

Academic Performance of Undergraduate Accounting Students: Does Prior Knowledge in Accounting Matter?

Amponsah-Boadu Dominic and Joseph Tufuor Kwarteng

University of Cape Coast, Cape Coast, Ghana

Abstract. Diverging from previous research, which predominantly focused on the impact of prior accounting knowledge on the Final Cumulative Grade Point Average (FCGPA), this study introduces a novel perspective by delving into the influence of prior accounting knowledge on the performance of individual undergraduate accounting courses. Employing a causal-comparative design, the academic records of 250 undergraduate accounting students were scrutinised, with 130 possessing prior accounting knowledge and 120 lacking such background. Data regarding their entry qualifications and academic performance were sourced. The study employed regression and t-test analyses, revealing that prior accounting knowledge exerts an influence on the overall performance of undergraduate accounting students. However, no significant disparities were identified in the performance of specific accounting courses between the two groups. Consequently, the study recommends a departure from rigidly incorporating prior accounting knowledge into admission requirements for undergraduate accounting programmes. Instead, it advocates for the design of classroom engagements that facilitate cooperative learning strategies, fostering peer tutoring and collaborative learning environments.

Keywords: prior knowledge, undergraduate, accounting, academic performance, admission.

1. Introduction

The excellence of any tertiary institution, particularly a university, is determined by the calibre of graduates who periodically pass out of the institution (Dillon & Smith 2017). Efficient graduates are those described as having attained a higher class of degree and can discharge their duties in line with set guidelines. Tertiary institutions admit students and prepare them to meet job market needs, translating into building the country's economy. Whilst the transition from secondary schools to universities is acknowledged as the norm, Papageorgiou and Carpenter (2019) cite difficulty in passing the subjects required for admission into the university as an impediment to many potential undergraduate accounting students.

Gaining admission into an institution of higher learning in developing countries such as Ghana has been an endemic problem among the majority of

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students owing to situations ranging from lack of economic resources of families from which the students come from, to inadequate facilities of the universities (Abugre 2018; Bruce 2018; Atuahene & Owusu-Ansah 2013). Accordingly, entry to undergraduate programmes is restricted not only based on the quality of the grades obtained but also the relevance of the subjects studied (i.e., relevant prior knowledge) at the pre-tertiary level of education.

Relevant prior knowledge of students is the history of their academic work before entering universities to pursue any degree programmes (Toth & Daniels 2021). Using relevant prior knowledge in admission decisions ensures that the student has basic accounting (as with other disciplines) knowledge so that building on with more advanced accounting knowledge would be more reasonable and fruitful in developing the student for the job market upon graduation. Research suggests a connection exists between a undergraduate student's entry qualification and academic performance (Boateng & Kwarteng 2023; Masasi 2012).

Most universities admit students to pursue accounting degree programmes without considering the prior programme pursued (Adu-Gyamfi *et al.* 2016). However, the accounting discipline is both numerate and principled-based, so admitting students without accounting background to pursue accounting programmes may be challenging for many such students. This policy is reducing enrolment in accounting programmes in secondary schools and causing poor performance in accounting courses in the universities (Ampofo & Osei-Owusu 2015).

Some studies show that students with diverse pre-university background selected to pursue accounting degree programmes perform differently in university accounting courses (Zandi, Shahabi, & Bagheri 2012). Students who possess the requisite entry requirement with relevant prior learning experience are emphasised in the admission decisions (NewmanFord 2009). Such requirements are set to select applicants with relevant prior knowledge considered necessary to move and strengthen the prospective students' basic knowledge, which could be built on in the degree programme enrolled (Chakrabarty & Martin 2018). Thus, students admitted into disciplines their academic background support outperform those without a pre-university background in the discipline (Alfan & Othman 2005; McPhail 2015).

However, there is evidence to suggest that academic history does not affect academic performance in accounting degree programmes (Aidoo-Buameh & Ayagre 2013; Budd 2017; Hepworth 2018; Mutonga 2011; Zezekwa & Mudavanhu 2011). This means that the controversy surrounding academic history and its influence academic performance still lingers to be further explored.

For the different positions above, most (Nketiah-Amponsah *et al.* 2017; York *et al.* 2015) of the researchers studied the effect of relevant prior knowledge in accounting on the final grade point average (FGPA) as a proxy for the academic performance of the students instead of considering the effect of the relevant prior

knowledge on specific accounting courses in the accounting degree programme on the FGPA. Therefore, the results obtained from such studies cannot be accepted to conclude the effect of the relevant prior knowledge in accounting on the performance in accounting courses in the university.

This study departs from other studies because it explores the effect of relevant prior knowledge in accounting on the various conceptual strands of accounting, not just the final Cumulative Grade Point Average (CGPA), which is a conglomerate of many other unrelated accounting courses. Also, prior studies measured academic performance as the general CGPA encompassing accounting and non-accounting courses, thereby clouding the clarity of the evidence obtained. Even though, in some cases (Abdullahi 2014; Ibrahim & Usman 2015) specific accounting courses were studied, only one accounting course was examined, thereby limiting the scope. This study therefore widens the scope of prior studies to examine the impact of academic history on students performance in Financial Accounting, Cost and Management Accounting, Taxation, Financial Management and Auditing. This would help holistically explain the impact of academic history on academic performance in courses reflecting the conceptual strands of accounting in the university.

2. Literature Review

Theoretical Review

Schema theory, a cognitive framework rooted in the works of early psychologists such as Plato and Piaget (Marshall 1995), asserts that individuals have the ability to organize information into mental structures known as schemas. These schemas play a crucial role in interpreting, comprehending, and retaining new knowledge (McVee *et al.* 2005; Brewer & Nakamura 1984). In the context of studying the correlation between admission qualifications and academic performance at the tertiary level, schema theory assumes particular significance.

This research, grounded in schema theory, aims to explore the impact of students' pre-university academic performances on their cognitive processes, specifically focusing on their capacity to comprehend and retain new academic content. The theory suggests that individuals with strong entry qualifications possess well-structured mental frameworks in their specific field of study. This pre-existing knowledge framework enables them to effectively incorporate new content, leading to superior performance in their chosen field.

The study particularly examines the potential impact of prior knowledge in accounting concepts, acquired during pre-tertiary education, on cognitive processing and comprehension in university-level accounting courses. The assumption is that individuals with a robust foundation in accounting concepts from their pre-university education will demonstrate enhanced cognitive

processes, facilitating better understanding and retention of accounting content at the tertiary level.

Schema theory provides a valuable cognitive framework for understanding how individuals organize and process information. Applied to the context of tertiary education, this theory informs the investigation into the relationship between pre-university academic performance and cognitive processes at the university level. The study anticipates revealing insights into how prior knowledge in accounting concepts shapes cognitive functioning, ultimately influencing academic performance in university-level accounting courses.

Empirical Review

Research consistently highlights the crucial role of prior knowledge in shaping students' academic performance across various disciplines. This review delves into the extensive literature on how students' pre-existing knowledge influences their cognitive processes, academic achievements, and performance at the tertiary level.

Studies affirm that students possess certain levels of knowledge before entering academic institutions, influencing their perception and understanding of the world (Nichols 2017; Zelalem 2020). The nature of this knowledge becomes a determining factor in a student's success (Diaz 2017; Folsom *et al.* 2015; Iqbal *et al.* 2017). This pre-existing knowledge serves as a mental framework, aiding the interpretation and assimilation of new information (Sjödin *et al.* 2019).

As academic challenges intensify, the application of prior knowledge becomes increasingly significant (Berkenkotter & Huckin 2016; Buehl 2017). Students with a well-established knowledge base find it easier to recollect and build on existing information, facilitating a more efficient understanding of complex tasks. Conversely, those lacking prior knowledge may struggle and depend on instructors to activate their memory through relevant activities (Tarchi 2015).

The cognitive process, as advocated by the constructivist school of thought, emphasizes the use of existing knowledge to understand new information (Kwan & Wong 2015). Numerous studies emphasize the impact of pre-existing knowledge on students' discipline-specific performance (Hailikari 2010; Hailikari *et al.* 2018). The combination of various types and stages of learning contributes to knowledge development beyond existing understanding (Asikainen *et al.* 2018).

Studies focused on accounting students provide valuable insights into the influence of prior knowledge. Papageorgiou and Carpenter (2019) explored the impact of new prior knowledge in accounting on first-year university students, revealing positive effects on academic performance. Similarly, Bosua (2015) demonstrated a strong correlation between students' mathematical ability before university and their performance in accounting courses.