

May 2022

## FACTORS AFFECTING ACCOUNTING STUDENTS' PERFORMANCE AT UNIVERSITY IN LEBANON

Rasha Mohamad Mahboub

*Assistant Professor, Faculty of Business Administration, Accounting Department, Beirut Arab University, Beirut, Lebanon, r.mahboub@bau.edu.lb*

Follow this and additional works at: <https://digitalcommons.bau.edu.lb/csdjournal>



Part of the [Accounting Commons](#)

Factors; Accounting; Students' Performance; Beirut Arab University; Lebanon.

---

### Recommended Citation

Mahboub, Rasha Mohamad (2022) "FACTORS AFFECTING ACCOUNTING STUDENTS' PERFORMANCE AT UNIVERSITY IN LEBANON," *BAU Journal - Creative Sustainable Development*. Vol. 3: Iss. 2, Article 2.

DOI: <https://www.doi.org/10.54729/QBUM4617>

Available at: <https://digitalcommons.bau.edu.lb/csdjournal/vol3/iss2/2>

This Article is brought to you for free and open access by Digital Commons @ BAU. It has been accepted for inclusion in BAU Journal - Creative Sustainable Development by an authorized editor of Digital Commons @ BAU. For more information, please contact [ibtihal@bau.edu.lb](mailto:ibtihal@bau.edu.lb).

---

## FACTORS AFFECTING ACCOUNTING STUDENTS' PERFORMANCE AT UNIVERSITY IN LEBANON

### Abstract

Factors affecting students' performance (SP) have been the topic of continuing discussion among academics, instructors, and policy - makers. There have been several research that tried to investigate this subject; however, most of those research have concentrated on SP in America and Europe. Though, since cultural dissimilarities might have a function in determining the factors that influence SP, it is extremely vital to investigate those factors to the Lebanese society. The purpose of this research is to investigate the factors affecting accounting SP at the faculty of business administration at Beirut Arab University (BAU) in Lebanon. To achieve this, a questionnaire was administered and distributed to 232 second and third-year accounting students. The regression results reveal that the factors of gender, language, class attendance, part time work, statistics grade and introductory accounting grade are significantly and positively related to SP in accounting. Results also show that extracurricular activity, high school grades and age have negative significant influence on SP. Results also demonstrated that mathematics grade, high school accounting, high school major, studying hours, nationality, student interest in accounting field, marital status, class size, course load and instructor effectiveness are not significantly associated with SP in accounting. These findings offer a significant contribution to accounting literature and have imperative implications for accounting students, university administrators and accounting instructors.

### Keywords

Factors; Accounting; Students' Performance; Beirut Arab University; Lebanon.

## 1. INTRODUCTION

The role of the accountant in business organizations has developed over the years from “simple bookkeeping and reporting function” to greater “involvement in decision making” (Siegel et al, 1997). This change is primarily due to the increasing difficulty of business transactions, continuous technological development, and a progressively competitive international business environment. Thus, accounting graduates are expected to have a various skills to succeed in this changing environment. All these challenges have put increasing pressure on business schools to offer undergraduate accounting programs that graduate accountants with numerous skills of a generic and technical nature (Hakim and Bizri, 2015).

As a consequence, the academic performance (AP) of accounting students (AS) has become an imperative issue because academic failure, besides the emotional and financial costs to the students, decreases the number of students succeeding through to professional level (Gracia and Jenkins, 2003). Hence, the AP of students majoring in accounting-at universities has become a major worry for higher education institutions (HEIs) (Guney, 2009). This is because accounting often has low pass rates that accordingly affected the results of students' final performance (Jansen and de Villiers, 2016). This is mainly due to accounting courses (AC) are regularly regarded among the hardest courses in business programs (Benligiray and Ahmet, 2017). Thus, there is a need for academics to improve SP in order to maintain the perceptions of various stakeholders to the quality of the business programs (Ghani et al., 2012).

Thought, it is evidenced from the previous studies that a number of research have investigated the factors that impact AS performance. Final-year high school grades (HSG); high school mathematics grade (MG); type of school attended; introductory accounting grade (IAG); high school accounting (HSA); age (AG); gender (GEN); language (LG); bursary holder; number of attempts; living in a residence or at home; four-year vs. three-year degree program; intended grade; intention to take the CPA exam (ICPA); intention to attend graduate school; part time work (PTW); job type; number of courses taken per semester (NCTPS); student's self-perceived writing, reading and listening ability; overall GPA; class attendance (CA); statistics grade (SG); extracurricular activity (EA); internship experience; marital status (MS); student interest in accounting field (SIAF); class size (CS); parents role; student's nationality (NAT); high school major (HSM); score in university entrance examination; course scheduling; course load (CL); instructor effectiveness (IE); studying hours (SH); and personal problems are just a little examples of factors that have been utilized in previous research to examine SP (Al- Rashed, 2001; Guney, 2009; Al-Twajiry, 2010 ; Uyar and Gungörmüş, 2011; Garkaz et al., 2011; Maksy, 2014; Al-Munais, 2014; Papageorgiou and Halabi, 2014; Maksy and Wagaman, 2015; Jansen and de Villiers, 2016 ; Benligiray and Ahmet, 2017; Shaffee et al., 2019).

Although several previous research have investigated the factors that are associated with students' AP during their undergraduate studies, however, the majority of the studies have been conducted in an international context while focusing on developed countries, such as United States of America and Europe (Garkaz et al., 2011) with very little known about the factors that affect AS performance in developing countries as Lebanon (Papageorgiou and Halabi, 2014). As the dynamics of improving accounting students' AP in a developing country with diverse cultural backgrounds may demand a different approach compared to a developed country as developed countries are putting more resources into universities – pure spending, reduced class sizes, increased instructor training, and the like which will lead to improvements in SP (Ahinful et al., 2019). Moreover, these studies have resulted in contradictory findings about the nature of the association between the factors and the AP.

Hence, as the issue of non-success rates among the students who have registered in accounting major is of great interest, and in light of growing trends in worldwide education and the variances in economic and socio-cultural factors between countries, specifically that of the developed and developing countries, there is a need for context-specific research to investigate the factors that hinder the success of AS especially in developing countries like Lebanon as there is no unified higher educational model in Lebanon (Hakim and Bizri, 2015). Determining the potential factors of academic success of students is vigorous to lecturers, institutions and

students, in several respects. It might have numerous implications on teaching performance and admissions policies.

Driven by the lack of studies on this issue in Lebanon, and the call from previous research about the need to replicate previous studies in a different environment at different points in time and extend the variables rather than limiting it to background demographic characteristics (Byrne and Flood, 2008); this research aims to identify and provide more evidence points to the factors affecting SP majoring in accounting at BAU in Lebanon. Consequently, this research aims to answer the question, “what are the factors that impact the AP of students majoring in accounting?”

Conducting this research in a developing country as Lebanon can be an attainment and contribution to the previous research. Most previous studies consider five or six factors affecting students’ AP in accounting courses. This research is one of the little studies to examine nineteen factors affecting students’ AP simultaneously. Moreover, all of the existing studies of the factors affecting students’ AP in accounting are based on mainly developed countries; this is the first research investigating factors affecting students’ AP in accounting courses in a non-developed country setting as Lebanon. Thus, this research will add to the dearth of literature about this issue in Lebanon. Especially that the economic and socio-cultural factors which impact on the educational system differ significantly from those of the developed countries making the applicability of Western results difficult.

This research investigates this issue in Lebanon as a case study for a developing country that is incorporated with the international market. First, in terms of international students, Lebanon is the most attractive Arab country for HE before the Lebanese civil war. Second, Lebanon is a source of highly educated labor with fifty percent of Lebanese university graduates searching for jobs outside their country due to the labor market in their country cannot absorb them. Arab countries look for the Lebanese labor market for all kinds of employees. Third, the Lebanese accounting profession is intertwined with international bodies since the Lebanese Association of Certified Public Accountants is a member of the International Federation of Accountants. All of these issues put Lebanon in the heart of the global job market, making it an interesting case study for investigating the factors affecting the AP of the students (Majzoub and Aga, 2015).

The subsequent section presents the theoretical framework. Section three discusses the related literature review about the topic. Section four explains the research design utilized in this research. Section five presents the research findings while section six, presents the conclusions to this research along with research limitations, proposals for future studies and research recommendations.

## 2. THEORETICAL FRAMEWORK

Universities continuously face the challenge of providing evidence of their effectiveness to the society and international HE. The top management in universities is concerned about the SP to show their usefulness for the international community especially, the rate of graduated students has served as an indicator of the usefulness of the universities in several countries (Islam and Tasnim, 2021). Hence, AP is imperative for an institution for the good outcomes that lead to the job performance in the future (Kuncel et al., 2005). Consequently, improvement in AP especially for the AS has always been an essential aim of the “education community” and a highest priority of accounting educators (Al-Munais, 2014).

Several previous studies have discussed the factors affecting students’ AP. Some studies consider individuals’ internal characteristics such as intelligence and self-concept and some other studies consider external characteristics such as family and social status (Garkaz et al., 2011). Some studies have confirmed the positive relationship between the factors and AP (Arthur and Everaert, 2012; Wally-Dima and Mbekomiza, 2013). Other studies have confirmed the negative relationship (Roos, 2009; Li et al., 2010). While other studies have confirmed no significant effect of the factors on the AP (Guney, 2009; Al-Twajjry, 2010).

Given this fact, there are a number of theories that have been postulated to explain the factors that affect students’ AP. For instance, expectancy theory revealed that SP is influenced

by the “attractiveness of perceived future rewards” and likelihood that their effort will lead to these rewards. Therefore, motivating students to improve their AP depends on their belief that higher performance will result from their effort which is associated with future desired benefits (Geiger and Cooper, 1995).

Choice theory argued that students take ownership and responsibility for their actions. Therefore, to ensure success in an academic environment, the student should be provided with relevant information and allowed the freedom to make their own choice of subjects or course of study rather than being compelled Glasser (1998).

Interest theory demonstrated that “interest among individuals is conceived as depositions which are related to mental schemata linking the activity or object of interest with positive emotional experiences and the personal value system” (Ahinful et al., 2019: 559). Interest is one of the relevant factors of academic success and it serves as a motivator for long working hours on tasks.

Theory of reasoned action postulated that “an individual’s behavior is determined by his/her behavioral intention to perform it. The behavioral intention in itself is determined by the attitudes and subjective norms. The attitude towards a behavior is a function of the expected consequences or outcomes of behavior (beliefs) and the evaluations of these expected consequences or outcomes” (Ahinful et al., 2019: 559). The theory was extended by to the theory of planned behavior by including perceived behavioral control (Ajzen, 1988).

### 3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The AP of students at most universities in the world today has recently come under scrutiny. Consequently, numerous research have tried to investigate the factors related to AS success in HE (Jansen and de Villiers, 2016; Benligiray and Ahmet, 2017; Shaffee et al., 2019). However, previous research into which factors affect AP of the students have shown results that are mixed and inconsistent (Papageorgiou and Halabi, 2014). Previous research has also revealed that several factors could affect AP of the students, however the literature does not always agree on what set of factors influence students’ AP (D’Souza and Maheshwari, 2010).

Hence, so as to contribute to the accounting literature, this research investigates nineteen commonly variables and their effect on SP. These variables were chosen based on a survey of prior studies on the topic. In order to restrict the number of factors, only those involved in more than one research, and which verified to be significantly related to SP be chosen. These factors are GEN, AG, LG, HSG, MG, CA, HSA, PTW, HSM, SH, SG, IAG, NAT, SIAF, MS, EA, CS, CL, and IE.

#### 3.1 Gender

Several studies have shown evidence of a positive relation between GEN variation and SP in AC (Tho, 1994; Gammie et al., 2003; Gracia and Jenkins, 2003; Vickers et al., 2003; Alfian and Othman, 2005; Baard et al. 2010; Garkaz et al., 2011; Arthur and Everaert, 2012; Wally-Dima and Mbekomiza, 2013; Schmidt and Wartick, 2014; Al- Munais, 2014). The results revealed that female students (FS) had superior performance than male students (MS). More specifically, the results indicated that FS are more outstanding than MS. In contrast to these studies, Doran et al. (1991); De Lange et al. (1997); Koh and Koh (1999); Brahmasrene and Whitten (2001); Weil et al. (2004); Jansen and de Villiers (2016) found that MS who enrolled in an accounting program accomplish better than FS during their education. The results show that men have the better accomplishment of learning outcomes than females. On the other hand, Buckless et al.(1991); Gist et al. (1996); Keef and Roush (1997); Grudnitski (1997); Jackling and Anderson (1998); Naser and Peel (1998); Duff (2004); Paver and Gammie (2005); McDowall and Jackling (2006); Byrne and Flood (2008); Guney (2009); Roos (2009); Halabi et al. (2010); Van Wyk (2011); Papageorgiou and Halabi (2014) as well as Benligiray and Ahmet (2017) reported that there was no significant association between GEN and SP in AC. This assertion is conveyed in hypothesis one:

*H<sub>1</sub>: There is a significant relationship between GEN and AP in AC in Lebanon.*

### 3.2 Age

Many researchers studied the relation between students' AG and SP in AC and the results were mixed. For instance, Koh and Koh (1999); Müller et al. (2007); Roos (2009); Li et al. (2010); Van Wyk (2011) and Jansen and de Villiers (2016) found a negative association between students' AG and performance. These studies revealed that younger students perform better in an accounting program and older students had a lower grade. In contrast to these studies, Bartlett et al. (1993); Brahmašreene and Whitten (2001); Lane and Porch (2002); Guney (2009) as well as Al- Munais (2014) found that AG has a significantly positive impact on SP. They demonstrated that mature students perform superior in AC. However, Al- Rashed (2001); Gammie et al. (2003); Triki et al. (2012); Papageorgiou and Halabi (2014); Papageorgiou (2017) as well as Benligiray and Ahmet (2017) reported that AG does not affect SP. Based on that, hypothesis two is developed as follow:

*H<sub>2</sub>: There is a significant relationship between AG and AP in AC in Lebanon.*

### 3.3 Language

Several previous studies have tried to investigate the association between LG proficiency and SP in AC. The findings of these studies are mixed. Such as Feast (2002); Gerber et al. (2005); Krausz et al. (2005); Wongtrirat (2010); Sahragard et al. (2011); Van Wyk (2011); Venter and Villiers (2013); Martirosyan et al. (2015); and Ghenghesh (2015) found a significant positive relation between English LG and SP. The positive relationship implied that the higher the students' English LG proficiency, the higher the level of overall AP. Students whose first LG is English will surpass their colleagues in AC. However, other studies as De Lange et al. (1997); Jackling and Anderson (1998); Kerstijens and Nery (2000); Roos (2009); Jansen and de Villiers (2016) and Shaffee et al. (2019) found no significant relation between LG proficiency and SP. This implies that LG seemed to be a non significant factor in the variability of SP. It can, therefore, hypothesis three is developed:

*H<sub>3</sub>: There is a significant relationship between EL proficiency and AP in AC in Lebanon.*

### 3.4 High School Grades

The findings of the studies that investigated the relation between HSG and SP are mixed. Doran et al. (1991); Brasfield et al. (1993); Gist et al. (1996); Von Allmen (1996); Trine and Schellenger (1999); Marcal and Roberts (2000); Al- Rashed (2001); Duff (2004); Byrne and Flood (2008); Guney (2009); Al-Twajjry (2010); Uyar and Güngörmüş (2011); and Jansen and de Villiers (2016) found a significant positive relation between HSG and accounting performance of the students. These studies confirmed that students with a higher pre-university performance do significantly superior at the university as successful students may be considered as intelligent. Contrarily, certain studies, such as those by Grudnitski (1997) as well as Brahmašreene and Whitten (2001), found no significant association between HSG and accounting performance of the students. Hence, this claim is expressed in hypothesis four as follow:

*H<sub>4</sub>: There is a significant relationship between HSG and AP in AC in Lebanon.*

### 3.5 Mathematics Grade

Numerous previous studies have investigated the effect of prior experience in mathematical qualification on SP in AC. The results are questionable. For instance, Gul and Fong (1993); Tho (1994); Anderson et al. (1994); Gist et al. (1996); Wong and Chia (1996); Koh and Koh (1999); Trine and Schellenger (1999); Lee (1999); Kealey et al. (2005); Guney (2009); Fedoryshyn et al. (2010); Al-Twajjry (2010); Garkaz et al. (2011); Uyar and Güngörmüş (2011); Seow et al. (2014); Papageorgiou and Halabi (2014); and Maksy (2014) found a positive significant relation between students' MG and their performance in AC. These studies confirm that students with a stronger mathematics background accomplish better. By contrast, Ely and Hittle (1990); Karim and Ibrahim (1992); Bartlett et al. (1993); Gist et al. (1996); Naser and Peel (1998); Kirk and Spector (2006); Maksy and Wagaman

(2015); Jansen and de Villiers (2016); and Benligiray and Ahmet (2017) found that mathematics knowledge is not associated with SP in AC. This leads to hypothesis five:

*H<sub>5</sub>: There is a significant relationship between MG and AP in AC in Lebanon.*

### 3.6 Class Attendance

Several previous research have advocated that CA is an imperative factor to assess SP (Romer, 1993; Hammen and Kelland, 1994; Marburger, 2001; Moore et al., 2003; Purcell, 2007; Ali et al., 2009; Guney, 2009; Uyar and Güngörmüş, 2011; Padurath et al., 2013; Lukkarinen et al., 2016; Shaffee et al., 2019). These studies found significant influence of CA on SP. Students who join more classes in AC are more expected to success and attain better grades. However, other research found CA does not significantly impact their performance (Frost and Fukami, 1997; Ledman and Kamuche, 2002; Al- Munais, 2014). Therefore, hypothesis six is set forth as follow:

*H<sub>6</sub>: There is a significant relationship between CA and AP in AC in Lebanon.*

### 3.7 High School Accounting

Prior studies demonstrated questionable confirmation as to whether finishing accounting at HS is beneficial for students registered for AC at university. For instance, Bartlett et al. (1993); Gul and Fong (1993); Tho (1994); Rohde and Kavanagh (1996); Naser and Peel (1998); Rankin et al. (2003); Hartnett et al. (2004); Al-Twajry (2005); Alcock et al. (2008); Cheung and Wong (2011); Papageorgiou and Halabi (2014); and Benligiray and Ahmet (2017) highlighted that there is a significant relation between students' HSA education and university accountancy attainment. Students who studied accounting at their school did better. On the other hand, several studies as Doran et al. (1991); Keef (1992); Jackling and Anderson (1998); Koh and Koh (1999); Lane and Porch (2002); Gammie et al. (2003); Byrne and Flood (2008); Guney (2009); Al-Twajry (2010); and Jansen and de Villiers (2016) cannot observe any significant effect of prior HSA knowledge on SP in AC. Students who studied an accounting course at HS did not have a diverse performance than students who did not study an accounting course. Based on that, hypothesis seven is developed as follow:

*H<sub>7</sub>: There is a significant relationship between HSA and AP in AC in Lebanon.*

### 3.8 Part Time Work

Previous studies indicated that there is no agreement as to whether working PT has a positive effect on SP. Lillydahl (1990); Maksy and Zheng (2008); Maksy (2014); Maksy and Wagaman (2015) revealed that working too many hours per week has no significant negative associations with SP. They are not disturbing the students and stopping them from earning HG in AC. Whereas, Stinebrickner and Stinebrickner (2003) as well as Lynn and Backmon (2006) found a significant negative association between PTW and SP, denoting that students who work PT during semester time achieve inferior in AC than do others. Hence, hypothesis eight is formed as follow:

*H<sub>8</sub>: There is a significant relationship between PTW and AP in AC in Lebanon.*

### 3.9 High School Major

The accounting education literature had inconsistent findings about the impact of HSM on SP. Some researchers as Ramadan and Quraan (1994); Al- Rashed (2001); Abdullah (2011) and Al- Munais (2014) confirmed that HSM is significantly and positively associated with SP in AC. Students who have taken an academic degree with science major in HS achieve higher than other students who have taken academic degree from humanities major. In contrast, Hallaq (2001) and Al-Twajry (2010) revealed that secondary school major had no influence on SP. This implies that there was no variance in the performance of students from scientific HS and those from other HS. Based on this argument, the following hypothesis nine is formulated:

*H<sub>9</sub>: There is a significant relationship between HSM and AP in AC in Lebanon.*

### 3.10 Studying Hours

The relationship between students' SH and accounting performance does not seem to have been explored regularly in the accounting literature. Didia and Hasnat (1998); Byrne et al. (2002); Davidson (2002); Krohn and O'Connor (2005); Guney (2009); as well as Grave (2011) demonstrated that there is a negative association between SH and performance. Studying more does not essentially lead to improved performance. However, Fejgin (1995); Al- Munais (2014); Mahinay and Villanueva (2017) cannot realize a significant association between SH and students' success in AC. SH do not always influence the AP and the grades of the students. Hence, hypothesis ten is stated as follow:

*H<sub>10</sub>: There is a significant relationship between SH and AP in AC in Lebanon.*

### 3.11 Statistics Grade

Previous research demonstrated that statistical information is probable to be required in order to comprehend some AC. Consequently, there may be a relation between SP in AC and earlier statistical information. Several researchers as Marcal and Roberts (2000); Brookshire and Palocsay (2005); Kirk and Spector (2006); Shaban (2015) as well as Benligiray and Ahmet (2017) approved that there is a significant positive relation between performance of the statistics course and the performance of AS. Thus, these findings support that students who did well in statistics were more successful in AC. These results contradict with the findings of Benligiray and Ahmet (2017) who conveyed that the statistical information of the students is not linked to AC success. This lead to the development of hypothesis eleven:

*H<sub>11</sub>: There is a significant relationship between SG and AP in AC in Lebanon.*

### 3.12 Introductory Accounting Grade

There is an expectation in the accounting literature that students' grades in accounting at certain level will be expressive of their performance at the consequent level. Fascinatingly, previous research have produced indecisive results relating to this factor. Grudnitski (1997); Trine and Schellenger (1999); Al- Rashed (2001); Brahmastre and Whitten (2001); Maksy and Zheng (2008); Al-Twaijry (2010); Van Wyk (2011); Maksy (2014); Maksy and Wagaman (2015); and Jansen and de Villiers (2016) found a positive and significant association between IAG and SP in AC. Grades in the first IA course are an explanatory power in predicting SP in advanced AC. Students with a higher accounting one grade are possible to do superior at accounting three. However, Doran et al. (1991) and Gist et al. (1996) found no significant association between IAG and their performance in advanced AC. Based on that description, hypothesis twelve is proposed as follow:

*H<sub>12</sub>: There is a significant relationship between IAG and AP in AC in Lebanon.*

### 3.13 Nationality

Previous studies state that SP could be associated with the origins of students' education systems. However, very few academic studies have tried to examine the influence of students' NAT on their GPA. For instance, Sue and Okazaki (1990); Al-Rashed (2001); Bachan and Reilly (2003); Rankin et al. (2003), Hartnett et al. (2004); and Harb and El-Shaarawi (2007) show a significant positive relationship between NAT and SP with higher performance reported for the international students. One exception is the result of Guney (2009), which show that national students accomplished superior in accounting than did their colleagues. On the other hand, Jackling and Anderson (1998) as well as Al Hajraf and Al Asfour (2014) found that country of origin does not significantly impact SP. Therefore, hypothesis thirteen is constructed as follow:

*H<sub>13</sub>: There is a significant relationship between NAT and AP in AC in Lebanon.*

### 3.14 Student Interest in Accounting Field

A number of studies have confirmed that one of the key factor that makes AS study tough and efficiently is their IAF (Romer, 1993; Gist et al., 1996; Guney, 2009). The studies of Arrington and Cheek (1990); King and Kotrlid (1995); Wijewardena and Rudkin (1999); Stinebrickner and Stinebrickner (2003); Guney (2009); as well as Garkaz

et al. (2011) confirmed the positive effect of SIAF on their AP. This implies that students fascinated in accounting have superior AP than non-fascinated students. More specifically, students forecasting to work in accounting field after graduation would perform superior than their colleagues would. Based on these results, hypothesis fourteen is suggested as follow:

*H<sub>14</sub>: There is a significant relationship between SIAF and AP in AC in Lebanon.*

### 3.15 Marital Status

The findings of the studies that investigated the relation between MS and AP are mixed. Eyer (1993); Lynn and Backmon (2006); Ekundayo (2010); Garkaz et al. (2011); Heirany et al. (2013); Amuda et al. (2016) proved that student's MS have no significant relationship with AP. However, Stern (1998); Robert et al. (1999); Boey (2002); Negy (2003); Yess (2009); Tambawal (2011); Al- Munais (2014); and Beard (2018) show significant variances in AP among AS based on MS. The results revealed that married students face more daily problems and troubles than non-married students, which might possibly deter AP. Based on these results, hypothesis fifteen is tested:

*H<sub>15</sub>: There is a significant relationship between MS and AP in AC in Lebanon.*

### 3.16 Extracurricular Activity

The students' participation in EA is always viewed as a reason for subsequently poor AP because they seem to be less committed in their study. Several researchers have confirmed that there is a negative relation between EA involvement and AP (Maloney and McCormick, 1993; Baucom and Lantz, 2001; Applegate and Daly, 2006; Suleman, 2014). The assumption is that if students are over-extended, injured or participate in too many activities that it may negatively impact their academic success and attendance. However, other researchers proved otherwise whereby the students' participation in EA inclines to have improved AP (Gerber, 1996; Whitley, 1999; Marsh and Kleitman, 2002; Pritchard and Wilson, 2005; Fujita, 2006; Reeves, 2008; Logan and Scarborough, 2008; Wang and Shiveley, 2009; Rivera, 2010; Seow et al. 2014). Students who entail in numerous types of EA are superior in AP than the students who are not entail. On the other hand, research conducted by Wooten (1998); Broh (2002); Baker (2008); Shamsudin et al. (2014); Nabilah et al. (2014) and Shaffee et al. (2019) show EA do not have any impact on students' AP. Based on this reasoning, hypothesis sixteen is developed as follow:

*H<sub>16</sub>: There is a significant relationship between EA involvement and AP in AC in Lebanon.*

### 3.17 Class Size

The effect of CS on SP has been studied in numerous fields and the findings of these research display diverse effect of CS on SP. For instance, Keil and Partell (1997); Berthelot et al. (2001); Toth and Montagna (2002); Murdoch and Guy (2002); Arias and Walker (2004); Asadullah (2005); Kamuche (2006); and Kokkelenberg et al. (2008) revealed a negative relation between performance and CS. Students that were in the smaller classes did superior on accounting tests than that were in the bigger classes. On the other hand, some researchers as Pascarella and Terenzini (1991); Hancock (1996); Hill (1998); Ngoboka and Schultz (2002) found no evidence that SP was influenced by CS. Consequently, based on the results of previous studies, hypothesis seventeen is formulated as follow:

*H<sub>17</sub>: There is a significant relationship between CS and AP in AC in Lebanon.*

### 3.18 Course Load

Previous studies on the effect of NCTPS on SP show mixed effect on student learning. Chan et al. (1997); Szafran (2001); Maksy and Zheng (2008); Al-Twajiry (2010); Maksy and Wagaman (2013); Maksy (2014); Gupta and Maksy (2014); Maksy and Wagaman (2015); Maksy and Rodriguez (2018); and Maksy and Yoon (2019) found no significant association between performance in AC and NCTPS. That is, CL is not disrupting the students and avoiding them from getting better grades in AC. Opposing to

common assumptions, students who take more credits tend to get higher GPAs. Whereas, Didia and Hasnat (1998) and Austin and Gustafson (2006) found a positive relation between NCTPS and grades. These results indicated that students who enroll for more credits incline to get better GPAs in AC. Thus, based on the mixed findings of previous studies, it seems reasonable to postulate hypothesis eighteen as follow:

*H<sub>18</sub>: There is a significant relationship between CL and AP in AC in Lebanon.*

### 3.19 Instructor Effectiveness

Several research studies as Tay (1994); Nasser and Peel (1998); Tucker et al. (2002); Ofoegbu (2004); Kherfi (2008); Boyd et al. (2009); De Paola et al. (2009); Baumert et al. (2010); Akinsolu (2010); Tatto et al. (2012); Blömeke et al. (2016) and Martí-Ballester (2019) have confirmed the positive association between IE and student' grades. They explain that the ineffectiveness of teachers in classroom could be responsible for the observable poor performance of students. Instructors' ability, attempt, motivation and teaching style has significant relationship with SP. Hence, based on these findings, hypothesis nineteen is developed as follow:

*H<sub>19</sub>: There is a significant relationship between IE and AP in AC in Lebanon.*

## 4. RESEARCH DESIGN

### 4.1 Research Population

The population utilized in this research is involved of students majoring in accounting (second-year and third- year AS) at the faculty of business administration at BAU in its three different campuses – Beirut, Debbieh and Tripoli- in the spring semester of 2019–2020 (Table:1).

**Table 1: Number of Accounting Students at BAU 2019-2020**

	Beirut	Debbieh	Tripoli
<b>Second -Year AS</b>	93	28	45
<b>Third -Year AS</b>	82	15	23
<b>Total Number of AS at Each Campus</b>	175	43	68
<b>Total Number of AS at BAU</b>	286		

Source: Moodle Platform

### 4.2 Sample Size

This research has selected AS of BAU in Lebanon (second-year and third- year) as the sample. The undergraduate AS are chosen because they have undergone the learning process over a few semesters and have under-performed in some accounting courses. Students who are in their early semesters may not have completed their studies in all related subjects and it would therefore be difficult to identify those who have under-performed. The survey was completed by 232 students from the accounting major at the university in its three different campuses (Table: 2); this sample represents 81% of the AS.

**Table 2: Sample Size**

	Beirut		Debbieh		Tripoli	
	No. of Questionnaires Distributed	No. of Questionnaires Filled	No. of Questionnaires Distributed	No. of Questionnaires Filled	No. of Questionnaires Distributed	No. of Questionnaires Filled
<b>Second -Year AS</b>	93	81	28	25	45	22
<b>Third -Year AS</b>	82	75	15	15	23	14
<b>Total Number of AS</b>	175	156	43	40	68	36

Source: Developed by the Researcher

### 4.3 Data Collection

The data was collected through mailing a questionnaire among students majoring in accounting at BAU in Lebanon in the spring semester of 2019– 2020. A list of students' email addresses was collected from the Moodle platform.

### 4.4 Research Instrument

For the research purpose, previous studies in the area of AP was studied and reviewed to develop a questionnaire to investigate factors that may impact accounting SP. The questionnaire comprises of 20 questions related to the factors influencing the AP of the students. These questions were adopted from prior research after editing the questions to be suitable for the research environment (Table: 3). The questionnaire content was validated by three accounting instructors of the BAU. The pilot study noted that respondents simply comprehended the questions and had no trouble in filling it in a proper duration. To measure the “reliability” and “internal consistency” of the questionnaire, “cronbach’s alpha” test was utilized. In this research, the cronbach’s alpha coefficient was 0.722; revealing reliability of the scales utilized. A cronbach’s alpha of 0.7 or more is considered satisfactory by furthestmost social science researchers (DeVellis, 2003).

### 4.5 Research Model and Variables

The multiple regression model of the research is defined as:

$$SAP = \beta_0 + \beta_1GEN + \beta_2AG + \beta_3HSG + \beta_4MG + \beta_5CA + \beta_6HAS + \beta_7PTW + \beta_8HSM + \beta_9SH + \beta_{10}SG + \beta_{11}IAG + \beta_{12}NAT + \beta_{13}SIAF + \beta_{14}MS + \beta_{15}MS + \beta_{16}EA + \beta_{17}CS + \beta_{18}CL + \beta_{19}IE + e$$

The measurement of each variable is summarised in Table: 3.

**Table 3: Measurement of Dependent and Independent Variables**

Variable	Measurement	References
<i>Dependent Variable</i>		
SAP: Students' Academic Performance	“Cumulative GPA of the student is between :1= less than 2; 2= 2 - 2.5; 3= 2.6 – 3; 4= 3.1 - 3.5; 5= 3.6 – 4”	Jansen and de Villiers (2016)
<i>Independent Variables</i>		
GEN: Gender	“1= if a student is male; 2= if a student is female”	Benligiray and Onay (2017)
AG: Age	“Age of a student is between:1= 18-20; 2= 21-23; 3= 24-26; 4= 27-29; 5= more than 29”	Benligiray and Onay (2017)
LG: Language	“Intensive English program level of a students is:1= INT101; 2= INT 102; 3= INT 103; 4= INT 104; 5= No INT”	Jansen and de Villiers (2016)
HSG: High School Grades	“HSG of a student is between:1= 0-20%; 2= 21-40%; 3= 41-60%; 4= 61-80%; 5= 81-100%”	Jansen and de Villiers (2016)
MG: Mathematics Grade	“MG of a student is between:1= 0-20%; 2= 21-40%; 3= 41-60%; 4= 61-80%; 5= 81-100%”	Benligiray and Onay (2017)
CA: Class Attendance	“CA of a student is between:1= 0-20%; 2= 21-40%; 3= 41-60%; 4= 61-80%; 5= 81-100%”	Shaffee et al. (2019)
HSA: High School Accounting	“1= if a student has taken a HSA course; 2= if a student has not taken a HSA course”	Jansen and de Villiers (2016)
PTW: Part Time Work	“1 = if a student had PTW during semester time; 2 = if a student had no PTW during semester time”	Maksy and Wagaman (2015)
HSM: High School Major	“1= if a student is in the humanities major; 2= if a student is in the scientific major”	Al- Munais, 2014
SH: Studying Hours	“Total number of SH a week is between:1 = 0-3; 2 = 4-7; 3 = 8-11; 4 = 12-15; 5 = 16-19”	Al- Munais, 2014
SG: Statistics Grade	“SG of a student is between:1= 0-59%; 2= 60-70%; 3= 71-80%; 4= 81-90%; 5= 91-100%”	Benligiray and Onay (2017)
IAG:	“Principles of Accounting grade of a student is between:1= 0-59%;	Jansen and de

Variable	Measurement	References
Introductory Accounting Grade	2= 60-70%; 3= 71-80%; 4= 81-90%; 5= 91-100%”	Villiers (2016)
NAT: Nationality	“1 = if the NAT of the student is Lebanese; 2 = if the NAT of the student is non – Lebanese”	Guney, 2009
SIAF: Student Interest in Accounting Field	“1= if a student has planned to work in accounting area after graduation; 2= if a student has not planned to work in accounting area after graduation”	Garkaz et al., 2011
MS: Marital Status	“1= if a student is single; 2= if a student is married”	Al- Munais, 2014
EA: Extracurricular Activity	“1= if a student is involved in any EA; 2= if a student is not involved in any EA”	Shaffee et al. (2019)
CS: Class Size	“Number of students enrolled in the accounting classes is between:1= 0-20; 2= 21-40; 3= 41-60; 4= 61-80; 5= more than 80”	Kokkelenberg et al. (2008)
CL: Course Load	“Number of credit hours a student take per semester is between:1= less than 9; 2= 9 -12; 3= 13- 15; 4= 16 – 18; 5= more than 18”	Maksy and Wagaman (2015)
IE: Instructor Effectiveness	“Student perceive of accounting professors is:1= very poor; 2= poor; 3= good; 4= very good; 5= excellent”	Martí-Ballester (2019)

Source: Developed by the Researcher

## 5. EMPIRICAL FINDINGS

### 5.1 Frequency Distribution

Table (4) displays the frequency distribution of the students who participated in this research.

**Table 4: Frequency Distribution**

Variable		Frequency	Percent
GEN	1	80	34.5
	2	152	65.5
AG	1	20	8.6
	2	176	75.9
	3	24	10.3
	4	12	5.2
LG	2	8	3.4
	3	12	5.2
	4	32	13.8
	5	180	77.6
HSG	3	12	5.2
	4	92	39.7
	5	128	55.2
MG	3	40	17.2
	4	52	22.4
	5	140	60.3
CA	2	4	1.7
	3	8	3.4
	4	32	13.8
	5	188	81
HSA	1	36	15.5
	2	196	84.5
PTW	1	32	13.8
	2	200	86.2
HSM	1	148	63.8
	2	84	36.2
SH	1	20	8.6
	2	64	27.6
	3	112	48.3
	4	32	13.8
	5	4	1.7

Variable		Frequency	Percent
SG	2	20	8.6
	3	28	12.1
	4	52	22.4
	5	132	56.9
IAG	2	4	1.7
	3	32	13.8
	4	44	19
	5	152	65.5
NAT	1	204	87.9
	2	28	12.1
SIAF	1	224	96.6
	2	8	3.4
MS	1	224	96.6
	2	8	3.4
EA	1	32	13.8
	2	200	86.2
CS	1	16	6.9
	2	48	20.7
	3	112	48.3
	4	40	17.2
	5	16	6.9
CL	2	16	6.9
	3	88	37.9
	4	124	53.4
	5	4	1.7
IE	3	28	12.1
	4	72	31
	5	132	56.9
SAP	2	16	6.9
	3	40	17.2
	4	48	20.7
	5	128	55.2

Source: SPSS (20) Outputs

Table (4) indicates that the sample was embraced of 80 males (34.5%) and 152 females (65.5%). 75.9% of the students were between 21 and 23 years old. Most of the students (77.6%) have no need to get intensive English LG program. The results indicate that their English LG proficiency is at a high level. 55.2% of the students attained a school grade between 81 and 100%. This indicates that the students have HS cumulative grade point averages. 60.3% of the students attained a MG between 81 and 100%. This implies that the surveyed students are excellent math students. The findings also demonstrate that more than 81% of the students documented between 81 to 100% presence in classes. Few students (36) have studied accounting in HS. Moreover, few students (32) rely on PT jobs while at university to fund their studies. The results show that 148 students (63.8%) majored in "humanities" in HS, while only 84 students (36.2%) had a "scientific" major in HS. Further, the highest number of students (112) devotes 8 to 11 hours of study time per week. Also, 56.9% of the students attained a SG between 91 and 100%. This implies that the surveyed students are excellent statistics students. Besides, 65.5% of the students surveyed attained a principles of accounting grade between 91 and 100%. This implies that the surveyed students got high grades in principles of accounting. In addition, among the total students, 204 students were Lebanese. 96.6% of the surveyed students have planned to work in accounting area after graduation. As well as, among the total of 232 students, only 8 (3.4%) were married as contrasted with 224 (96.6%) unmarried. Likewise, the results show that only 13.8% of the students were involved in any curricular activities. Similarly, 17.2% of the students enrolled in the accounting classes is between 41 to 61 students. This implies that the largest number of students in a classroom is 40. In the same vein, the highest number of students (53.4%) takes 16 to 18 credit hours per semester. Additionally, 56.9% of the

students perceived that the accounting professors are excellent, 31% perceived them very good and 12.1% perceived them as good. This means that the students are satisfied to the accounting professors teaching. Finally, the results show that only 6.9% of students attained a CGPA between 2.00 and 2.5. Also, 17.2% of the students attained a CGPA between 2.6 and 3. 20.7% of the students attained a CGPA between 3.1 and 3.5. Whereas, the majority of the students 55.2% attained a CGPA above 3.50.

## 5.2 Descriptive Statistics

Table (5) summarizes the basic descriptive statistics for the variables.

**Table 5: Descriptive Statistics**

	Minimum	Maximum	Mean	Std. Deviation
GEN	1	2	1.6552	0.47634
AG	1	4	2.1207	0.61939
LG	2	5	4.6552	0.73389
HSG	3	5	4.5	0.5958
MG	3	5	4.431	0.76982
CA	2	5	4.7414	0.60475
HAS	1	2	1.8448	0.36285
PTW	1	2	1.8621	0.34557
HSM	1	2	1.3621	0.48164
SH	1	5	2.7241	0.86876
SG	2	5	4.2759	0.98109
IAG	2	5	4.4828	0.79482
NAT	1	2	1.1207	0.32647
SIAF	1	2	1.0345	0.18286
MS	1	2	1.0345	0.18286
EA	1	2	1.8621	0.34557
CS	1	5	2.9655	0.96637
CL	2	5	3.5	0.65134
IE	3	5	4.4483	0.70059
SAP	2	5	4.2414	0.97253

Source: SPSS (20) Outputs

Table (5) reveals that the average students appear to be female, young, Lebanese, unmarried and with English as the first language. They appear to have obtained an excellent high school grades especially for mathematics and statistics courses and they have completed high school accounting with humanities major. Furthermore, the average students appear to have not involved in any curricular activities. They concentrated in joining classes, studying several hours per day, registering high number of credits per semester. Moreover, they did not work in part time jobs while they are at university. Besides, the students appear to plan to work in accounting area after graduation. The students were perceived that the number of students in the class is fair and that the performance of the accounting professors are excellent.



**Table 7: ANOVA<sup>a</sup>**

	<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>1</b>	<b>Regression</b>	197.371	19	10.388	104.316	.000 <sup>b</sup>
	<b>Residual</b>	21.111	212	.100		
	<b>Total</b>	218.483	231			

a. Dependent Variable: SP  
b. Predictors: (Constant), IE, CL , SIAF, PTW , CA , HSG, EA, MS , HSM , NAT , GEN, LG, SH, IAG, AG, HSA, CS , MG, SG

Source: SPSS (20)

**Table 8: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.950 <sup>a</sup>	.903	.895	.31557

a. Predictors: (Constant), IE, CL , SIAF, PTW , CA , HSG, EA, MS , HSM , NAT , GEN, LG, SH, IAG, AG, HSA, CS , MG, SG

Source: SPSS (20)

Table (9) sums up the findings of the multiple regression analysis.

**Table 9: Regression Analysis**

<b>Model</b>	<b>B</b>	<b>t</b>	<b>Sig.</b>
(Constant)	-1.393	-2.356	.019
Gender	.155	2.809	.005
Age	-.100	-2.150	.033
Language	.080	2.013	.045
High School Grades	-.104	-2.008	.046
Mathematics Grade	-.033	-.651	.516
Class Attendance	.197	3.974	.000
High School Accounting	.101	1.267	.206
Part Time Work	.360	4.897	.000
High School Major	-.009	-.166	.868
Studying Hours	.005	.165	.869
Statistics Grade	.648	14.453	.000
Introductory Accounting Grade	.370	7.716	.000
Nationality	-.039	-.475	.635
Student Interest in Accounting Field	.216	1.463	.145
Marital Status	.082	.624	.534
Extracurricular Activity	-.244	-3.100	.002
Class Size	-.027	-.826	.410
Course Load	.073	1.705	.090
Instructor Effectiveness	-.084	-1.897	.059

a. Dependent Variable: SP  
Source: SPSS (20) Outputs

As shown in table (9) the coefficient of GEN is positive and significant ( $B=0.155$ ;  $p$  value =  $0.005 < 0.05$ ). This result demonstrates that there is a significant positive relation between GEN and SAP. Thus,  $H_1$  is supported. This result indicated that MS outcompete FS in accounting performance. This result can be interpreted as since accounting is a “mathematics-based course needing quantitative and numerate skills”, it is more probable that MS would outdo their FS in the accounting program (Gammie et al., 2003). This result

is in line with the previous studies of Doran et al. (1991); De Lange et al. (1997); Koh and Koh (1999); Brahmasrene and Whitten (2001); Weil et al. (2004); and Jansen and de Villiers (2016). However, the result contrast with the previous studies of Tho (1994); Gammie et al. (2003); Gracia and Jenkins (2003); Vickers et al. (2003); Alfian and Othman (2005); Baard et al. (2010); Garkaz et al. (2011); Arthur and Everaert (2012); Wally-Dima and Mbekomiza (2013); Schmidt and Wartick (2014); and Al- Munais (2014) who demonstrated that FS had superior performance outcomes than MS. As well as, it opposes the previous studies of Buckless et al.(1991); Gist et al. (1996); Keef and Roush (1997); Grudnitski (1997); Jackling and Anderson (1998); Naser and Peel (1998); Duff (2004); Paver and Gammie (2005); McDowall and Jackling (2006); Byrne and Flood (2008); Guney (2009); Roos (2009); Halabi et al. (2010); Wyk (2011); Papageorgiou and Halabi (2014) and Benligiray and Ahmet (2017) who conveyed that there was no significant relation between GEN and SAP.

The coefficient of AG is negative and significant ( $B=-0.1$ ;  $p \text{ value}=0.033<0.05$ ). This result points out that there is a significant negative relation between AG and SAP. Thus,  $H_2$  is supported. This result confirms with the previous studies of Koh and Koh (1999); Müller et al. (2007); Roos (2009); Li et al. (2010); Wyk (2011) and Jansen and de Villiers (2016). This result proved that newer students outdid older students in accounting exams. This variance might be owing that older students can possibly find it harder to settle down to repetitive examinations. Conversely, the result contradicts with the earlier studies of Bartlett et al. (1993); Brahmasrene and Whitten (2001); Al- Rashed (2001); Lane and Porch (2002); Gammie et al. (2003); Guney (2009); Triki et al. (2012); Al- Munais (2014); Papageorgiou and Halabi (2014); Papageorgiou (2017); and Benligiray and Ahmet (2017) who verified that older students are anticipated to outdo their younger colleagues.

The coefficient of LG is positive and significant ( $B=0.08$ ;  $p \text{ value}=0.045<0.05$ ). This result reveals that there is a positive significant relationship between LG and SAP. Thus,  $H_3$  is supported. This result is in line with the results of Feast (2002); Gerber et al. (2005); Krausz et al. (2005); Wongtrirat (2010); Sahragard et al. (2011); Van Wyk (2011); Venter and Villiers (2013); Ghenghesh (2015); Martirosyan et al. (2015); and Ghenghesh (2015). This result demonstrated that the advanced the English proficiency of students on admission to the university, the superior they accomplished in their AC. However, the result contradicts the previous studies of De Lange et al. (1997); Jackling and Anderson (1998); Kerstijens and Nery (2000); Roos (2009); Jansen and de Villiers (2016) and Shaffee et al. (2019) who found that LG is an insignificant factor in the variability of SP in AC.

The coefficient of HSG is negative and significant ( $B=-0.104$ ;  $p \text{ value}=0.046<0.05$ ). This result shows that there is a significant negative relation between HSG and SAP. Thus,  $H_4$  is supported. It was surprising to see that the relationship between the grades of students at HS and their AP in AC was negative. The result indicated that HS GPA scores measure at most a slight set of the abilities and skills that students want to succeed in university and students can prepare for these exams in slight ways that may not translate into improved preparation to succeed in university in courses such as AC. This result contradicts with earlier research of Doran et al. (1991); Brasfield et al. (1993); Gist et al. (1996); Von Allmen (1996); Trine and Schellenger (1999); Marcal and Roberts (2000); Al- Rashed (2001); Duff (2004); Byrne and Flood (2008); Guney (2009); Al-Twajry (2010); Uyar and Güngörmüş (2011); and Jansen and de Villiers (2016) that show HS GPA is better forecaster of SP at the university. In the same vein, the result disagrees with the results of Grudnitski (1997) and Brahmasrene and Whitten (2001) who found no significant relation exist between HSG and accounting performance of the students.

The coefficient of MG is negative and insignificant ( $B=-0.033$ ;  $p \text{ value}=0.516>0.05$ ). This result shows that there is an insignificant relation between MG and SAP. Thus,  $H_5$  is not supported. This finding is compatible with prior studies of Ely and Hittle (1990); Karim and Ibrahim (1992); Bartlett et al. (1993); Gist et al. (1996); Naser and Peel (1998); Kirk and Spector (2006); Maksy and Wagaman (2015); Jansen and de Villiers (2016); and Benligiray and Ahmet (2017). The result points out that mathematics knowledge is not allied to the SP in AC. More specifically, there was no difference between the AP of

students in AC irrespective of their level of prior knowledge in mathematics. Alternatively, the result disagrees with the findings of the previous studies of Gul and Fong (1993); Tho (1994); Anderson et al. (1994); Gist et al. (1996); Wong and Chia (1996); Koh and Koh (1999); Trine and Schellenger (1999); Lee (1999); Kealey et al. (2005); Guney (2009); Fedoryshyn et al. (2010); Al-Twajry (2010); Garkaz et al. (2011); Uyar and Güngörmüş (2011); Seow et al. (2014); Papageorgiou and Halabi (2014); and Maksy (2014) who found a positive relation between students' MG and their performance in AC.

The coefficient of CA is positive and significant ( $B=0.197$ ;  $p \text{ value}=0.000<0.05$ ). This result reveals that there is a significant positive relation between CA and SAP. Thus,  $H_6$  is supported. This result is in line with the results of several studies of Romer (1993); Hammen and Kelland (1994); Marburger (2001); Moore et al. (2003); Purcell (2007); Ali et al. (2009); Guney (2009); Uyar and Güngörmüş (2011); Padurath et al. (2013); Lukkarinen et al. (2016) and Shaffee et al. (2019). The result stated that if the students are committed in attending their accounting lectures; that will improve student's performance in AC. However, the result confutes the result of the previous studies of Frost and Fukami (1997); Ledman and Kamuche (2002); and Al- Munais (2014) who found that CA does not affect SAP.

The coefficient of HSA is positive and insignificant ( $B=0.101$ ;  $p \text{ value}=0.206>0.05$ ). This result shows that there is an insignificant relation between HSA and SAP. Thus,  $H_7$  is not supported. This finding approved earlier research of Keef (1992); Jackling and Anderson (1998); Koh and Koh (1999); Lane and Porch (2002); Gammie et al. (2003); Byrne and Flood (2008); Guney (2009); Al-Twajry (2010); and Jansen and de Villiers (2016). This result postulates that past comprehension of accounting is not significantly associated with the SAP in AC. The absence of the relationship between HSA and SP in the AC should help dismiss the insight that it is hard for AS to do well in AC at university if they have not studied accounting in HS. Furthermore, this finding suggests that students who have studied accounting in HS should not be excluded from first year AC, as such students do not achieve superior than other students in these AC. On the other hand, this result is not consistent with the findings of previous studies of Bartlett et al. (1993); Gul and Fong (1993); Tho (1994); Rohde and Kavanagh (1996); Naser and Peel (1998); Rankin et al. (2003); Hartnett et al. (2004); Al-Twajry (2005); Alcock et al. (2008); Cheung and Wong (2011); Papageorgiou and Halabi (2014); and Benligiray and Ahmet (2017) who stressed that there is a relation between students' pre-university accounting education and university accountancy success.

The coefficient of PTW is positive and significant ( $B=0.360$ ;  $p \text{ value}=0.000<0.05$ ). This result indicates that there is a significant positive relation between PTW and SAP. Thus,  $H_8$  is supported. This result does not support the previous studies of Stinebrickner and Stinebrickner (2003) and Lynn and Backmon (2006) who found a negative association between PTW and SP as well as does not support the results of Lillydahl (1990); Maksy and Zheng (2008); Maksy (2014) and Maksy and Wagaman (2015) who found that there is no association between PTW and SP. Thus, this result indicated that student occupation can be an accompaniment to education because of the other skills, abilities and knowledge gotten while working. Hence, linking study and PTW may provide students the chance to apply in practice what they have acquired a knowledge in university (Geel and Backes-Gellner, 2012).

The coefficient of HSM is negative and insignificant ( $B=-0.009$ ;  $p \text{ value}=0.868>0.05$ ). The result shows that there is an insignificant relationship between HSA and SAP. Thus,  $H_9$  is not supported. This finding verified earlier research of Wael (2001) and Al-Twajry (2010). This indicated that no effect of secondary school branch toward students' college performance in AC. This postulates that even though some students do not have any accounting background, they are in the same motives, expectations and preparedness to get well achievement at college. This result is in opposition to the prior research of Ramadan and Quraan (1994); Al- Rashed (2001); Abdullah (2011) and Al-Munais (2014) who confirmed that students who have graduated with "science" major in HS achieve superior than other students graduated from "humanities" major.

The coefficient of SH is positive and insignificant ( $B=0.005$ ;  $p \text{ value}=0.869>0.05$ ). This result shows that there is an insignificant relationship between SH and SAP. Thus,  $H_{10}$  is not supported. This result is alike to the earlier studies of Fejgin (1995); Al- Munais (2014); and Mahinay and Villanueva (2017). This result contradicts with the widely held belief that if student works hard that results in academic success and that idleness and postponement eventually end in academic failure. This indicates that SH will have no impact on the AP of the students because students vary in skill and ability. On the other hand, this result disagrees with the results of Didia and Hasnat (1998); Byrne et al. (2002); Davidson (2002); Krohn and O'Connor (2005); Guney (2009); as well as Grave (2011) who demonstrated that there is a negative relation between SP and SH.

The coefficient of SG is positive and significant ( $B=0.648$ ;  $p \text{ value}=0.000<0.05$ ). This result shows that there is a significant positive relation between SG and SAP. Thus,  $H_{11}$  is supported. This result corroborate with the results of numerous studies of Marcal and Roberts (2000); Brookshire and Palocsay (2005); Kirk and Spector (2006); Shaban (2015) and Benligiray and Onay (2017). The result indicated that SG have a significant positive effect on the AP of the AS. This is mainly due to accounting has close relationship with statistics. Accountants nowadays utilized "statistical models, computers and operation research techniques". All these necessitate understanding of statistics.

The coefficient of IAG is positive and significant ( $B=0.370$ ;  $p \text{ value}=0.000<0.05$ ). This result indicates that there is a significant positive relationship between IAG and SAP. Thus,  $H_{12}$  is supported. This result is comparable to the results of Grudnitski (1997); Trine and Schellenger (1999); Al- Rashed (2001); Brahmasrene and Whitten (2001); Maksy and Zheng (2008); Al-Twajry (2010); Wyk (2011); Maksy (2014) and Maksy and Wagaman (2015). This result inferred that SP in their first accounting course might be a forecaster of performance of all accounting fundamental courses. In opposition, this result disagree with the findings of the previous studies of Doran et al. (1991) and Gist et al. (1996) who found no relationship exist between IAG and SP in advanced AC.

The coefficient of NAT is negative and insignificant ( $B=-0.039$ ;  $p \text{ value}=0.635>0.05$ ). This result shows that there is an insignificant relationship between NAT and SAP. Thus,  $H_{13}$  is not supported. This result is corresponding to the results of the previous studies of Jackling and Anderson (1998) and Al Hajraf and Al Asfour (2014). This result shows that NAT of students has no effect on their AP. It seems plausible that the country of origin of the students does not affect their AP because the ability of the students to meet up with their studies depends on the students themselves whether they are home students or foreign. On the other hand, the result disagrees with the results of Sue and Okazaki (1990); Al- Rashed (2001); Bachan and Reilly (2003); Rankin et al. (2003), Hartnett et al. (2004) and Harb and El-Shaarawi (2007) who reported a significant positive relation between NAT and SAP.

The coefficient of SIAF is positive and insignificant ( $B=0.216$ ;  $p \text{ value}=0.145>0.05$ ). This result shows that there is an insignificant relationship between SIAF and SAP. Thus,  $H_{14}$  is not supported. Unexpectedly, this result hold the opposite point of view of the previous studies of Arrington and Cheek (1990); King and Kotrlid (1995); Wijewardena and Rudkin (1999); Stinebrickner and Stinebrickner (2003); Guney (2009) as well as Garkaz et al. (2011) who demonstrated a positive relation exist between SIAF and their AP. This unpredictable result can be referred to the method of studying with the objective of attaining the maximum possible grades by the students even though they do not actually have curiosity in the subject matter educated (Muda et al., 2013).

The coefficient of MS is positive and insignificant ( $B=0.082$ ;  $p \text{ value}=0.534>0.05$ ). This result shows that there is an insignificant relationship between MS and SAP. Thus,  $H_{15}$  is not supported. This result is in line with the earlier studies of Eyer (1993); Lynn and Backmon (2006); Ekundayo (2010); Garkaz et al. (2011); Heirany et al. (2013); and Amuda et al. (2016) who indicated that MS was not found to be a relevant predictor of AS' achievement. On the other hand, the result was against the result of studies of Stern (1998); Robert et al. (1999); Boey (2002); Negy (2003); Yess (2009); Tambawal (2011); Al-

Munais (2014) and Beard (2018) who show that the MS of the AS affect their AP. Thus, marriage was not concluded to be necessarily the cause of the differences in SP.

The coefficient of EA is negative and significant ( $B=-0.244$ ;  $p \text{ value}=0.002<0.05$ ). This result indicates that there is a significant negative relation between EA and SAP. Thus,  $H_{16}$  is supported. This result is akin to the findings of the previous studies of Maloney and McCormick (1993); Baucom and Lantz (2001); Applegate and Daly (2006); and Suleman (2014). This result supports the conclusion that involvement in EA outside of the class can lead to decline AP. This is mainly due to the time students devote to EA will eventually disturb from academic work which can negatively influence AP. Contrary, this result does not support the studies of Gerber (1996); Whitley (1999); Marsh and Kleitman (2002); Pritchard and Wilson (2003); Fujita (2006); Reeves (2008); Logan and Scarborough (2008); Wang and Shiveley (2009); Rivera (2010) and Seow et al. (2014) who found that students who entail in several types of EA are better in AP than the students who are not entailed.

The coefficient of CS is negative and insignificant ( $B=-0.027$ ;  $p \text{ value}=0.410>0.05$ ). This result indicates that there is an insignificant relationship between CS and SAP. Thus,  $H_{17}$  is not supported. This result is matched with the earlier studies of Pascarella and Terenzini (1991); Hancock (1996); Hill (1998); and Ngoboka and Schultz (2002). Thus, there is no confirmation to accept the hypothesis that AP is superior for students registered in the normal section instead of the huge section. On the other hand, the result opposed the prior studies of Keil and Partell (1997); Berthelot et al. (2001); Toth and Montagna (2002); Murdoch and Guy (2002); Arias and Walker (2004); Asadullah (2005); Kamuche (2006); and Kokkelenberg et al. (2008) who confirmed a negative relation exist between SP and CS.

The coefficient of CL is positive and insignificant ( $B=0.073$ ;  $p \text{ value}=0.090>0.05$ ). This result shows that there is an insignificant relationship between CL and SAP. Thus,  $H_{18}$  is not supported. This result is approaching the studies of Chan et al. (1997); Szafran (2001); Maksy and Zheng (2008); Al-Twajjry (2010); Maksy and Wagaman (2013); Maksy (2014); Gupta and Maksy (2014); Maksy and Wagaman (2015); Maksy and Rodriguez (2018); and Maksy and Yoon (2019). The result indicates that student CL does not impact learning outcomes. In other words, there is no proof that SP was harmed when taking an 18 credit per semester. This result is in disagreement to the prior research of Didia and Hasnat (1998) and Austin and Gustafson (2006) who found a positive association between NCTPS and SP.

The coefficient of IE is negative and insignificant ( $B=-.084$ ;  $p \text{ value}=0.056>0.05$ ). This result shows that there is an insignificant relationship between IE and SAP. Thus,  $H_{19}$  is not supported. This result is contradicting the studies of Kennedy and Tay (1994); Nasser and Peel (1998); Tucker et al. (2002); Ofoegbu (2004); De Paola et al. (2009); Kherfi (2008); Boyd et al. (2009); Baumert et al. (2010); Akinsolu (2010); Blömeke et al. (2012); Tatto et al. (2012) and Martí-Ballester (2019) who have confirmed the positive association between IE and student' grades. This finding implied that students' grades do not mirror the quality of instructor because instructors' input is not the only factor that impacts student's academic achievement in universities.

To summarize, the key findings are abridged in table (10):

**Table 10: Summary of Findings**

Variable	Coefficient	Sig.	Hypothesis
Gender	Positive	Significant	Supported
Age	Negative	Significant	Supported
Language	Positive	Significant	Supported
High School Grades	Negative	Significant	Supported
Mathematics Grade	Negative	Insignificant	Not Supported
Class Attendance	Positive	Significant	Supported
High School Accounting	Positive	Insignificant	Not Supported

Part Time Work	Positive	Significant	Supported
High School Major	Negative	Insignificant	Not Supported
Studying Hours	Positive	Insignificant	Not Supported
Statistics Grade	Positive	Significant	Supported
Introductory Accounting Grade	Positive	Significant	Supported
Nationality	Negative	Insignificant	Not Supported
Student Interest in Accounting Field	Positive	Insignificant	Not Supported
Marital Status	Positive	Insignificant	Not Supported
Extracurricular Activity	Negative	Significant	Supported
Class Size	Negative	Insignificant	Not Supported
Course Load	Positive	Insignificant	Not Supported
Instructor Effectiveness	Negative	Insignificant	Not Supported

Source: Developed by the Researcher

## 6. CONCLUSIONS

This research investigated factors associated with SP in AC. The sample includes 232 students registered in the accounting program of BAU, Lebanon. In order to investigate the factors influencing SP in AC, prevailing literature was reviewed. Based on the preceding literature, nineteen variables were identified. The association between these nineteen variables and the SP in AC was analyzed by the multiple regression analysis. The findings pointed out that nine out of nineteen factors are significantly associated with SP in AC. MG, HSA, HSM, SH, NAT, SIAF, MS, CS, CL and IE are not significantly associated with SP. EA, HSG and AG has negative significant influence on SP. GEN, LG, CA, PTW, SG and IAG are all significantly positively related to SP in AC.

Consequently, this research adds value to the current literature on the academic performance in the accounting education context by recognizing the main factors that enhance the AP of students majoring in accounting. This research presents solid practical insights into the AP in accounting context in developing countries such as Lebanon. Hence, the results of this research are likely to help all parties, such as students, lecturers and program administrators to identify possible causes for further improvement such as revising student's intake policies and appropriate entry requirements to improve SP in accounting subjects.

This research is not without limitations. First, this research only examined nineteen variables on accounting SP. There are other variables such as family role in choosing major; ICPA; teaching methodology and personal problems that can be incorporated in future studies. Second, this research focuses on one private university (BAU) in examining the factors that may influence AS performance. So that the findings cannot be utilized to other universities. Perhaps, future research can enlarge the research by comprising numerous other universities. Third, the survey data collected was analyzed quantitatively. Future research should, consequently, apply a "qualitative approach" to examine the factors of AP. Fourth, the research examined only university in Lebanon and thus, the findings might not be generalized to universities in other evolving countries. Therefore, future studies may entail to conduct in other emerging countries.

In line with the findings, the research comes with a list of recommendations. As the result reveals males had superior performance than FS thus it is recommended that the responsible body at the university must give further prominence to enhance the AP of FS through adjusting special support to FS. In addition, the results of the research show the significance of the English LG acquisition. Thus, students must be taught the English LG from early age in order to have a strong English background. Where it will be much easier for them to study and understand the accounting courses better in the future, as the fact that accounting concepts are internationally unified by the International Accounting Standard Board. Moreover, a link between performance and CA may make HEI policy-makers feel that CA should be obligatory or seriously fortified. Besides, students with high non-attendance rate must be checked and essential actions would be taken against them to avoid any glitches that will harm their CGPA. The research found a positive association between working hours per week and SP, thus it is suggested that students be rein vigorated to work less than twenty hours per week so as they can

get higher grades and graduate earlier. Furthermore, students' grades in statistics appear to be robust factor of performance. So, it would be suitable if admission policies grabbed the significance of "numeracy" into concern. The research demonstrated that grades in the first preliminary accounting course are an explanatory power in predicting SP. Hence, it is recommended that prerequisite AC be completed for all AC to ensure the success of students in the advanced AC. Furthermore, the negative association between students' involvement in EA and AP may make university instructors to determine a "best fit" for participation in activities for the students that build on their interests and skill level. Besides, the results indicated that students with average grades have not done as well at University. Thus, the research recommends universities to not limit enrollment to students with high grades. Likewise, the results revealed that younger students perform better in an accounting program than older students, hence the research recommends the instructors to give special attention to adult students.

## REFERENCES

- Abdullah, A. M. (2011). Factors affecting business students' performance in Arab Open University: The case of Kuwait. *International Journal of Business and Management*, 6(5), 146.
- Ahinful, G. S., Tauringana, V., Bansah, E. A., & Essuman, D. (2019). Determinants of academic performance of accounting students in Ghanaian secondary and tertiary education institutions. *Accounting Education*, 28(6), 553-581.
- Ajzen, I. (1988). Attitudes, personality and behaviour. Chicago, IL: The Dorsey Press.
- Akinsolu, A. O. (2010). Teachers and Students' Academic Performance in Nigerian Secondary Schools: Implications for Planning. *Florida Journal of Educational Administration & Policy*, 3(2), 86-103.
- Alcock, J., Cockcroft, S., & Finn, F. (2008). Quantifying the advantage of secondary mathematics study for accounting and finance undergraduates. *Accounting & Finance*, 48(5), 697-718.
- Alfian, E., & Othman, N. (2005). Undergraduate students' performance: the case of University of Malaya. *Quality assurance in education*, 13(4), 329-343.
- Alhajraf, N. M., & Alasfour, A. M. (2014). The impact of demographic and academic characteristics on academic performance. *International Business Research*, 7(4), 92 – 100.
- Ali, N., Jusof, K., Ali, S., Mokhtar, N., & Salamat, A. S. A. (2009). The Factors Influencing Students' performance at Universiti Teknologi Mara Kedah, Malaysia. *Management Science and Engineering*, 3(4), 81-90.
- Almunais, T. A., & Alfraih, M. M. (2014). Determinants of Accounting Students Performance. *Business Education & Accreditation*, 6(2), 1-9.
- AL-Rashed, W. I. (2001). Determinates of accounting Students' performance in Kuwait University. *Economics and Administration*, 15(2), 3-17.
- Al-Twaijry, A. A. (2010). Student academic performance in undergraduate managerial-accounting courses. *Journal of Education for Business*, 85(6), 311-322.
- Amuda, B. G., Bulus, A. K., & Joseph, H. P. (2016). Marital status and age as predictors of academic performance of students of colleges of education in the North-Eastern Nigeria. *American Journal of Educational Research*, 4(12), 896-902.
- Anderson, G., Benjamin, D., & Fuss, M. A. (1994). The determinants of success in university introductory economics courses. *The Journal of Economic Education*, 25(2), 99-119.
- Applegate, C., & Daly, A. (2006). The impact of paid work on the academic performance of students: A case study from the University of Canberra. *Australian Journal of Education*, 50(2), 155-166.
- Arias, J. J., & Walker, D. M. (2004). Additional evidence on the relationship between class size and student performance. *The Journal of Economic Education*, 35(4), 311-329.
- Arrington, L. R., & Cheek, J. G. (1990). SAE Scope and Student Achievement in Agribusiness and Natural Resources Education. *Journal of Agricultural Education*, 31(2), 55-61.
- Arthur, N., & Everaert, P. (2012). Gender and performance in accounting examinations: Exploring the impact of examination format. *Accounting Education*, 21(5), 471-487.

- Asadullah, M. N. (2005). The effect of class size on student achievement: Evidence from Bangladesh. *Applied Economics Letters*, 12(4), 217-221.
- Austin, A. M., & Gustafson, L. (2006). Impact of course length on student learning. *Journal of economics and finance education*, 5(1), 26-37.
- Baard, R. S., Steenkamp, L. P., Frick, B. L., & Kidd, M. (2010). Factors influencing success in first-year accounting at a South African university: The profile of a successful first-year Accounting student. *South African Journal of Accounting Research*, 24(1), 129-147.
- Bachan, R., & Reilly, B. (2003). A comparison of academic performance in A-level economics between two years. *International Review of Economics Education*, 2(1), 8-24.
- Baker, C. N. (2008). Under-represented college students and extracurricular involvement: The effects of various student organizations on academic performance. *Social Psychology of Education*, 11(3), 273-298.
- Bartlett, S., Peel, M. J., & Pendlebury, M. (1993). From fresher to finalist: a three-year study of student performance in the first college course. *Accounting Education*, 2(2), 111-122.
- Baucom, C., & Lantz, C. D. (2001). Faculty attitudes toward male Division II student-athletes. *Journal of Sport Behavior*, 24(3), 265 - 277.
- Baumert, J., Kunter, M., Blum, W., Brunner, M., Voss, T., Jordan, A., & Tsai, Y. M. (2010). Teachers' mathematical knowledge, cognitive activation in the classroom, and student progress. *American educational research journal*, 47(1), 133-180.
- Beard, S. (2018). Saying "I Do" in College: Examining Marital Status and Academic Performance. *Undergraduate Research Journal*, 22(1), 1 – 18.
- Benligiray, S., and Ahmet, O. N. A. Y. (2017). Analysis of performance factors for accounting and finance related business courses in a distance education environment. *Turkish Online Journal of Distance Education*, 18(3), 16-46.
- Berthelot, J. M., Ross, N., & Tremblay, S. (2001). Factors affecting Grade 3 student performance in Ontario: A multilevel analysis. *Education Quarterly Review*, 7(4), 25 – 36.
- Blömeke, S., Olsen, R. V., & Suhl, U. (2016). Relation of student achievement to the quality of their teachers and instructional quality. *Teacher quality, instructional quality and student outcomes*, 2, 21-50.
- Boey, L. H. K. W. (2002). Assessing Psychological Well-being of College Student: Psychometric Properties of GHQ-20 [J]. *Psychological Development and Education*, 18 (1), 75 – 79.
- Boyd, D. J., Grossman, P. L., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher preparation and student achievement. *Educational evaluation and policy analysis*, 31(4), 416-440.
- Brahmasrene, T., & Whitten, D. (2001). Assessing success on the uniform CPA exam: A logit approach. *Journal of Education for Business*, 77(1), 45-50.
- Brasfield, D. W., Harrison, D. E., & McCoy, J. P. (1993). The impact of high school economics on the college principles of economics course. *The Journal of Economic Education*, 24(2), 99-111.
- Broh, B. A. (2002). Linking extracurricular programming to academic achievement: Who benefits and why?. *Sociology of education*, 75(1), 69-95.
- Brookshire, R. G., & Palocsay, S. W. (2005). Factors contributing to the success of undergraduate business students in management science courses. *Decision Sciences Journal of Innovative Education*, 3(1), 99-108.
- Buckless, F. A., Lipe, M. G., & Ravenscroft, S. P. (1991). Do gender effects on accounting course performance persist after controlling for general academic aptitude? *Issues in Accounting Education*, 6(2), 248-261.
- Byrne, M., & Flood, B. (2008). Examining the relationships among background variables and academic performance of first year accounting students at an Irish University. *Journal of Accounting Education*, 26(4), 202-212.
- Byrne, M., Flood, B., & Willis, P. (2002). The relationship between learning approaches and learning outcomes: a study of Irish accounting students. *Accounting education*, 11(1), 27-42.

- Chan, K. C., & Shum, C. (1997). Class attendance and student performance in principles of Finance. *Financial Practice & Education*, 7(2), 58-65.
- Cheung, L. M., & Wong, W. S. (2011). The effects of insomnia and internet addiction on depression in Hong Kong Chinese adolescents: an exploratory cross-sectional analysis. *Journal of sleep research*, 20(2), 311-317.
- Davidson, R. A. (2002). Relationship of study approach and exam performance. *Journal of Accounting Education*, 20(1), 29-44.
- De Lange, P., Waldmann, E., & Wyatt, K. (1997). Personal characteristics and academic achievement of undergraduate accounting students studying through open learning. *Accounting Education*, 6(4), 295-306.
- De Paola, M., Ponzio, M., & Scoppa, V. (2009). *Effects of class size on achievement of college students: Heterogeneity across abilities and fields*. Working Paper. 1 – 20.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Sage publications.
- Didia, D., & Hasnat, B. (1998). The determinants of performance in the university introductory finance course. *Financial Practice and Education*, 8, 102-107.
- Doran, B. M., Bouillon, M. L., & Smith, C. G. (1991). Determinants of student performance in accounting principles I and II. *Issues in Accounting Education*, 6(1), 74-84.
- D'Souza, K. A., & Maheshwari, S. K. (2010). Factors influencing student performance in the introductory management science course. *Academy of Educational Leadership Journal*, 14(3), 99-120.
- Duff\*, A. (2004). Understanding academic performance and progression of first-year accounting and business economics undergraduates: the role of approaches to learning and prior academic achievement. *Accounting Education*, 13(4), 409-430.
- Ekundayo, S. (2010). Gender, marital status and religious affiliation as factors of assertiveness among nigerian education majors. *The social sciences*, 5(6), 467-470.
- Ely, D. P., & Hittle, L. (1990). The impact of math background on performance in managerial economics and basic finance courses. *Journal of Financial Education*, 19, 59-61.
- Eyer, J. (1993). Self-directed continuing learning characteristics and perceptions of professional autonomy in senior baccalaureate nursing students. Doctoral dissertation, Northern Illinois University.
- Feast, V. (2002). The impact of IELTS scores on performance at university. *International Education Journal*, 3(4), 70-85.
- Fedoryshyn, M. W., O'Brien, M., Hintz, A., & Bosner, K. (2010). Arithmetical reasoning skills as a predictor of success in principles of accounting. *Academy of Educational Leadership Journal*, 14, 93.
- Fejgin, N. (1995). Factors contributing to the academic excellence of American Jewish and Asian students. *Sociology of education*, 68(1), 18-30.
- Frost, P. J., & Fukami, C. V. (1997). Teaching effectiveness in the organizational sciences: Recognizing and enhancing the scholarship of teaching. *Academy of Management Journal*, 40(6), 1271-1281.
- Fujita, K. (2006). The effects of extracurricular activities on the academic performance of junior high students. *Undergraduate Research Journal for the Human Sciences*, 5(1), 1-16.
- Gammie, E., Paver, B., Gammie, B., & Duncan, F. (2003). Gender differences in accounting education: an undergraduate exploration. *Accounting Education*, 12(2), 177-196.
- Garkaz, M., Banimahd, B., & Esmaeili, H. (2011). Factors affecting accounting students' performance: The case of students at the Islamic Azad University. *Procedia-Social and Behavioral Sciences*, 29, 122-128.
- Geel, R., & Backes-Gellner, U. (2012). Earning while learning: When and how student employment is beneficial. *Labour*, 26(3), 313-340.
- Geiger, M. A., & Cooper, A. E. (1995). Predicting academic performance: The impact of expectancy and needs theory. *Journal of Experimental Education*, 63(3), 251–262.

- Gerber, A., Engelbrecht, J., Harding, A., & Rogan, J. (2005). The influence of second language teaching on undergraduate mathematics performance. *Mathematics Education Research Journal*, 17(3), 3-21.
- Gerber, S. B. (1996). Extracurricular activities and academic achievement. *Journal of Research & Development in Education*, 30(1), 42–50.
- Ghani, E. K., Said, J., & Muhammad, K. (2012). The effect of teaching format, students' ability and cognitive effort on accounting students' performance. *International Journal of Learning and Development*, 2(3), 81-98.
- Ghenghesh, P. (2015). The relationship between English language proficiency and academic performance of university students—should academic institutions really be concerned?. *International Journal of Applied linguistics and English literature*, 4(2), 91-97.
- Gist, W. E., Goedde, H., & Ward, B. H. (1996). The influence of mathematical skills and other factors on minority student performance in principles of accounting. *Issues in Accounting Education*, 11(1), 49- 60.
- Glasser, W. (1998). Choice theory: A new psychology of personal freedom. New York, NY: HarperCollins.
- Gracia, L., & Jenkins, E. (2003). A quantitative exploration of student performance on an undergraduate accounting programme of study. *Accounting education*, 12(1), 15-32.
- Grave, B. S. (2011). The effect of student time allocation on academic achievement. *Education Economics*, 19(3), 291-310.
- Grudnitski, G. (1997). A forecast of achievement from student profile data. *Journal of Accounting Education*, 15(4), 549-558.
- Gul, F. A., & Cheong Fong, S. C. (1993). Predicting success for introductory accounting students: some further Hong Kong evidence. *Accounting Education*, 2(1), 33-42.
- Guney, Y. (2009). Exogenous and endogenous factors influencing students' performance in undergraduate accounting modules. *Accounting Education*, 18(1), 51-73.
- Gupta, K., & Maksy, M. M. (2014). Factors associated with student performance in an investments course: an empirical study. *Journal of Finance and Accountancy*, 16, 1 – 31.
- Hakim, C., & Bizri, R. M. (2015). The education gap in the accounting profession evidence from Lebanon. *World Review of Business Research*, 5(3), 13-29.
- Halabi, A. K., Essop, A., Joosub, T., Padia, N., Vawda, M., & Yasseen, Y. (2010). A South African study comparing the effectiveness of computer-based learning materials and face-to-face teaching. *Meditari: Research Journal of the School of Accounting Sciences*, 18(2), 23-37.
- Hallaq, W. (2001). From regional to personal schools of law? A reevaluation. *Islamic Law and Society*, 8(1), 1-26.
- Hammen, C. S., & Kelland, J. L. (1994). Attendance and grades in a human psychology course. *Advances in Physiology Education*, 12, 105-108.
- Hancock, T. M. (1996). Effects of class size on college student achievement. *College Student Journal*, 30, 479-481.
- Harb, N., & El-Shaarawi, A. (2007). Factors affecting business students' performance: the case of students in United Arab Emirates. *Journal of Education for Business*, 82(5), 282-290.
- Hartnett, N., Römcke, J., & Yap, C. (2004). Student performance in tertiary-level accounting: an international student focus. *Accounting & Finance*, 44(2), 163-185.
- Heirany, F., Mahmood, M., Jaber, Z., Nassim, S., & Ehsan, K. (2013). Impact of personal characteristics on the academic achievement of the accounting students of Islamic Azad University of Yazd. *International Journal of Academic Research Inro Gressive Education and Development*, 2(4), 190-199.
- Hill, M. C. (1998). Class size and student performance in introductory accounting courses: Further evidence. *Issues in Accounting Education*, 13(1), 47 – 64.
- Islam, A., & Tasnim, S. (2021). An Analysis of Factors Influencing Academic Performance of Undergraduate Students: A Case Study of Rabindra University, Bangladesh (RUB). *Shanlax International Journal of Education*, 9(3), 127-135.
- Jackling, B., & Anderson, A. (1998). Study mode, general ability and performance in accounting: a research note. *Accounting Education*, 7(1), 65-73.

- Jansen, J., & de Villiers, C. (2016). Determinants of student performance in an accounting degree programme. *South African Journal of Accounting Research*, 30(1), 1-28.
- Kamuche, F. U. (2006). Does smaller class size affect students' performance in basic statistics class? An empirical study. *International Business & Economics Research Journal (IBER)*, 5(8), 39 – 44.
- Karim, R., & Ibrahim, M. (1992). The Performance of Male versus Female Accounting Students. *Advances in International Accounting*, 5(7), 255-262.
- Kealey, B. T., Holland, J., & Watson, M. (2005). Preliminary evidence on the association between critical thinking and performance in principles of accounting. *Issues in Accounting Education*, 20(1), 33-49.
- Keef, S. P. (1992). The effect of prior accounting education: some evidence from New Zealand. *Accounting Education*, 1(1), 63-68.
- Keef, S. P., & Roush, M. L. (1997). New Zealand evidence on the performance of accounting students: race, gender and self-concept. *Issues in Accounting Education*, 12(2), 315 – 330.
- Keil, J., & Partell, P. J. (1997). The effect of class size on student performance and retention at Binghamton University. *Office of Budget and Institutional Research* available at: [http://www.classsizematters.org/wp-content/uploads/2012/11/Class\\_size\\_jkpp1997.pdf](http://www.classsizematters.org/wp-content/uploads/2012/11/Class_size_jkpp1997.pdf)
- Kerstjens, M., & Nery, C. (2000). Predictive validity in the IELTS test: A study of the relationship between IELTS scores and students' subsequent academic performance. *IELTS research reports*, 3(4), 86-108.
- Kherfi, S. (2008). Economic education in the Middle East: are the determinants of success in introductory economics any different?. *The Journal of Economic Education*, 39(1), 22-40.
- King, L. O., & Kotrlik, J. W. (1995). Relevance of the general education core curriculum to career goals of college of agriculture students. *Journal of Agricultural Education*, 36(3), 26-33.
- Kirk, F. R., & Spector, C. A. (2006). Factors affecting student achievement in cost accounting. *Academy of Educational Leadership Journal*, 10(1), 91 – 104.
- Koh, M. Y., & Koh, H. C. (1999). The determinants of performance in an accountancy degree programme. *Accounting Education*, 8(1), 13-29.
- Kokkelenberg, E. C., Dillon, M., & Christy, S. M. (2008). The effects of class size on student grades at a public university. *Economics of Education Review*, 27(2), 221-233.
- Krausz, J., Schiff, A., Schiff, J., & Hise, J. V. (2005). The impact of TOEFL scores on placement and performance of international students in the initial graduate accounting class. *Accounting Education*, 14(1), 103-111.
- Krohn, G. A., & O'Connor, C. M. (2005). Student effort and performance over the semester. *The Journal of Economic Education*, 36(1), 3-28.
- Kuncel, N. R., Credé, M., & Thomas, L. L. (2005). The validity of self-reported grade point averages, class ranks, and test scores: A meta-analysis and review of the literature. *Review of educational research*, 75(1), 63-82.
- Lane, A., & Porch, M. (2002). Computer aided learning (CAL) and its impact on the performance of non-specialist accounting undergraduates. *Accounting Education*, 11(3), 217-233.
- Ledman, R. E., & Kamuche, F. (2002). Improving student attendance: Does it improve student learning? (The scholarship of teaching and learning). *Academic Exchange Quarterly*, 6(1), 76-81.
- Lee, D. S. Y. (1999). Strength of high school accounting qualification and student performance in university-level introductory accounting courses in Hong Kong. *Journal of Education for Business*, 74(5), 301-306.
- Li, G., Chen, W., & Duanmu, J. L. (2010). Determinants of international students' academic performance: A comparison between Chinese and other international students. *Journal of studies in international education*, 14(4), 389-405.
- Lillydahl, J. H. (1990). Academic achievement and part-time employment of high school students. *The journal of economic education*, 21(3), 307-316.

- Logan, W. L., & Scarborough, J. L. (2008). Connections through clubs: Collaboration and coordination of a schoolwide program. *Professional School Counseling*, 12(2), 157 – 161.
- Lukkarinen, A., Koivukangas, P., & Seppälä, T. (2016). Relationship between class attendance and student performance. *Procedia-Social and Behavioral Sciences*, 228, 341-347.
- Lynn, S. A., & Robinson-Backmon, I. (2006). Academic success of non-traditional students: Factors affecting performance in an upper-division undergraduate accounting course. *Journal of College Teaching & Learning (TLC)*, 3(12), 85 – 96.
- Mahinay, C., & Villanueva, J. M. (2017), Effects of time allotment in studying to academic performance. *University of Science and Technology of Southern Philippines Publication*, 1-9. Available at: <https://www.academia.edu/36306347>.
- Majzoub, S., & Aga, M. (2015). Characterizing the gap between accounting education and practice: evidence from Lebanon. *International Journal of Business and Management*, 10(12), 127 -151.
- Maksy, M. M. (2014). Factors associated with student performance in intermediate accounting: A comparative study at commuter and residential schools. *The Journal of Applied Business and Economics*, 16(5), 86-108.
- Maksy, M. M., & Rodriguez, C. (2018). Factors associated with student performance in managerial accounting: An empirical study at a New England public university. *Journal of Applied Business and Economics*, 20(7), 103 – 125.
- Maksy, M. M., & Wagaman, D. D. (2015). Factors Associated with Student Performance in Advanced Accounting: A Comparative Study at Commuter and Residential Schools. *Journal of Accounting & Finance*, 15(1), 72-94.
- Maksy, M. M., & Zheng, L. (2008). Factors associated with student performance in advanced accounting and auditing: An empirical study in a public university. *Accounting Research Journal*, 21(1), 16-32.
- Maksy, M., & Yoon, M. H. (2019). Supporting and Distracting Factors Affecting Student Performance in Management Information Systems: An Empirical Study at a US Commuter Public University. *Journal of Accounting & Finance (2158-3625)*, 19(5). 66-88.
- Maloney, M. T., & McCormick, R. E. (1993). An examination of the role that intercollegiate athletic participation plays in academic achievement: Athletes' feats in the classroom. *Journal of Human Resources*, 28(3), 555-570.
- Marburger, D. R. (2001). Absenteeism and undergraduate exam performance. *The Journal of Economic Education*, 32(2), 99-109.
- Marcal, L., & Roberts, W. W. (2000). Computer literacy requirements and student performance in business communications. *Journal of Education for Business*, 75(5), 253-257.
- Marsh, H., & Kleitman, S. (2002). Extracurricular school activities: The good, the bad, and the nonlinear. *Harvard educational review*, 72(4), 464-515.
- Martí-Ballester, C. P. (2019). Factors that influence academic performance: Analyzing gender differences in accounting students. *Revista Educación*, 43(2), 31-48.
- Martirosyan, N. M., Hwang, E., & Wanjohi, R. (2015). Impact of English proficiency on academic performance of international students. *Journal of International Students*, 5(1), 60-71.
- Mcdowall, T., & Jackling, B. (2006). The impact of computer-assisted learning on academic grades: An assessment of students' perceptions. *Accounting Education: an international journal*, 15(4), 377-389.
- Midi, H., & Bagheri, A. (2010). Robust multicollinearity diagnostic measure in collinear data set. In *Proceedings of the 4th international conference on applied mathematics, simulation, modeling* (pp. 138-142). World Scientific and Engineering Academy and Society (WSEAS).
- Moore, R., Jensen, M., Hatch, J., Duranczyk, I., Staats, S., & Koch, L. (2003). Showing up: The importance of class attendance for academic success in introductory science courses. *The American biology teacher*, 65(5), 325-329.
- Muda, M., Shahrudin, A., & Embaya, A. (2013). Comparative analysis of profitability determinants of domestic and foreign Islamic banks in Malaysia. *International Journal of Economics and Financial Issues*, 3(3), 559 – 569.

- Müller, H., Prinsloo, P., & du Plessis, A. (2007). Validating the profile of a successful first year accounting student. *Meditari Accountancy Research*, 15(1), 19 -33.
- Murdoch, B., & Guy, P. W. (2002). Active learning in small and large classes. *Accounting Education*, 11(3), 271-282.
- Nabilah, S., Mazhani, N. Suryani, A. R., & Aswani, N. (2014). Determinants of Accounting Students' Academic Performance. Proceedings of International Conference on Accounting Research & Education, 603 - 613.
- Naser, K., & Peel, M. J. (1998). An exploratory study of the impact of intervening variables on student performance in a principles of accounting course. *Accounting Education*, 7(3), 209-223.
- Negy, C. (2003). Undergraduate students' adaptation to college: does being married make a difference?. *Journal of College Student Development*, 44(5), 670-690.
- Ngoboka, P., & Schultz, B. (2002). The effects of class size on student academic performance in a principles of microeconomics course. *Proceedings of the Midwest Business Economics Association*, 198-207.
- Ofoegbu, F. I. (2004). Teacher motivation: A factor for classroom effectiveness and school improvement in Nigeria. *College student journal*, 38(1), 81-90.
- Papageorgiou, E. (2017). Accounting students' profile versus academic performance: A five-year analysis. *South African Journal of Higher Education*, 31(3), 209-229.
- Papageorgiou, K., & Halabi, A. K. (2014). Factors contributing toward student performance in a distance education accounting degree. *Meditari Accountancy Research*, 22(2), 211-223.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research*. Jossey-Bass Inc., Publishers, PO Box 44305, San Francisco, CA 94144-4305 (ISBN-1-55542-304-3--\$75.00, hardcover).
- Paver, B., & Gammie, E. (2005). Constructed gender, approach to learning and academic performance. *Accounting Education: an international journal*, 14(4), 427-444.
- Pritchard, M., & Wilson, G. (2005). Comparing sources of stress in college student athletes and non-athletes. *Athletic Insight: The Online Journal of Sports Psychology*, 5(1), 1-8.
- Pudaruth, S., Nagowah, L., Sungkur, R., Moloo, R., & Chiniah, A. (2013, August). The effect of class attendance on the performance of computer science students. In *2nd International Conference on Machine Learning and Computer Science (IMLCS'2013)*, Kuala Lumpur, Malaysia (Vol. 30).
- Purcell, P. (2007). Engineering student attendance at lectures: Effect on examination performance. In *International Conference on Engineering Education, Coimbra, Portugal*.
- Ramadan, S., & Quraan, A. (1994). Determinants of students' performance in introductory accounting courses. *Journal of King Saud University*, 6(2), 65-80.
- Rankin, M., Silvester, M., Vallely, M., & Wyatt, A. (2003). An analysis of the implications of diversity for students' first level accounting performance. *Accounting & Finance*, 43(3), 365-393.
- Reeves, D. B. (2008). The learning leader/the extracurricular advantage. *Learning*, 66(1), 86-87.
- Rivera, M. (2010). Extracurricular activities helped improved grades. Retrieved June, 10, 2021. Available at: [www.northjersey.com/news/80680527.html](http://www.northjersey.com/news/80680527.html).
- Roberts, R., Golding, J., Towell, T., & Weinreb, I. (1999). The effects of economic circumstances on British students' mental and physical health. *Journal of American College Health*, 48(3), 103-109.
- Rohde, F. H., & Kavanagh, M. (1996). Performance in first year university accounting: quantifying the advantage of secondary school accounting. *Accounting & Finance*, 36(2), 275-285.
- Romer, D. (1993). Do students go to class? Should they?. *Journal of economic perspectives*, 7(3), 167-174.
- Roos, S. (2009). Factors affecting Southern African students' success in CIMA examinations. *Meditari: Research Journal of the School of Accounting Sciences*, 17(1), 49-67.

- Sahragard, R., Baharloo, A., & Soozandehfar, S. M. A. (2011). A Closer Look at the Relationship between Academic Achievement and Language Proficiency among Iranian EFL Students. *Theory & Practice in Language Studies*, 1(12), 1740 – 1748.
- Schmidt, D., & Wartick, M. (2014). Performance in upper-level accounting courses: The case of transfer students. In *Advances in accounting education: teaching and curriculum innovations*, 14, 171 – 192.
- Seow, P. S., Pan, G., & Tay, J. (2014). Revisiting the determinants of students' performance in an undergraduate accountancy degree programme in Singapore. *Global Perspectives on Accounting Education*, 11, 1-23.
- Shaban<sup>a</sup>, O. (2015). The Relationship between Mathematics Grades and the Academic Performance of the Accounting Students'. *The European Proceedings of Social & Behavioural Sciences*, 35 – 41.
- Shaffee, N. S., Ahmad, E. M., Idris, S. I. Z. S., Ismail, R. F., & Ghani, E. K. (2019). Factors Influencing Accounting Students' Under-Performance: A Case Study in a Malaysian Public University. *International Journal of Education and Practice*, 7(1), 41-53.
- Shamsudin, S., Ismail, S. F., Al-Mamun, A., & Nordin, S. K. B. S. (2014). Examining the effect of extracurricular activities on academic achievements among the public university students in Malaysia. *Asian social science*, 10(9), 171 – 177.
- Siegel, G., Kulesza, C. S., & Sorensen, J. E. (1997). Are you ready for the new accounting?. *Journal of Accountancy*, 184(2), 42 -46.
- Stern, L. S. (1998). The experience of women combining multiple roles and graduate training in counseling psychology. Dissertation Abstracts International, Section B: The Sciences & Engineering, Loyola University Chicago.
- Stinebrickner, R., & Stinebrickner, T. R. (2003). Working during school and academic performance. *Journal of labor Economics*, 21(2), 473-491.
- Sue, S., & Okazaki, S. (1990). Asian-American educational achievements: A phenomenon in search of an explanation. *American psychologist*, 45(8), 913 – 920.
- Suleman, Q., & Singh, T. K. R. (2014). Effects of Over-Scheduled involvement in Co-Curricular Activities on the Academic Achievement of Secondary School Students in Kohat Division, Pakistan. *International Journal of Learning & Development*, 4(3), 62 – 71.
- Szafran, R. F. (2001). The effect of academic load on success for new college students: Is lighter better?. *Research in Higher Education*, 42(1), 27-50.
- Tambawal, M. U. (2011). Relationship among guidance and counselling awareness, study habits, attitude to school and academic performance of senior secondary school students in Sokoto Metropolis. 35th Annual International Conference of the Counselling Association of Nigeria (Casson).
- Tatto, M. T., Peck, R., Schwille, J., Bankov, K., Senk, S. L., Rodriguez, M., & Rowley, G. (2012). *Policy, Practice, and Readiness to Teach Primary and Secondary Mathematics in 17 Countries: Findings from the IEA Teacher Education and Development Study in Mathematics (TEDS-MM)*. International Association for the Evaluation of Educational Achievement. Herengracht 487, Amsterdam, 1017 BT, the Netherlands.
- Tay, R. S. (1994). Students' performance in economics: Does the norm hold across cultural and institutional settings?. *The Journal of Economic Education*, 25(4), 291-301.
- Tho, L. M. (1994). Some evidence on the determinants of student performance in the University of Malaya introductory accounting course. *Accounting Education*, 3(4), 331-340.
- Toth, L. S., & Montagna, L. G. (2002). Class size and achievement in higher education: A summary of current research. *College Student Journal*, 36(2), 253-261.
- Triki, A., Nicholls, S., Wegener, M., Bay, D., & Cook, G. L. (2012). Anti-intellectualism, tolerance for ambiguity and locus of control: Impact on performance in accounting education. In *Advances in accounting education: Teaching and curriculum innovations*, 13, 87 – 107.
- Trine, J., & Schellenger, M. (1999). Determinants of student performance in an upper level corporate finance course. *Proceedings of the Academy of Educational Leadership, Myrtle Beach*, 4(1), 91-99.

- Tucker, C. M., Zayco, R. A., Herman, K. C., Reinke, W. M., Trujillo, M., Carraway, K., & Ivery, P. D. (2002). Teacher and child variables as predictors of academic engagement among low-income African American children. *Psychology in the Schools*, 39(4), 477-488.
- Uyar, A., & Güngörmüş, A. H. (2011). Factors Associated with Student Performance in Financial Accounting Course. *European Journal of Economic & Political Studies*, 4(2), 139-154.
- Van Wyk, E. (2011). A note: The SAICA Part I qualifying examinations: Factors that may influence candidates' success. *South African Journal of Accounting Research*, 25(1), 145-174.
- Venter, E. R., & de Villiers, C. (2013). The accounting profession's influence on academe: South African evidence. *Accounting, Auditing & Accountability Journal*, 26(8), 1246 – 1278.
- Vickers, M., Lamb, S., & Hinkley, J. (2003). Student workers in high school and beyond: the effects of part-time employment on participation in education, training and work. *ACER Customer Service*, Private Bag 55, Camberwell, Victoria 3124 Australia.
- Von Allmen, P. (1996). The effect of quantitative prerequisites on performance in intermediate microeconomics. *Journal of Education for Business*, 72(1), 18-22.
- Wally-Dima, L., & Mbekomize, C. J. (2013). Causes of Gender Differences in Accounting Performance: Students' Perspective. *International Education Studies*, 6(10), 13-26.
- Wang, J., & Shiveley, J. (2009). The impact of extracurricular activity on student academic performance. Retrieved May, 5, 2021. Available at: <https://www.cair.org/wp-content/uploads/sites/474/2015/07/Wang-Student-Activity-Report-2009.pdf>.
- Weil\*, S., Oyelere, P., & Rainsbury, E. (2004). The usefulness of case studies in developing core competencies in a professional accounting programme: a New Zealand study. *Accounting Education*, 13(2), 139-169.
- Whitley, R. L. (1999). Those'dumb jocks' are at it again: A comparison of the educational performances of athletes and nonathletes in North Carolina high schools from 1993 through 1996. *The High School Journal*, 82(4), 223-233.
- Wijewardena, H., & Rudkin, K. (1999). An empirical investigation of some factors affecting student performance in introductory accounting. *International Journal of Accounting and Business Society*, 7(1), 39-53.
- Wong, D. S., & Chia, Y. M. (1996). English language, mathematics and first-year financial accounting performance: a research note. *Accounting education*, 5(2), 183-189.
- Wongtrirat, R. (2010). English language proficiency and academic achievement of international students: A meta-analysis. Doctoral Dissertation, Educational Foundations & Leadership, Old Dominion University.
- Wooten, T. C. (1998). Factors influencing student learning in introductory accounting classes: A comparison of traditional and non-traditional students. *Issues in Accounting Education*, 13(2), 357 – 373.
- Yess, J. P. (2009). Influence of marriage on the scholastic achievement of community College students. Humanities, social sciences and law. *Research in Higher Education*, 14(2), 103-118.