic performance. First, ECA participation helps students develop life skills and characteristics such as a strong work ethic, self-esteem, perseverance, locus of control, which are consistent with positive academic outcomes. Second, participating in ECA increases students’ social status and accords them membership into the leading-crowd of academically-oriented peer group, thereby facilitating higher academic performance. Third, ECA participation

provides students with greater interaction with fellow students and the school, thereby building social ties and developing social capital. This social capital then acts as a form of social control that encourages students to follow school norms and thus attain academic success.

ECA participation facilitates students to achieve better academic performance through acquiring life skills and attitudes (Holland and Andre, 1987; Larson, 2006; Lewis, 1994; Mahoney et al., 2003; Marsh, 1992). Holland and Andre (1987) suggested that ECA participation helps students to acquire organizational, planning and time-management skills. They also suggested that ECA participation helps students to develop attitudes such as discipline and motivation; and to receive social rewards which influence personality characteristics (Holland and Andre, 1987). Marsh (1992) and Valentine et al. (2002) found that ECA participation enhances students' self-concept, which in turn mediates positive effects on other academic outcomes. ECA participation also promotes personal initiatives such as setting personal goals, evaluating what is needed to attain goals, and then actively acquiring the abilities and resources to achieve goals (Larson, 2006). Over time, the benefits of consistent ECA participation could generalize beyond the ECA setting towards academic pursuits such as in academic goal setting (Mahoney et al., 2003). Mahoney et al., 2003 conducted a longitudinal study and found that consistent ECA participation was associated with high interpersonal competence, educational status, and educational aspirations.

Lewis (2004) proposed the application of resilience theory to examine the positive impacts of ECA participation. Resilience is one's ability to respond positively to stress, adversity, and obstacles, learned as a result of exposure to challenging situations (Rutter, 1987). Lewis (2004) argued that ECA participation acts as an agent of resilience by providing students with new environments for self-discovery,

opening up opportunities for achievement, and allowing them to assume meaningful roles in their school communities. Lewis (2004) also argued that ECA participation enhances students' self-esteem and self-efficacy and motivates them to work towards academic goals and social relations. This results in a stronger sense of school belonging, which can motivate students to work towards academic goals (Lewis, 2004).

The achievement-oriented nature of ECA, especially sports activities, is an ideal context for building students' character (Fejgin, 1994). Fejgin (1994) found that students who participated in competitive sport activities developed a greater internal locus of control. By making experiences of both success and failure highly visible to participants and their peers, students realize that achievements depend upon individual effort. This link between performance and achievement in competitive sports might help students to establish a greater internal locus of control and achieve better academic performance (Fejgin, 1994).

Hansen et al. (2003) examined the developmental benefits of ECA participation and suggested that ECA participation provides students with six basic domains of learning experiences which may lead to positive academic outcomes. ECA participation assists the personal development of students by (a) facilitating identity development through trying out new experiences; (b) providing a context for developing personal initiative; (c) developing basic emotional, cognition, and physical skills; (d) building social connections to others through developing teamwork and social skills; (e) promoting interpersonal relationships; and (f) extending social networks with both peers and adults which are a source of social capital (Hansen et al., 2003).

ECA participation may be a key factor in increasing students' sense of school belonging (Finn, 1989; Fredricks and Eccles, 2005). Students who have a

greater sense of school belonging were more likely to be more interested in school, more motivated, experienced less anxiety and had improved academic performance (Osterman, 2000). Anderman (2002) found that students who felt a greater sense of school belonging obtained a higher grade point average, were more optimistic, and had fewer problems at school. Marsh (1992) argued that through ECA involvement, students experience a sense of meaning and purpose connected to the educational process, which increases their sense of commitment to the school. This results in shaping students' values and attitudes to become more consistent with the academic-oriented school values and to the academic process in general as reflected through lower school dropout rates and school attendance (Mahoney and Cairns, 1997; Marsh, 1992).

Threshold Framework

An emerging theoretical framework in the extant literature is the Threshold framework, which theorized that ECA participation has a positive effect on academic performance up till a certain point beyond which participation leads to negative academic outcomes (Cooper et al., 1999; Fredricks, 2012; Fredricks and Eccles, 2010; Knifsend and Graham, 2012; Marsh, 1992; Marsh and Kleitman, 2002; Randall and Bohnert, 2012).

The Threshold framework posits that the association between ECA participation and academic outcomes resembles an inverted U-shaped function, in which academic outcomes increase at low and moderate levels of ECA participation, level off, then decline at the highest participation levels (Marsh, 1992; Fredricks, 2012). The Threshold framework attributes the point of diminishing academic benefits to students' excessive time commitment which leaves students too little time for academic pursuits, similar to the Zero-Sum framework (Marsh, 1992). As

such, the Threshold framework strikes a compromise between the Zero-Sum framework's prediction that excessive time commitments result in declining academic performance and the Developmental framework's prediction of positive non-academic developmental benefits (Marsh and Kleitman, 2002).

Marsh (1992) found significant non-linear effects of ECA participation on academic outcomes. Marsh and Kleitman (2002) also found that the number of ECA, time spent on ECA, and total ECA participation has non-linear effects on academic outcomes. Similarly, Fredricks and Eccles (2010) reported that ECA participation has a non-linear effect on grades, educational expectations and educational status. They argued that high levels of ECA participation weakened students' connectedness with others and take time away from academic pursuits (Fredricks and Eccles, 2010). Fredricks (2012) found that the students' academic performance declined at higher breadth and intensity of ECA participation and argued that the stress of balancing multiple ECA affects academic performance negatively.

Cooper et al. (1999) reported a curvilinear trend between ECA participation and standardized achievement test scores - the amount of time spent on ECAs was positively associated with test scores, but at the highest participation levels, test scores declined dramatically. Knifsend and Graham (2012) found curvilinear relationships between breath of ECA participation and academic performance. They argued that moderate ECA participation provided students with an optimal number of contexts to foster relationships with peers and promote a greater sense of school belonging. In contrast, students with high levels of ECA participation may experience difficulties determining where they fit in and belong with their peers (Knifsend and Graham, 2012). Randall and Bohnert (2012) reported a threshold

effect between ECA participation and students' psychological and social development.

CONCLUSION

The current study examined prior studies in the general education literature which investigated the impact of ECA participation on students' academic performance. Our study of the general education literature suggested three major theoretical frameworks. First, the Zero-Sum framework posited that ECA participation has a negative effect on academic performance because students were devoting more time for their ECA activities at the expense of their academic studies. Second, the Developmental framework theorized that ECA participation has a positive effect on academic performance indirectly as a result of the non-academic and social benefits associated with ECA participation. Last, the Threshold framework hypothesized that ECA participation has a positive effect on academic performance up till a certain point beyond which participation leads to negative academic outcomes.

While much has been done in understanding the impact of ECA participation in the general education literature, there were limited studies involving the accounting education context. By examining the impact of ECA participation, the current study aims to inform the accounting education literature of another potential determinant of students' academic performance in an undergraduate accountancy programme. This will extend the commonly examined determinants beyond prior academic achievement, mathematical aptitude, critical thinking, age, gender, prior knowledge of accounting and working experience. We urge researchers to conduct future research on the impact of ECA participation so as to extend the stream of research in the accounting education literature on determinants of students' academic performance.

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