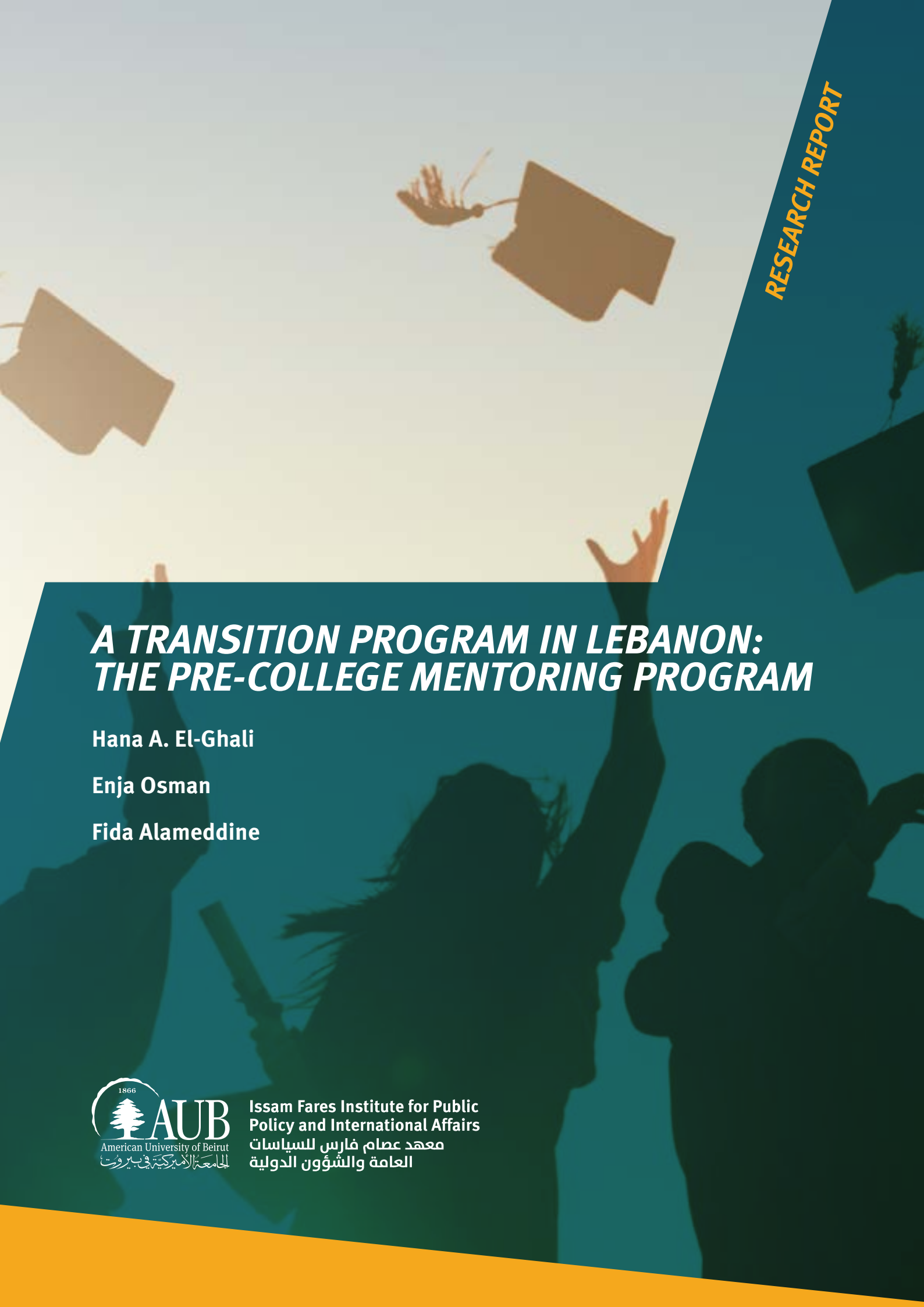

RESEARCH REPORT

A TRANSITION PROGRAM IN LEBANON: THE PRE-COLLEGE MENTORING PROGRAM

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1866 AUB American University of Beirut الجامعة الأميركية في بيروت

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A TRANSITION PROGRAM IN LEBANON: THE PRE-COLLEGE MENTORING PROGRAM

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LIST OF ACRONYMS

4Cs	Critical thinking, Creativity, Collaboration, and Communication
FYE	First-Year Experience
PCM	Pre-College Mentoring

ABSTRACT

The transitioning phase from school to university proves to be critical for youths who face many challenges in adjusting to college life (Gibney et al., 2011). This transitioning becomes more evident in youths from disadvantaged and marginalized and refugees background who experience additional difficulties, such as lacking a support system and having to work. Due to the gravity of this phase in the youths' lives, diverse intervention activities have been designed by different educational entities to ease the transition from school to university. Transition, pipeline, and bridge programs are examples of such activities, which have proved to be successful in Western contexts. However, little is known whether similar programs are conducted in Lebanon or the region. Thus, this research study aimed to explore the effectiveness and impact of a newly designed intervention program, the Pre-College Mentoring program (PCM). One hundred secondary students from public schools, several school staff, and faculty members from the American University of Beirut participated in this study. Data collection tools such as pre and post-tests, surveys, posters, and video recordings were employed. The study's findings revealed that students, who participated in the PCM program, acquired content knowledge and non-cognitive skills that can ease their transition into university. Despite major positive findings, many participating students claimed that they still need more guidance to choose their college and careers, and have better access to organizations, which provide scholarship opportunities. Results also revealed areas that need to be thoughtfully considered for improving or designing similar and more effective transition programs. Lastly, action recommendations are suggested that could be applied by various entities, such as policy stakeholders at the Ministry of Education, school principals, and other educational organizations, to provide a smooth transition to postsecondary education.

I. Introduction

With the constantly changing world we live in, it is expected that all youths be university graduates. However, the transitioning phase from school to university proves to be critical (Gibney et al., 2011), especially for those from disadvantaged backgrounds. While transitioning, youths face difficulties in adjusting socially, emotionally, and academically (Gerdes & Mallinckrodt, 1994) to their new life. If youths are not well-prepared and supported during this time, they risk dropping out and discontinuing their education (Mattanah et al., 2010), which in turn negatively impacts society at different levels. Disadvantaged students, such as those coming from marginalized and refugee backgrounds, face additional challenges, such as the lack of support systems (Earnest et al., 2010; Farah & Benchiba, 2018; Reid & Moore, 2008), the need to work to finance their families and their education (Earnest et al., 2010; Kong et al., 2016; Reid & Moore, 2008), and the ability to cope with their complex physical and psychological health (Earnest et al., 2010; Kong et al., 2016). Research studies have been conducted to describe, explain, and analyze the factors that influence the youths' transition from school to university (Cabrera & La Nasa, 2000; Foskett et al., 2008; Gerdes & Mallinckrodt, 1994; Gibney et al., 2011; Kelly et al., 2007; Keung & Ho, 2019; Lowe & Cook, 2003; Mattanah et al., 2010; Smyth & Banks, 2012; Zhang & Smith, 2011). Several researchers were interested in exploring additional factors which affect students from disadvantaged background (Earnest et al., 2010; Kong et al., 2016; McBrien, 2005; Reid & Moore, 2008; Slade et al., 2015; Wilkinson, 2002).

Due to the gravity of this phase in youths' lives, diverse intervention activities have been designed by different educational entities to ease the transition from school to university. Transition, pipeline, and bridge programs are examples of such activities, which have been implemented for quite some time. Generally, these activities proved to be effective and impactful, as revealed by the findings of research studies such as that of Cabrera et al. (2013), Mattanah et al. (2010), Slade et al. (2015), Strayhorn (2011), and Venezia and Jaeger (2013). All of these programs focused on the cognitive aspect—academia—while some also included a non-cognitive component, such as time managament skills which is crucial for youths to succeed at university. The different intervention activities have been implemented and discussed in Western contexts, while little is known about whether similar programs are conducted in Lebanon or the region. Thus, researchers of this study collaborated with experts to design and implement an intervention program in Lebanon. This study will present findings from the executed activity and its impact on facilitating the access of vulnerable youth to postsecondary education.

II. Transitioning of Youths from School to University

The transitional phase from school to university includes two components which are planning for a postsecondary education and successfully completing the first semester at a university. In the sections below, factors that impact secondary students' decision and pursuit of a university degree are presented. Challenges encountered by students during the first semester, which usually determine whether they would dropout or continue their education, are also discussed. Moreover, this section summarizes common intervention programs and activities adopted world-wide to facilitate the youths' transition from school to university.

A. Planning a Postsecondary Education

There are several factors that influence youths' expectations and plans to pursue a university degree. These aspects not only include the students' academic abilities but other factors as well (Gerdes & Mallinckrodt, 1994) such as socioeconomic status and parents' support and encouragement.

Academic Abilities

Studies showed that the youths' academic abilities and skills influence their attainment of a university degree (Cabrera & La Nasa, 2000; Kelly et al., 2007). Students who are underprepared academically face challenges in applying and succeeding at higher education institutions (Slade et al., 2015; Reid & Moore, 2008).

Socioeconomic Status and Parent Support

Moreover, research findings revealed that the financial and/or socioeconomic status of youths and their immediate family profoundly impacts the desire and ability to further continue their education (Smyth & Banks, 2012). Youth from affluent backgrounds have several and diverse sources to provide them with information and assist them in planning for a university degree (Cabrera & La Nasa, 2000; Keung & Ho, 2019), including their parents, social network, and school. Youth coming from a middle to high socioeconomic status are more likely to have parents who are university graduates; these parents may influence the youths' aspirations for continuing their education, offer advice and guidance, and help plan savings for college expenses (Cabrera & La Nasa, 2000). In addition to having parents and siblings with educational attainment, youth from affluent backgrounds have social networks that affect their completion of a university degree (Cabrera & La Nasa, 2000; Farah & Benchiba, 2018; Zhang & Smith, 2011); they are privileged of having prior knowledge about the university through their network's members, have easier access to information about the university (Smyth & Banks, 2012), and an aspiration to receive a similar education level as their network's members.

Furthermore, schools play a crucial role in preparing and facilitating youths' attainment of a university degree (Cabrera & La Nasa, 2000; Kelly et al., 2007). Schools of higher socioeconomic statuses positively influence their students to further continue their education, to choose a university, and to select a major (Farah & Benchiba, 2018; Foskett et al., 2008; Keung & Ho, 2019). Research studies revealed that students in schools of low socioeconomic levels don't have enough information about postsecondary education and thus either pursue vocational training or discontinue their education (Foskett et al., 2008). Schools that have advantaged students have more resources and facilities that are well-maintained to encourage and motivate learning and teaching (Cabrera & La Nasa, 2000; Foskett et al., 2008; Keung & Ho, 2019). Moreover, such institutions offer university guidance and counseling and have designated counselors (Foskett et al., 2008; Smyth & Banks, 2012) to help in devising an educational plan, which is unique for each secondary student, in addition to assisting with and the application process.

Parental support and encouragement influences the youths' desire to pursue a postsecondary education (Cabrera & La Nasa, 2000). Parents who motivate their children and have high expectations for them will yield children with similarly high aspirations of attaining a university degree (Cabrera & La Nasa, 2000). Additionally, when parents are proactive and highly involved with their children's education (Cabrera & La Nasa, 2000), the probability of their children pursuing a postsecondary education is significantly high.

B. First-Year University Students

The second component of transitioning is successfully completing the first semester at university. Youths face challenges during this phase which is aggravated for those coming from disadvantaged backgrounds. In the sections below, the challenges faced by first-year students are presented.

Challenges Faced by First-Year University Students

It is challenging for youths to successfully complete the first semester as they have to adjust to their new life at university.These adjustments are at the social, emotional, and academic levels (Gerdes & Mallinckrodt, 1994). Socially, youths face difficulties in integrating into a new social life (Gerdes & Mallinckrodt, 1994), forming a new social network (Gerdes & Mallinckrodt, 1994; Gibney et al., 2011; Mattanah et al., 2010), and "managing new social freedoms" (Gerdes & Mallinckrodt, 1994, p. 281) with the temptations of a university-life (Mattanah et al., 2010). Gibney et al. (2011) and Kelly et al. (2007) corroborate these findings with the importance of university students being well-integrated and having a social life; they explained that these factors facilitate the transition and impact retention and dropout rates. Emotionally, students may experience anxiety, stress, and/or depression when transitioning from school to university (Gerdes & Mallinckrodt, 1994). In fact, research studies from diverse contexts (Farah & Benchiba, 2018; Gibney et al., 2011; Lowe & Cook, 2003) revealed that first year university students mainly feel anxious at the start of the year, owing to the expected academic difficulties students face when they transfer from school to university (Gerdes & Mallinckrodt, 1994). These challenges include, but are not limited to, the different learning and studying environments (Mattanah et al., 2010), increased workload (Gibney et al., 2011; Reid & Moore, 2008), difference in pedagogy between school and university (Lowe & Cook, 2003), and the set of study skills required at university level to perform well (Reid & Moore, 2008).

In addition to the difficulties of adjusting socially, emotionally, and academically when transitioning from school to university, students have to face further challenges, such as separation from parents, lack of motivation, and unrealistic expectations of college life. Coping with the separation from parents can impact the students' social, emotional, and academic adjustment (Gerdes & Mallinckrodt, 1994; Mattanah et al., 2010). Contrary to these research studies, Lowe and Cook (2003) revealed that first year university students more widely anticipated the separation from their parents than actually experienced. As for student motivation, it is correlated to the ability to transition from school to university (Gibney et al., 2011); those students who were not motivated were unable to successfully transition and, as a result, discontinued their education (Kelly et al., 2007). Similarly, unrealistic high expectations of university life also hinder students' successful transition and attainment of a university degree (Gerdes & Mallinckrodt, 1994). Examples of such expectations include a "rich social life" (Lowe & Cook, 2003, p. 55) and an overestimate of the student's ability to easily adjust to university life (Gerdes & Mallinckrodt, 1994). This mismatch between prior expectations and reality negatively affects students' academic performance and university social life, which in turn reinforces their decision to dropout (Lowe & Cook, 2003)

Challenges Particular to Disadvantaged Students

Disadvantaged students such as those coming from marginalized and/or refugee backgrounds face additional difficulties in transitioning from school to university, especially when they are the first generation in their families to attend college. Such students have parents who are less educated and thus lack the knowledge, resources, and skills to offer advice, academic support, guidance, and help in planning their children's postsecondary education (Earnest et al., 2010; Farah & Benchiba, 2018; Reid & Moore, 2008). Coming from low socioeconomic backgrounds, disadvantaged students may be obliged to work, in order to financially assist their parents, making it difficult to balance their duties at university and those

at work (Earnest et al., 2010; Kong et al., 2016; Reid & Moore, 2008). Findings showed that many refugee students discontinued their education because they were unable to work and study simultaneously (Earnest et al., 2010; Kong et al., 2016).

Another challenge mainly faced by refugees is their physical and psychological health (Earnest et al., 2010; Kong et al., 2016). Their prior life experiences significantly impact their psychological wellbeing, resulting in depression, isolation, and anxiety making it even more difficult to transition to university. McBrien's (2005) study further highlighted that refugee students' psychological wellbeing may be additionally traumatized when experiencing discrimination from peers and faculty members.

While transitioning to university, refugee students experience great difficulties in integration for several reasons. These students have weak proficiency when it comes to the host country's language of instruction (Earnest et al., 2010; Kong et al., 2016; McBriens, 2005; Wilkinson, 2002), which hinders their integration into the university and gets in the way of effective communication with peers and/or academic faculty. Research studies also reported that disadvantaged students have limited skills in using technology in general, and reported stumbling when learning how to use the internet and computer in particular (Earnest et al., 2010; Farah & Benchiba, 2018; Kong et al., 2016).

Another reason is the difference between the youths' culture and that of the university. Disadvantaged students struggle to balance between their family's culture, values, and beliefs (Kong et al., 2016; McBriens, 2005; Smyth & Banks, 2012) and those of society. This disbalance hinders the successful transition and integration into university (Earnest et al., 2010; Wilkinson, 2002). Consequently, these students struggle to create social connections at university because they lack the necessary skills to do so (Earnest et al., 2010; Kong et al., 2016).

Instructors and/or faculty members also face cultural challenges for they are often unaware of the students' backgrounds and experiences (Earnest et al., 2010; Kong et al., 2016; McBrien, 2005). Kong et al. (2016) explained that staff members lacked cross-cultural training, which hinders their effectiveness in helping and dealing with refugee students.

C. Intervention Programs and Activities

There are various intervention activities that aim to facilitate the youths' transitioning from school to university. Some of these activities are implemented by schools while others by higher education institutions. Thus, the modality, duration, with aim of these intervention programs differ.

School-Level Interventions

Activities and programs implemented by schools that prepare students to transition to university include but are not limited to organizing talks, designing additional academic programs, and offering university guidance and counseling. Schools usually organize talks, sometimes in collaboration with universities, to inform students about college courses, present curricula, and the enrollment process in postsecondary institutions (Keung & Ho, 2019). The activity that facilitates students' transitioning from school to university is known as dual enrollment; this program allows secondary students to enroll in college-level courses that are offered at high schools or universities (Venezia & Jaeger, 2013). Additionally, in the US, there are high schools that target historically underrepresented students to assist them in successfully completing their education, including at the postsecondary level (Venezia & Jaeger, 2013).

University guidance and counseling is an intervention activity conducted by schools. A plethora of research studies identified the importance of this activity in assisting and guiding youths to plan for their postsecondary education (Cabrera & La Nasa, 2000; Earnest et al., 2010; Foskett et al., 2008; Reid & Moore, 2008; Smyth & Banks, 2012). Disadvantaged students profoundly benefit from university career guidance and counseling, as it is sometimes their sole opportunity to pursue a university education (Cabrera & La Nasa, 2000; Smyth & Banks, 2012; Vlaardingerbroek et al., 2007; Zhang & Smith, 2011). For example, school guidance officers and counselors provide the needed information and knowledge about college entry, finances, and courses, which "is not easily available at home", to students who are the first generation in their families to pursue a university degree (Smyth & Banks, 2012, p. 272). More importantly, these youths are guided to find an "institutional fit", critical to ensuring their graduation (Venezia & Jaeger, 2013). Additionally, these school

staff-members assist the disadvantaged youths by thoughtfully changing the students' opinions and perceptions about their decisions and plans on how to continue their education (Foskett et al., 2008).

University-Level Interventions

Programs such as First-Year Experience (FYE), peer-led social support, and transition programs are the most widespread activities that are implemented by higher education institutions, high schools, states, and governments. FYE and peer-led social support programs share the same aim, which is to provide first-year students with social support. FYE programs conduct advising sessions, offer service-learning opportunities, and seminars (Mattanah et al., 2010). These programs also facilitate the first-year students' informal interactions with faculty members. Similarly, peer-led social support programs help first-year students to adjust socially to college life and reduce loneliness by allowing them to establish new social ties with colleagues who are in a similar situation (Mattanah et al., 2010). Other interventions, such as federal and state programs in the US, provide academic support in addition to other services, such as psychosocial and behavioral support, to facilitate the educational pathway of disadvantaged students, starting at middle school (Venezia & Jaeger, 2013). Transition programs that are sometimes referred to as pipeline or bridge programs address first-year students' college readiness and are commonly implemented in higher education institutions. Transition programs in particular have been implemented by universities for quite a long time and are relied upon to "channel at-risk, under-prepared, and under-represented students toward college success" (Slade et al., 2015, p. 2). These programs aim to improve the students' academic performance while fostering non-academic aspects, such as time-management skills, in addition to increasing the retention rate of at-risk students (Slade et al., 2015; Strayhorn, 2011). Research studies, such as that of Cabrera et al. (2013), have been conducted to examine the effectiveness of bridge programs. Their findings reveal that such programs do prepare youths, particularly those from disadvantaged backgrounds, to smoothly transition to and graduate from university. Participants from Earnest et al. (2010) corroborated this finding by explaining that bridging programs or courses equip refugee students "with the necessary skills and knowledge of university culture and expectations" (p. 170). Furthermore, marginalized students, who participated in such programs, supported this claim by explaining that these programs played a significant role in assisting them to acquire the necessary skills to succeed at university (Reid & Moore, 2008).

III. Intervention Programs and Activities in Lebanon

Similar to the Western world, schools and universities in Lebanon implemented intervention programs and activities to ease the youths' transition. This section will present them.

Secondary students in Lebanon, whether nationals or refugees, face similar, perhaps more challenging obstacles, when transitioning from school to university. It was reported that only 51.94 percent of youths were enrolled at the secondary level (Trading Economics, 2016a) and an even lower enrolment rate at the tertiary level of 38.2 percent (Trading Economics, 2016b). Among the refugee population, only 2.4 percent were enrolled at the secondary level and almost 6 percent attended university (El-Ghali, 2018). The considerably high enrolment rate of refugees in higher education institutions is attributed to local and international stakeholders' major strides and efforts.

The transition process of secondary youths in Lebanon is inadequately investigated and described. There are limited, if any, research studies examining this issue (Vlaardingerbroek et al., 2007). Consequently, very few disperse intervention activities exist to facilitate and ease the transition. In fact, the primary aim of most of these interventions is to raise awareness about higher education, whether it involves (a) schools organizing a "university fair", where higher education institutions provide information about the institution to secondary students, (b) universities host "high-school open days" by inviting secondary students to visit the campus and know more about the university and the services it offers, and (c) private institutions delivering informative sessions on college majors, careers, and available scholarships. In addition to the aforementioned activities, another initiative consists of inviting a handful of secondary students to university to introduce them to a certain major or discipline. The aim of this initiative is to raise awareness about this field and attempt to give the secondary students a better understanding about it. Another activity conducted by some private schools includes secondary students shadowing personnel in their field of interest, to help these students make better-informed decisions regarding their career path. Furthermore, a recognized foundation for education in the Arab region created an e-platform to assist secondary students in exploring their majors by aligning their interests and academic abilities with the different disciplines.

Some private Lebanese universities established bridge programs known as university preparatory programs that target disadvantaged students, especially those coming from marginalized backgrounds and graduating from public secondary schools. This program offers academic and psychosocial support, in addition to developing their communication skills and language proficiency, to foster academic success.

Nonetheless, intervention activities conducted in Lebanon are insufficient to improve college readiness or help secondary students choose their college majors based on their interest and intellectual capabilities. The impact and effectiveness of some of these activities have not been examined while others, such as those that raise awareness, leave participants with little or no follow-up sessions to reinforce practices and assess students in their process of applying to university. Similarly, research studies have identified gaps in programs, including bridging, pipeline, and transition, conducted at higher education institutions in the West (Cabrera et al., 2013; Strayhorn, 2011). Most of these programs are designed to improve first-year students' academic performance and increase their retention rate (Cabrera et al., 2013), while some also focus on their social adjustment to college life (Slade et al., 2015; Strayhorn, 2011). However, a dearth of programs incorporated the acquisition of non-cognitive or affective skills into their curriculum, although scholars such as Venezia and Jaeger (2013) and Pavlova (2017) recommed such a practice.

Non-cognitive skills have been defined and explained differently by scholars. For example, some perceive it to include problem-solving, critical thinking, curiosity, openness, and receptiveness of feedback, criticism, and failure, in addition to the ability to manage their time, as well as overcome frustrating and unclear tasks (Venezia & Jaeger, 2013). Others define non-cognitive skills as "those attitudes, behaviors, and strategies which facilitate success in school and workplace, such as motivation, perseverance, and self-

control" (Gutman & Schoon, 2013, p. 4). Despite the disagreement about what encompasses non-cognitive skills, they are crucial competencies for enabling the smooth transition of youths from school to university. For instance, Venezia and Jaeger (2013) believe that non-cognitive skills influence youths' college readiness. Additionally, these set of skills are as important, if not more important, than cognitive skills in predicting academic outcomes (Gutman & Schoon, 2013). Hence, university students who possess non-cognitive skills are more prone to graduate (Kelly et al., 2007). First generation university students confirmed the importance of such skills by explaining that they faced challenges at university for lacking or being incompetent in non-cognitive skills, such as time-management (Reid & Moore, 2008).

Therefore, to address the gap in the lack of intervention activities that assist youths in their transition from school to university, while simultaneously offering non-cognitive skills, a Pre-College Mentoring program (PCM) was designed and implemented at a higher private institution in Beirut, Lebanon. This program aims to (a) provide vulnerable and refugee secondary-school youth with basic life skills necessary to allow them to successfully transition from school to tertiary education, (b) promote in-depth understanding of content knowledge while fostering secondary students' 21st century skills, which can enhance academic success, and (c) provide them with opportunities to choose their college careers, which suit their interest and cognitive abilities. Hence, this study seeks to measure the effectiveness of PCM and suggests recommendations to improve practice and future implementations of similar programs.

IV. Methodology

This study followed the mixed methods approach to describe the impact of the designed intervention program. This methodological approach was used to allow for combining quantitative and qualitative methods, including deduction, induction, and abduction (Johnson & Onwuegbuzie, 2004). Diverse participants were selected to participate in the study. Various data collection tools were employed in an attempt to provide an overview of the Pre-College Mentoring program.

A. Research Participants

The participants in this research study were youths, Lebanese and Syrian, from marginalized backgrounds between the ages of 16 and 19. More precisely, one hundred Grade 11 secondary students from public schools in Beirut and Mount Lebanon participated in PCM during the academic year 2018-19.

The steps to select the participants were as following: 11 public schools were identified in Beirut (nine schools) and Mount Lebanon (two schools) based on having a high enrollment rate of Syrian students in Grade 11, and English as the language of instruction. Then, students at these schools completed the needs assessment survey.[1] Next, approximately ten students were selected from each school, according to the following criteria: the research team, who had administered the survey, listed the names of students who were active and showed great interest; from this list, prospective students were chosen to satisfy these criteria: (a) equal gender distribution, (b) ratio of 7:3 Syrian to Lebanese students, (c) one student per academic department (i.e. not to have two students receiving the same academic training), and (d) equal academic track distribution (literary and scientific).[2] Finally, the names were verified with the school principals and/or supervisors to ensure that the chosen students possess essential characteristics, such as commitment, determination, teamwork, and communication skills.[3] The tables below provide detailed descriptions of the student participants (Tables 1 and 2).

Table 1. Distribution of Students per Nationality, Gender, and Academic Track

Nationality		Gender		Academic track	
Syrian	Lebanese	Female	Male	Scientific	Literary
46	54	57	43	73	27

Table 2. Number of Students per Academic Major

Academic major	No. of students
Agriculture	10
Architecture	9
Biology	10
Chemistry	10
Computer Science	10
Education	11
Electrical & Computer Engineering	10
Media Studies	9
Nursing	11
Physics	10
Total	100

However, during the follow up phase, the number of participants declined. The response rates after completing the evaluation and follow up surveys were 74.5 percent and 71 percent respectively.

1 This survey, also developed by the research team, was comprehensive and aimed to inquire about students' skills, academic interests, and perceptions of college/university admission.

2 In Lebanon, students in Grade 11 choose to pursue either the literary or scientific track.

3 After the orientation session, some students requested to change the academic discipline they were assigned to. As a result, the research team had to ask additional students whether they would like to join the program and receive training from a major different from the one they had chosen.

B. Intervention Program

PCM was designed to include ten academic and three non-academic modules that were composed of eight sessions, wherein each had a four-hour duration. The academic modules pertained to the following disciplines: agriculture, architecture, biology, chemistry, computer science, education, electrical and computer engineering, media studies, nursing, and physics. Five sessions in the academic modules were delivered over a period of five weeks between April and May 2019. The sessions in these modules targeted subject-based scholastic knowledge and hands-on activities and/or lab sessions, with at least one activity addressing current research performed in the field. The non-academic modules were composed of two sessions that targeted basic life-skills, such as time management, decision making, and self-management, and a third session that aimed at increasing students' awareness of scholarship opportunities. All of the modules were developed by faculty members and reviewed by the research team before the faculty members delivered the training.

An important aspect of the designed program was its experiential nature, whereby students practiced in a discipline rather than being lectured about it. Such a practical approach aimed to provide a deeper understanding of the selected discipline. Also, the program sought to foster the 4Cs (critical thinking, creativity, collaboration, and communication) of 21st century skills by encouraging students to collaborate and communicate with peers and staff in thinking creatively to address societal issues within each of the ten disciplines.

Importantly, the program involved a culminating school project where students of each participating school were encouraged to apply their leadership, communication, collaboration, creativity, and self-direction skills to design an activity that helps them transfer what they acquired from the PCM program to their school communities. The end product was a poster supplemented with additional documents (e.g. PPT, videos, flyers, etc.), as evidence of transferred learning.

C. Data Collection Procedures

The Pre-College Mentoring program's impact and effectiveness was measured during three phases of its life cycle using different methods and tools. The first phase was implementing the module which lasted for 8 weeks. In the orientation session that introduced the participants to PCM, the students were asked to sit for a pre-test designed by each of the academic departments. After receiving all of the academic training sessions, the students were then asked to sit for the post-test, which was the same as the pre-test. It was a 45-minute test to assess any gains in knowledge and skills that might have occurred as a result of the intervention. Additionally, while the program was running, some sessions from each academic module was videotaped, and students and faculty members were asked to reflect on their experience throughout the PCM. At the end of the scholarship session—the last training session—students were asked to complete an evaluation survey of the program, which included sections on the knowledge and skills acquired, the logistics of PCM's implementation, and suggestions to improve the program. This survey was developed by the research team.

In the second phase, students applied the learning they had acquired. They were given a period of two months (summer vacation) to meet together and were encouraged to think creatively on how to transfer what they had learned to their school communities. Evidence of their work took the form of posters and was presented at the closing ceremony. Five faculty members, who delivered the training sessions, voluntarily accepted to judge the posters, based on criteria set by the research team.

Following up on the intervention was the third phase, which took place in the following academic year 2019-20. The research team visited the students' schools and asked them to complete a follow-up survey that aimed to explore whether students who had participated in the PCM program intend to apply, are ready to apply, and/or have applied to universities.

D. Data Analysis

To support the research team in analyzing the quantitative data that was collected, an external researcher was hired as a consultant for his expertise. Using the statistical software SPSS, data was analysed using means, standard variations, frequencies, and t-test. More specifically, the qualitative data was analyzed using the inductive approach that included (1) transcribing from the recorded video, (2) coding the data that emerged from the recorded video as well as students' responses to the open-ended questions of the evaluation surveys, follow-up surveys, and students' posters, and (3) rearranging the coded information into useful data in order to interpret the findings.

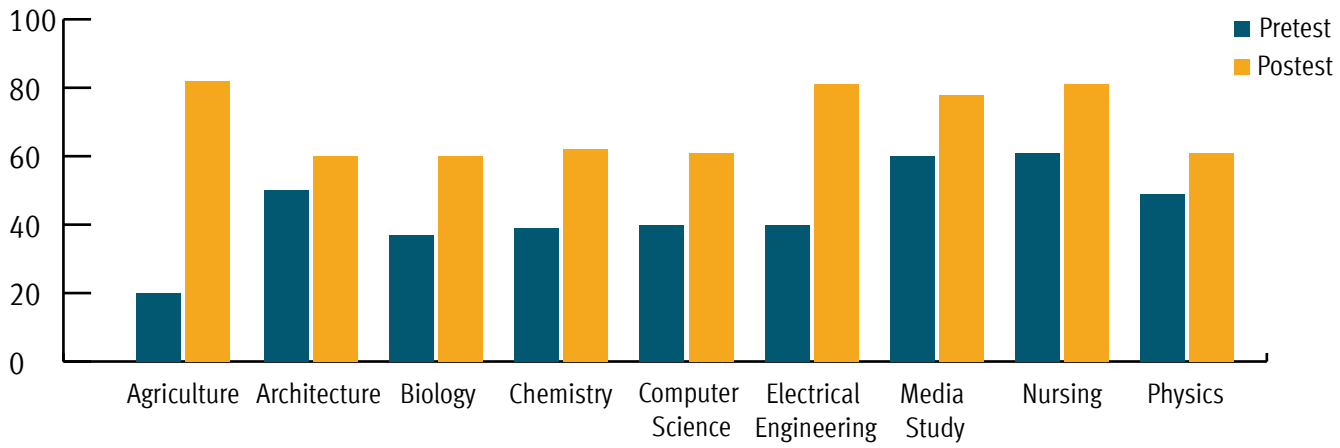
V. Findings

The aim of the Pre-College Mentoring program was to promote in-depth understanding of content knowledge, foster 21st century skills, and provide necessary life skills that allow vulnerable secondary-school youth to successfully transition from school to university. Findings in this section explore whether these goals were achieved and the extent to which the students benefitted from the program.

A. Academic Knowledge and Skills

The primary indicator used to explore whether the students acquired knowledge and skills pertaining to each discipline was the pre- and post-test. This test accurately measured the effectiveness because faculty members, who had offered the academic training sessions, developed it. The findings revealed that in all disciplines, there was an increase in content knowledge and skills associated with each discipline. An analysis of the difference between the students' pre-test and post-test results showed that the knowledge gain was greatest in the subject-field agriculture followed by electrical engineering. It is worth noting that neither discipline is studied at the schools.

Figure 1. A Comparison of the Students' Pre- and Post-Test Results in the Nine Disciplines



The analysis of the pre- and post-tests in the field of education was done separately. This is because most of the questions required open-ended answers and addressed different concepts, unlike the other disciplines. Content analysis of student responses revealed that 80 percent of the students changed their perception of inclusive education. Following a field visit to an inclusive school, students became more aware of individuals with special needs that have the right to be integrated into regular classrooms. Some students even stated that they would be specializing in Special Education because they would like to help such individuals, who are often threatened by negative social imaging and stereotypes. Moreover, after attending hand-on-minds-on and inquiry sessions, all of the students were able to state the difference between science and engineering, and expressed their fascination by the pedagogy used to teach science. As one student mentioned, "Our teachers never use these approaches in their teaching, and I wish we are taught in this way, this helps us learn faster."

Students' testimonies also revealed that they gained academic knowledge and skills after receiving the training sessions. For example, a student stated that he/she "learned new facts" while another explained that "all of the information was more detailed than in high school which strengthened my skills". Many students stated that they acquired new information, especially in disciplines not taught at school, such as agriculture, media studies, and architecture. A student who had received academic training in agriculture said: "In these five days I have learned many new things. I learned in agriculture about composting, how to do composting and how to have organic pesticides"

(Agriculture Student #2). Another student stated: "I learned the difference between mass media and communication" (Media Student #2). Being a new discipline for the students, one said: "I know nothing about this field, this program made me know what Architecture means. Architecture combines shelter and culture. Architecture shapes our minds" (Architecture Student #1).

Additionally, students further claimed that they acquired skills needed for their academic learning at school. They stated that they gained practical information and skills, such as lab safety in biology and chemistry, basic skills on effectively reading maps, and how to conduct an experiment in biology, chemistry, and physics. For example, a student explained: "We're being trained in this program to do experiments in physics and measure values and specifically to think in physics, not only theoretically but also experimentally" (Physics Student #7).

B. Life Skills and 21st Century Skills

The Pre-College Mentoring program aimed to assist vulnerable secondary students in acquiring life skills and 21st century skills that are needed to successfully graduate from high school and pursue a postsecondary degree. The participants reported that they greatly benefited from the two non-academic sessions that targeted these non-cognitive skills. One of the students explained how these sessions helped them: "[The non-academic module] was a very fundamental program for us as high-school students in order to have a better academic future" (Engineering Student #3). Other students stated that they acquired teamwork skills and life skills, such as time management and how to sit for an interview. They also explained that they became aware of the importance of volunteerism and the significance of engaging in community work. Most importantly, students learnt about multiple intelligences, which greatly intrigued and interested them.

Additionally, the posters that students designed to document the transfer of knowledge and skills to their school communities indicated the extent to which they had acquired and properly utilized non-cognitive skills. Importantly, it was evident that students applied the 4Cs in planning their tasks and designing their posters. Overall, the judges were impressed with the students' projects and quality of work. In fact, many of the projects were very creative. Furthermore, there was a competition with a monetary reward to encourage the students and their schools to engage in this activity of creating projects and designing posters. The work produced was of a high caliber and several posters fulfilled the criteria, leading to a tie, and having two schools in second place. Moreover, interviews with school principals during the closing event showed a great satisfaction in their students' work, and reported that the execution of such a culminating project encouraged students to apply many of the 21st century skills, particularly the 4Cs, which rarely takes place in a classroom, due to time constraints and an overloaded curriculum.

C. Transitioning from School to University

An essential goal of the Pre-College Mentoring program is assisting and facilitating the transition of vulnerable youths from school to university. Thus, to explore if this aim was achieved, the students were asked to express their college readiness immediately after the training sessions were concluded,[4] and once they were in Grade 12, after approximately nine months.

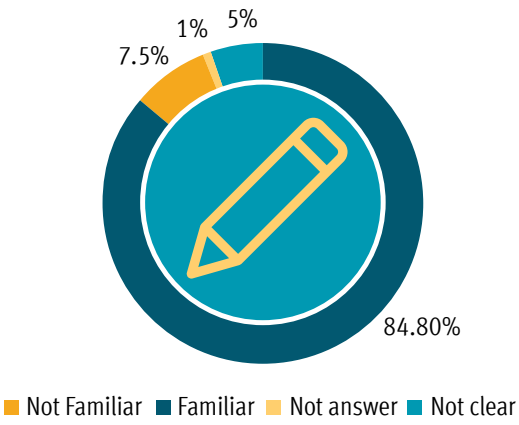
After attending all of the training sessions, 89.87 percent of students reported that they were well introduced, and became aware of some of the available majors at university and future career prospects. Testimonies included statements such as "it gave us information about majors and how to choose a major" (Agriculture Student #5) and "I became aware of the advantages and disadvantages of the major before studying it" (Architecture Student #6). Some students even realized that they already chose majors they would like to pursue, such as this student who said, "This program made me more certain that I want to major in physics in university" (Physics Student #7). Other students explained that the training sessions changed their choice of major. For example, a student narrated, "Actually, I was thinking about being a hardware engineer in the future but when I tried software engineering, I found it [to be] very interesting" (Engineering Student #9), while another participant explained, "At first I didn't know what I wanted to major in, but after the training, I decided on the major" (Chemistry Student #4). Students also reported that the program assisted

4 *The students were still in Grade 11.*

them in thinking and planning for their future careers. Statements such as "it helped me figure out who I am and what I want in the future, and what is my aim to pursue a major at university" (Nursing Student #3) and "it was super helpful because it showed me the different career options" (Education Student #11), supported this finding.

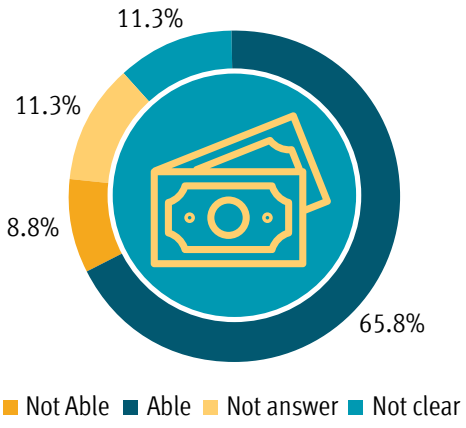
Another component addressed students' college readiness by asking if they felt more familiar with university admission requirements. Six students (7.5 percent) replied that they are still unfamiliar with the process and requirements, one student (1 percent) did not answer, five students (6 percent) didn't give a clear answer whether they were familiar or not, while the majority of students (84.8 percent) provided a positive answer, as illustrated in Figure 2. For example, one of the students reported, "Now, I know the requirements needed to apply to university/scholarship" (Computer Science Student #5), and another corroborated this response by stating, "I feel I am more prepared to apply to university because [the] sessions explained everything" (Biology Student #1). Some students explained that the training sessions provided them with information and knowledge about the admission requirements, such as the need to sit for the SAT test and how to study for it. A student stated that they benefited from these sessions by saying, "yes, these sessions increased my chances to be accepted [into universities]" (Physics Student #6).

***Figure 2.** Students' Familiarity with University Admission Requirements and Readiness to Apply to University*



Additionally, the PCM program aimed to inform the students of the different ways by which they can finance their university education. More than half of the students (65.8 percent) stated that the sessions helped them feel more knowledgeable and confident in planning to finance their university education, while 11 students (13.9 percent) students didn't answer, nine students (11.3%) didn't give a clear answer, and seven students (8 percent) said they still lack confidence, as shown in Figure 3. For example, two students reported, "Yes, due to the information that was presented to us, I can plan to finance my education that suits my situation." Moreover, a session was dedicated to introducing students to the available scholarship opportunities and requirements in Lebanon and abroad. This session was of great benefit, as one of the students explained, "[I] was familiarized with several scholarships that I can apply to because previously I was lost and didn't know how to finance my university studies." Also, students realized that scholarship requirements don't solely rely on grades but on their engagement in other activities, such as community work and volunteerism.

***Figure 3.** The Extent to which Sessions Enabled Students to Better Plan on Financing their University Education*



When the students were promoted to Grade 12,[5] they were asked to report on their readiness and plans in applying to university. Only 15.49 percent of the students stated that they had applied to universities by the end of February 2020. The majority of the students applied to universities where the PCM program was being implemented, while others applied to institutions with average tuition fees or to public universities that have considerably low tuition fees.

5 This was after approximately nine months from the time the PCM program was implemented; when the country witnessed political instability, including the October 17, 2019 uprisings, protests, and road closures.

Students who had not applied to university had different reasons for not applying: the most frequent response was not deciding on a major or university, followed by not knowing there was a deadline or when that admission deadline was, academic pressures at school, the country's deteriorating situation, and waiting for the results of their national official exams.[6] As for financing their university education, most of the students (57.75 percent) expect to receive scholarships. While 45.07 percent expect to get financial aid or pay the fees themselves, most probably by seeking job opportunities.

D. Perceptions of the Pre-College Mentoring Program

The students and faculty members were asked to express their opinions of the Pre-College Mentoring program to ensure further success of the program, if implemented again. Overall, students and faculty members had a positive experience, as a student and one of the instructors said, respectively, "It was a great experience. We had fun" (Architecture Student #1) and "It's one of my favorite experiences". Students also stated that they benefitted from the program, as explained by one of them, "These sessions were of great benefit. I was so lucky to be in the chemistry department" (Chemistry Student #8). One of the students also expressed their gratitude for being selected to join PCM by saying, "No words are enough to express my gratitude… [the] information was more than enough and useful."

Furthermore, students and faculty members identified the importance of the activities and hands-on components in the training sessions. A faculty member and a student from the school of nursing explained, respectively, "What is really nice about the Pre-College Mentoring program at AUB is that students coming from high schools are so excited to experience the life of a nursing student within only five days" and "I know now the reality of the nursing major… You gave us 'real feel' of the major" (Nursing Student #1).

Moreover, students were asked to suggest improvements to the program in terms of content, instructional strategies, meeting time, and duration of sessions. Results showed that some students would like to have additional hands-on activities, more information about career options within the major, less content per session, more graphics and videos, and more complex concepts, while others preferred the information to be more concrete and simplified. Suggestions for instructional strategies included the use of both English and Arabic as languages of instruction, having more time for Q&A, and using PowerPoint presentations rather than writing on the white board. As for logistics, students recommended that the training sessions take place during the weekend, holidays, and/or summer vacation, so as to allow them to have longer and frequent sessions per week; however, some students preferred shorter sessions.

General recommendations by students to improve the program were: (a) including more majors, (b) practicing how to apply to universities through mock sessions, (c) including students in Grade 9 and Grade 10 because they have time to improve their grades and engage in volunteering activities, (d) having more sessions on scholarship opportunities, (e) meeting students who received scholarships to share their experiences, and (f) compiling all the information in a booklet.

6 At the end of Grade 12, students in Lebanon sit for the national official exams. If they pass, they are awarded the Lebanese Baccalaureate II certificate, which indicates their successful completion of school.

VI. Discussion

The purpose of this study was to explore the impact of a newly designed transition program that addressed academic and life skills, in addition to college readiness of vulnerable secondary youth in Lebanon. Findings are discussed below, in light of the available literature.

A. Academic Preparation for School and University

One of the program's aims was to increase student knowledge and develop their skills to enable them to succeed at school and university. This goal is similar to that of other summer bridge and transition programs, such as the Aggie Impact Scholars Program (AISP) at North Carolina A&T State University and the New Start Summer program at the University of Arizona. Findings from Cabrera et al. (2013) and Slade et al. (2015) revealed positive academic performance of students after completing the program, i.e. at the university.

The students in this research study were keen to state that they acquired new information and knowledge because of the instruction strategies, especially the hands-on activities that were used to portray the content in an effective and efficient manner. Gonzalez Quiroz and Garza (2018) corroborated this claim by explaining that the summer bridge program they had investigated produced positive results because it also used gamification and hands-on activities that stimulate and retain students' interest.[7]

B. Importance of Non-Cognitive Skills

Faculty members, school staff, and students reported that the program's participants acquired new set(s) of skills. The posters that the students designed showed that they developed critical thinking, creativity, collaboration, and communication, which are an important set of skills that can facilitate their educational attainment. It seems that the PCM program fostered students' creativity, collaboration, and communication skills because the results of a needs assessment survey that was administered to secondary students in public schools stated that these three skills are underdeveloped at school.

Furthermore, students frequently reported that they acquired life skills and realized the importance of managing their time. Participants in a research study strongly agreed that time management is a vital skill to succeed at university, and further explained that lacking this skill impacted their college grades (Reid & Moore, 2008).

C. College Preparedness

As soon as the students completed the training sessions, 89.87 percent reported that they became familiar with university admission requirements, equipped with necessary skills, and ready to apply to university. However, once they were in Grade 12, only 15.49 percent of the students applied to university. It was probable that students attributed the reasons to the unruly events occurring in Lebanon beginning with the economic crisis, October 17, 2020, uprising, and ending with the novel coronavirus that locked down the country. However, the main reason for not applying to university was students still did not feel ready because they don't know to which major and institution they want to apply to. This implies that the nature of the sessions and when the program is implemented must be thoughtfully studied in designing future and similar pre-college mentoring programs.

This finding resonates with research studies that vulnerable and marginalized youth require more support, guidance, and advice to successfully transition from school to university (Kong et al., 2016; Reid & Moore, 2008; Slade et al., 2015; Wilkinson, 2002; Zhang & Smith, 2011). First-hand accounts from vulnerable youth stress the need for guidance in preparing and applying to university (Earnest et al., 2010). Marginalized secondary students are in dire need of support, guidance, and advice because of their disadvantaged backgrounds, such as parents who are not university graduates, which limits their access to necessary information and resources (Earnest et al., 2010; Farah & Benchiba, 2018; Reid & Moore, 2008). Ideally, schools providing university guidance and counseling can address this issue. This recommendation had been suggested almost a decade ago by Vlaardingerbroek et al. (2007), yet, there is no tangible progress to-date.

7 Gamification is defined by "the process of applying gaming designs to education to make them more engaging and entertaining for the learner" (Gonzalez Quiroz & Garza, 2018, p. 108).

VII. Recommendations

This research study examined the impact and effectiveness of an experiential Pre-College Mentoring program, which is the first of its kind in Lebanon. Based on the findings and literature review, the set of recommendations suggest ways to improve the program, take action, and address implications for future research.

A. Improving the PCM Program

One of the program's aims was to 'to help students get a comprehensive understanding of a college major by experiencing it rather than learning about it in order to make well-informed decisions in selecting their majors, and at the same time promote their academic success. However, lack of sufficient data on how students performed at school impaired our understanding on the effectiveness of PCM on student learning. It is recommended that the data collection tools thoroughly include the academic component, in addition to triangulating the students' responses with school records. Furthermore, it is recommended by many students to rotate across more than one discipline to further broaden the students' scope in choosing their college majors. It is fathomable that this suggestion is difficult to implement, due to logistics, but worth exploring.

Another major goal of the PCM program was to facilitate the transitioning of vulnerable youths from school to university. However, the findings revealed that not all of the participants were ready for college. Thus, it is recommended to improve the program's university guidance and counseling component by offering more training sessions. In these additional sessions, university guidance and counselors meet with the students to discuss their options thoroughly, students practice applying to universities through mock procedures, and meet other students who underwent similar experiences.

B. Action Recommendations

Assistance from diverse stakeholders coupled with the efforts of the PCM program is needed to facilitate the transition of youths from school to university. Schools can also assist by providing university guidance and counseling, universities can introduce career guidance and counseling services for prospective and first-year students, and entities such as the Ministry or organizations working in education can compile scholarship opportunities.

Secondary Schools Provide University Guidance and Counseling

The research study's findings revealed that students felt they are not ready to apply to university because they don't have the necessary information to do so. To better equip the students, it is recommended that schools fill this gap and provide the students with the much-needed guidance and counseling. Farah and Benchiba (2018) further support the need for Arab youth to receive "professional support" in making these "life-changing decisions" (p. 25).

Ideally, schools would assign a counselor to conduct one-on-one meetings with the students, starting in Grade 11. By doing so, not only will the students be able to plan for their future education but also their current high school education. In planning for their postsecondary education, the counselor would provide the students with information about universities, the application process, scholarships, and financial aid (Reid & Moore, 2008). It is the school's duty to assign a qualified counselor because of the significant role they play in shaping the students' future. For instance, it is important for students to "find the right institutional fit"; if they don't, they might risk dropping out of university and/or not graduating (Venezia & Jaeger, 2013, p. 121). A research study indicated that unqualified counselors have detrimental impacts on students continuing their education by "putting them down" and discouraging them (Smyth & Banks, 2012).

Compile Scholarship Opportunities

A significant number of secondary students expect and plan to finance their university education through scholarships. For some of these students, it is the only way they can pursue a higher education degree. Scholarship opportunities are available; however, students find it difficult to search for them. Thus, compiling and listing all of the scholarships on a webpage, perhaps under the Ministry of Education and Higher Education's directive, would greatly help prospective university students.

C. Future Research

There is a paucity of research studies that identify the non-cognitive skills that are needed to facilitate youths' transitioning from school to university. However, few studies which address these skills confirmed the importance in preparing youths for university (Reid & Moore, 2008; Venezia & Jaeger, 2013), and in limiting the number of students from dropping out (Gutman & Schoon, 2013; Kelly et al., 2007). Thus, it is essential that future studies explore and identify the non-cognitive skills that are needed to facilitate youth transition from school to university, including best practices to help them acquire these skills.

VIII. Conclusion

Findings from both the research study and literature highlight that youths, particularly those marginalized and vulnerable, need assistance to transition from school to university. Depending on the available resources and the given circumstances, different activities are being carried out. In Lebanon, however, the situation is more complex. Firstly, there are only a handful of activities, and their impact and effectiveness are unclear. Secondly, and more importantly, the economic crisis and the outbreak of the global pandemic are exacerbating the already dire situation of the vulnerable and marginalized youths. Thus, it is crucial that substantial efforts are made to assist these youths be ready for college by providing university guidance and counseling. These young people are in a precarious situation and are susceptible to discontinuing their education or pursuing majors that lack future prospects. It is important to mitigate a “lost generation” and have educated persons to ensure that they become informed citizens, who are able to make informed decisions that positively impact their lives as well as their communities and societies.

REFERENCES

Cabrera, A. F., & La Nasa, S. M. (2000). Understanding the college-choice process. New Directions for Institutional Research, 2000(107), 5–22. https://doi.org/10.1002/ir.10701

Cabrera, N. L., Miner, D. D., & Milem, J. F. (2013). Can a summer bridge program impact first-year persistence and performance?: A case study of the New Start Summer Program. Research in Higher Education, 54, 481–498. https://doi.org/10.1007/s11162-013-9286-7

Earnest, J., Joyce, A., De Mori, G., & Silvagni, G. (2010). Are universities responding to the needs of students from refugee backgrounds? Australian Journal of Education, 54(2), 155–174. https://doi.org/10.1177/000494411005400204

El-Ghali, H. (2018). Bridging gaps within refugee education for durable futures [PowerPoint slides]

El-Ghali, H., & Alameddine, F. (2019). Syrian refugee students in Lebanese higher education: Recognition of qualifications and beyond. Issam Fares Institute for Public Policy and International Affairs. https://www.aub.edu.lb/ifi/Documents/publications/research_reports/2019-2020/20190107_syrian_refugee_students_in_lebanese_higher_education.pdf

Farah, S., & Benchiba, S. (2018). Investing in tomorrow's talent: A study on the college and career readiness of Arab youth. Abdulla Al Ghurair Foundation for Education. https://www.alghurairfoundation.org/sites/default/files/AGFE%20CCR%20Report%20landscape%20v.2.2.pdf

Foskett, N., Dyke, M., & Maringe, F. (2008). The influence of the school in the decision to participate in learning post-16. British Educational Research Association, 34(2), 195–211. https://doi.org/10.1080/01411920701491961

Gerdes, H., & Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: A longitudinal study of retention. Journal of Counseling & Development, 72(3), 281–288. https://doi.org/10.1002/j.1556-6676.1994.tb00935

Gibney, A., Moore, N., Murphy, F., & O'Sullivan, S. (2011). The first semester of university life; "will I be able to manage it at all?" Higher Education, 62(3), 351–366. https://doi.org/10.1007/s10734-010-9392-9

Gonzalez Quiroz, A., & Garza, N. R. (2018). Focus on student success: Components for effective summer bridge programs. Journal of Hispanic Higher Education, 17(2), 101–111. https://doi.org/10.1177/1538192717753988

Gutman, L. M., & Schoon, I. (2013). The impact of non-cognitive skills on outcomes for young people. [Literature review]. Education Endowment Foundation & Cabinet Office. London: Institute of Education. https://educationendowmentfoundation.org.uk/public/files/Presentations/Publications/Non-cognitive_skills_literature_review_1.pdf

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. Educational Researcher, 33(7), 14–26. https://doi.org/10.3102/0013189X033007014

Kelly, J. T., Kendrick, M. M., Newgent, R. A., & Lucas, C. J. (2007). Strategies for student transition to college: A proactive approach. College Student Journal, 41(4), 1021–1035.

Keung, C. P. C., & Ho, E. S. C. (2019). Structure and agency in adolescents' expectations of pursuing post-secondary education. Research in Higher Education, 61(2), 270–295. https://doi.org/10.1007/s11162-019-09574-8

Kong, E., Parkes, G., Bishop, S., & Lawrence, J. (2016). University transition challenges for first year domestic cald students from refugee backgrounds: A case study from an Australian regional university. Australian Journal of Adult Learning, 56(2), 170–197.

Lowe, H., & Cook, A. (2003). Mind the gap : Are students prepared for higher education? Journal of Further and Higher Education, 27(1), 53–76. https://doi.org/10.1080/03098770305629

Mattanah, J. F., Ayers, J. F., Brand, B. L., Brooks, L. J., Quimby, J. L., & McNary, S. W. (2010). A social support intervention to ease the college transition: Exploring main effects and moderators. Journal of College Student Development, 51(1), 93–108. https://doi.org/10.1353/csd.0.0116

McBrien, J. L. (2005). Educational needs and barriers for refugee students in the united states : A review of the literature. Review of Educational Research, 75(3), 329–364. https://doi.org/10.3102/00346543075003329

Pavlova, M. (2017). Aspirations of and realities for Hong Kong students: Is the “formal” transition system effective? Educational Research for Policy and Practice, 16(1), 77–93. *https://doi.org/10.1007/s10671-016-9203-x*

Reid, M. J., & Moore, J. L. (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students. Urban Education, 43(2), 240–261. *https://doi.org/10.1177/0042085907312346*

Slade, J., Eatmon, D., Staley, K., & Dixon, K. G. (2015). Getting into the pipeline: Summer bridge as a pathway to college success. Journal of Negro Education, 84(2), 125–138. *https://doi.org/10.7709/jnegroeducation.84.2.0125*

Smyth, E., & Banks, J. (2012). ‘There was never really any question of anything else’: Young people’s agency, institutional habitus and the transition to higher education. British Journal of Sociology Education, 33(2), 263–281. *https://doi.org/10.1080/01425692.2012.632867*

Strayhorn, T. L. (2011). Bridging the pipeline : Increasing underrepresented students’ preparation for college through a summer bridge program. American Behavioral Scientist, 55(2), 142–159. *https://doi.org/10.1177/0002764210381871*

Trading Economics. (2016a). Lebanon: School enrollment, tertiary. *https://tradingeconomics.com/lebanon/school-enrollment-tertiary-percent-gross-wb-data.html*

Trading Economics. (2016b). Lebanon: Gross enrolment ratio, upper secondary, both sexes. *https://tradingeconomics.com/lebanon/gross-enrolment-ratio-upper-secondary-both-sexes-percent-wb-data.html*

Venezia, A., & Jaeger, L. (2013). Transitions from high school to college. Future of Children, 23(1), 117–136. *https://doi.org/10.1353/foc.2013.0004*

Vlaardingerbroek, B., Dallal, K., Rizkallah, G., & Rabah, J. (2007). A tracer study of Lebanese upper secondary school students. International Journal of Educational Development, 27(5), 564–571. *https://doi.org/10.1016/j.ijedudev.2006.09.002*

Wilkinson, L. (2002). Factors influencing the academic success of refugee youth in Canada. Journal of Youth Studies, 5(2), 173–193. *https://doi.org/10.1080/1367626022013443*

Zhang, P., & Smith, W. L. (2011). From high school to college: The transition experiences of black and white students. Journal of Black Studies, 42(5), 828–845. *https://doi.org/10.1177/0021934710376171*

ABOUT THE PROGRAM

Education and Youth Policy

The Education and Youth Policy Research program at the Issam Fares Institute aims at informing educational policy and promoting improved educational practices and achievement through an increased understanding of the issues of education in the Arab world and their impact on children and youth in the region.

The program further aims at engaging in applied, policy-relevant research to help policymakers make decisions based on best available information. The program will serve as a resource for government agencies and other institutions in order to shape the education and youth policy debate through evidence.

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The Issam Fares Institute for Public Policy and International Affairs (IFI) at the American University of Beirut (AUB) is an independent, research-based, policy oriented institute. It aims to initiate and develop policy-relevant research in and about the Arab region.

The Institute is committed to expanding and deepening knowledge production and to creating a space for the interdisciplinary exchange of ideas among researchers, civil society actors, and policy makers.

IFI goals:

- *Enhancing and broadening public policy-related debate and knowledge production in the Arab world and beyond;*
- *Better understanding the Arab world within shifting international and global contexts;*
- *Providing a space to enrich the quality of interaction among scholars, officials and civil society actors in and about the Arab world;*
- *Disseminating knowledge that is accessible to policy-makers, media, research communities and the general public.*