



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 9, 2020

**A new decade
for social changes**

www.techniumscience.com

ISSN 2668-7798



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An Investigation of the Factors Influencing UAE Nationals to undertake Technical and Vocational Education

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Abstract. Technical and vocational skills are essential for the United Arab Emirates (UAE) to secure growth and wealth as per the UAE Vision 2021, Abu Dhabi Vision 2030 and Emiratization strategies. Gaining insights about the factors that influence Emirati students that study technical and vocational education can support the UAE to attract more Emiratis into that area. What are those major influential factors, and are there any differences related to the gender, age level, and location of living in the UAE? The factor analysis revealed five underlying factors; the career factor, the economic factor, the guidance factor, the media factor, and the social environment factor. The career factor ($M = 3.48$) is perceived as the most influential one, followed by the social environment factor ($M = 3.32$). The independent sample t-test presented a statistically significant difference between male ($M = 2.8$, $SD = 1.066$, $N = 178$) and female ($M = 2.6$, $SD = 1.066$, $N = 250$) perceptions in the economic factor ($t [426] = 2.042 = 0.042$, $p < 0.05$). The result shows that males place more emphasis on the economic aspect when considering their educational paths. The one-way ANOVA revealed a statistically significant variance in the economic factor for the location of living ($F [7,420] = 4.278$, $p < 0.05$). The research discloses that the career aspects and future job perspectives in addition to parents of national students are the most considerable influencer, which is forming the basis for this study. Differences in perceptions could be discovered for economic aspects only. The findings reveal it is essential to consider the career, economic aspect, and parents' involvement when marketing technical and vocational education to Emirati students. Social media marketing is recommended as an advertising tool for best results.

Keywords. Technical and Vocational Education, United Arab Emirates, influence factors, dual system

1. Introduction

Technical and vocational education has been practiced since ancient times. Professional know-how, from fishermen, crafts workers, manufacturers, traders, doctors, and countless others, has been passed down over generations. Families have shared their knowledge with their descendants. Those concepts create the initial idea of educating about a vocation. Vocation is described as an activity towards a career or profession that a person pursues to gain the required skills [1]. Those skills need to be imparted by people who are experienced and aware of the particular vocation.

In history, countries have developed by facilitating the passing on of skills in specific vocations or professions. In the case of the United Arab Emirates (UAE), its first businesses were in pearl diving and trading. This know-how has been passed on to the next generations

over many years. The provision of professional training—which is today called technical and vocational education (TVE)—is of importance for any country seeking to achieve a sustainable economy and to stay competitive [2].

In order to secure a professional workforce and differentiated knowledge economy, the UAE is required to educate 10 Emiratis with a vocational degree for every Emirati university graduate [3]. This presents a challenge for the country because most UAE national students prefer to continue their education in a government-funded college or university in the UAE or at a university abroad. The Workforce Planning Study as published by the Dubai International Academic City revealed that only about three percent of students in the UAE register in technical vocational training institutes compared to the global average of ten percent [2],[4].

Several initiatives exist in the UAE to promote TVE. Significant among these is the Abu Dhabi Center for Technical and Vocational Education and Training (ACTVET). Established in 2010, ACTVET administers two educational entities: the Abu Dhabi Technical and Vocational Education and Training Institute (ADVETI) and the Institute of Applied Technology (IAT) [5]. Those bodies established the Applied Technology High School (ATHS) and Secondary Technical School (STS) systems that provide students with technical and vocational courses from Grade 9 to Grade 12. The ATHS and STS started in 2005 with four high schools and 700 students and continuously increased the intake of students and development of further schools all over the UAE. The Figures for the 2018–19 academic year are 32 High Schools and around 8,400 UAE national students systemwide, distributed all over the UAE.

This thesis seeks to better understand the factors that have influenced and ultimately motivated those national students to choose their education in the technical and vocational pathway. This research is the first of its kind to focus on UAE national high school students. As such, knowing and understanding those influential factors will be important when it comes to encouraging and attracting additional Emirati students in the future. Few researchers have addressed the problem, and the previous work has focused mainly on college-level students. A thorough understanding of the perceptions of Emirati high school students enrolled in vocational programs is lacking in the existing literature.

Previous studies of students from all over the world have found that perceptions of TVE vary according to the age, gender, and living location of student. The research is, therefore, focused on finding out if UAE nationals of different age levels are influenced by various factors to pursue their education in the TVE field. Another focus is on gender. Some UAE national female students are enrolled on courses, such as Electrical and Mechanical Engineering, that are not stereotypically female, so it is interesting to find out what influenced those students to study those majors. Do they have the same perceptions and motivations as the male students? The research focuses furthermore on the location of living as the literature review revealed that students from rural areas think differently about vocational education than students from urban areas.

Another essential aspect that the literature review revealed is the necessary collaboration between industry and academia in the UAE. According to Hammadi and Mohiuddin [2], there has not been enough effort to emphasize this partnership in the UAE. Close collaboration is essential for quickly responding to industry needs. Cooperation efforts could even reduce the youth unemployment rate in the UAE. The youth unemployment rate is rather high in comparison with other developed countries. The reason is that the younger generation is mostly interested in working for the already saturated public sector. The private sector is not of interest to them due to the lower salary and long working hours.

The dual system of vocational education, which is already practiced in several European countries, entails professional degrees that combine work and study in a parallel program [6]. The dual system promotes close collaboration between the government, industry, and academia. This program could be considered by the government to support the UAE in its efforts to work closely with industry and academia and can furthermore assist in promoting the private sector. Industries have the chance to train future staff according to individual company needs. The benefit of the dual system as a study model is that students can directly link the know-how from the school with the practical experience at the workplace. This program assists in a smooth shift from school life to the work life of a student. The companies, on the other hand, can train the students according to their individual needs. Additional on-the-job training is no longer required. The existing literature does not have any indication of whether Emirati students might be interested in the dual system of vocational education. Therefore, this research also considers their opinions about the program.

To sum up, this study had two primary aims. The first was to find the influence factors that motivate young Emiratis in the UAE to pursue their studies in the TVE field. The focus was on students studying at the Applied Technology High School and Secondary Technical School and at the further educational entity the Fatima College of Health Sciences. The findings regarding the perceptions of students were analyzed and tested for statistically significant differences in terms of gender, age level, and living location. The second objective was to learn if students might be interested in studying and working at the same time to pursue a professional degree. On the basis of the general aims of the study mentioned above, the following research objectives were identified:

1. To discover the factors that have influenced UAE national students to study technical and vocational education. Specifically:
 - a. To analyze a statistically significant difference regarding gender and influence factors.
 - b. To discover a statistically significant difference regarding age and influence factors.
 - c. To examine a statistically significant difference regarding living location and influence factors.
2. To assess Emirati students' interest in the dual system of vocational education as a study option.

2. Literature

TVE is of importance for any country. There are several positive aspects of why a state should invest in TVE. Switzerland provides the best example of a highly successful and established vocational education system that offers dual programs combining work and study. About 70% of the youth continue their education in the TVE field. This results in a low youth unemployment rate and an overall wealthy country [7], [8], [9].

However, not every country can implement the vocational program and especially the dual system because specific requirements must be given such as the willingness and qualification from the industry to train the youth, the support from the government, and, finally, the acceptance of the society toward vocational education.

Countries need to invest in tools that inform about the benefits and outcomes of vocational degrees and stop media from degrading TVE. Otherwise, the society receives a wrong perception of the result of a professional degree. It is often neglected that someone with a vocational degree can continue in education and achieve a higher degree later in the career phase. It is therefore important to inform about the program content and benefits. Considering the population and their preferences, each person is individual and might be influenced by outside factors to continue on a particular educational track.

Several research papers address the topic of influence factors that relate to the career choice for high school students. The existing literature has, however, a shortfall of research about the factors that influence UAE national students exclusively to choose TVE as their educational track. Few researchers have addressed the problem that the UAE requires vocational skills. Previous work does not consider the viewpoint of UAE national students concerning the dual system of vocational education to work and study at the same time. Research is lacking regarding the comparison of perceptions from genders, different age groups, and various locations within the UAE. Research that relates to the Arabian Gulf such as from Rutledge and Madi [10] concentrates mainly on the viewpoint of female students.

Most of the literature that informs about the influence factors for further education choices relate to findings that are outside of the UAE. Research conducted with samples from the UAE were either not done explicitly with UAE nationals or do not refer to the influence factors that motivated students to study in their chosen vocational fields. Some of the research is only regionally specific, like in Dubai, Abu Dhabi, or the Northern Emirates. The entire UAE has not yet been considered as a whole. The literature is lacking research that considers several influence factors to receive a clear picture of the most influential one.

The researcher created the theoretical framework after reviewing the literature and theories, including the factors that influence and finally motivate UAE national students to study TVE. Important to define are the factors that influence students from outside. Those are for sure the parents, especially for the minor students, the family members, the school the students studied before, and any career advice.

Additional factors are the influence of the media and the tools used by the vocational school to market their program. Furthermore, the reputation of the school important is important, as are any economic aspects such as tuition fees, transport costs, or stipends. The curriculum and the faculty, as well as co-curricular activities offered, should be considered, and the future career perspective is highly important.

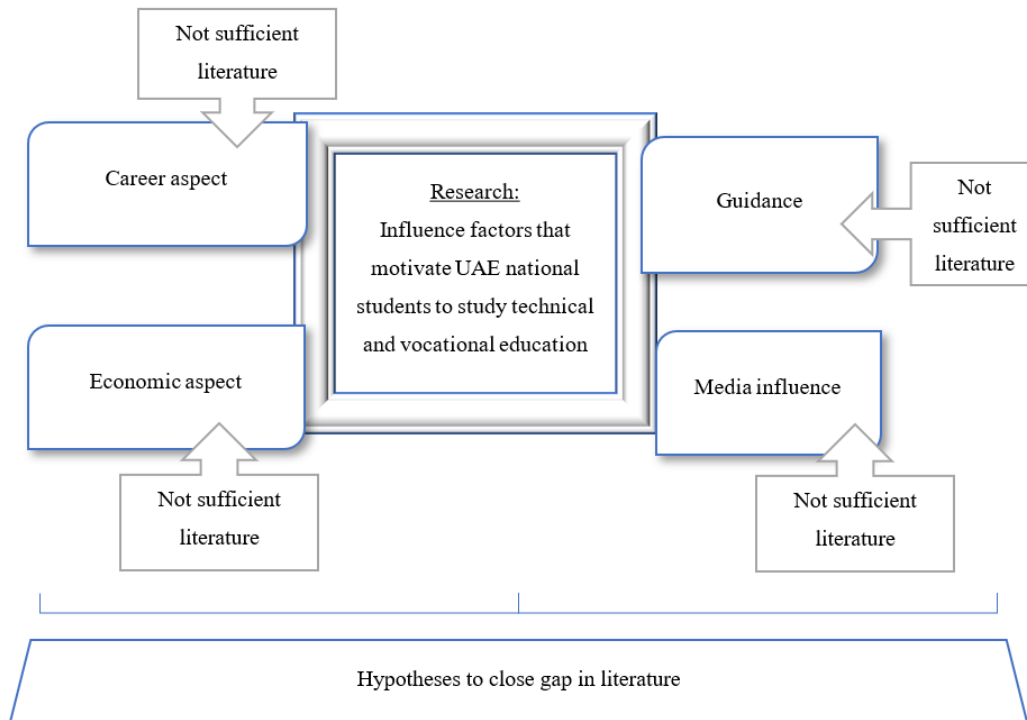


Figure 1 Literature review with defined gaps
Source: Author, from the literature review

The conceptual diagram has been established from the researched literature and defined gaps and is presented in Figures 1 and 2. Figure 2 depicts the concept that will be studied, and it shows the dependent and independent variables as well as their relationships. The idea of the diagram is to present the items that will be explored, measured, and defined in detail.

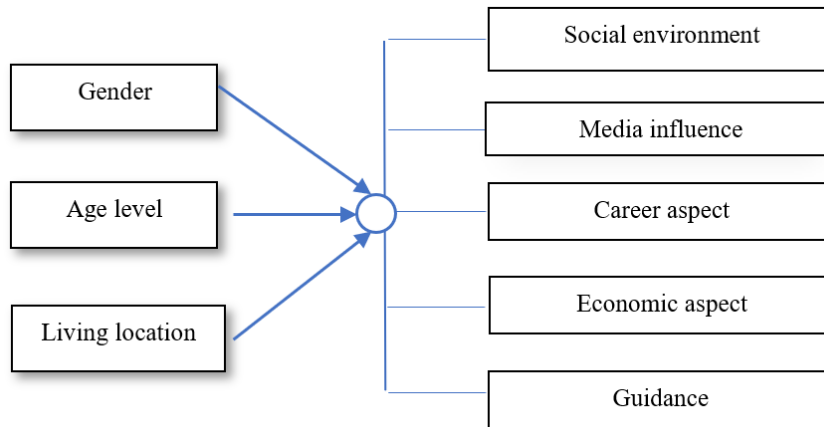


Figure 2 Conceptual diagram – influence factors for TVE choice
Source: Author, from the literature review

Social Environment

The literature review revealed that the parents, the family, and close friends from Emirati students are among the primary influences for further education. However, the researcher found that the family from Emirati students would mainly recommend continuing learning in the academic sector. Students would then preferably all continue their education in that field and not in the vocational area. Research is lacking to inform about who had the most influence on students in selecting the TVE track. Another important aspect is the patriotism of the youth towards their country. Emiratis love their country and leadership. As students identify themselves often to serve their country, it can be a further factor that influenced them to continue their path to become future technicians or engineers for the UAE. This aspect is one of the visions of the ACTVET entities. The research approach has not been tested before.

Media influence

Young people, who are nowadays described as “digital natives,” are mostly influenced by social media. The communication takes place regularly within social media tools, and marketing is spread through it as well. There is no research done in the UAE that relates to the influence through social media to study TVE. However, the aspect of marketing, in general, was mentioned as an influence factor in the literature.

The following study needs, therefore, to consider if and what kind of marketing has influenced the student to study TVE. Those include the influence of YouTube and general TV advertisements. Those factors must be considered as potential influencing factors that persuaded students to choose their respective educational tracks.

Career aspect

One significant factor that was stated by scholars was the personal factor that finally influenced and motivated a student to study on a specific track. This relates to the ambitions, beliefs, values, and career aspirations of the student. The characteristic of the career perspective

that a student might have when studying at a specific vocational school needs to be elaborated. Some students might even be influenced by their parents to perform the same profession as them to overtake a possible business later to step into the footsteps of their parents. Research has to include the perception towards TVE in general, which was not done before in the UAE. The reputation of the vocational schools can indicate to be another significant influence factor as well as the marketing done by the school to recruit students. The curriculum offered and its practical workshops in the vocational schools might be an additional encouragement. Another significant aspect may be the offering of co-curricular activities and the facilities.

Economic aspect

The literature showed that factors that relate to the financial situation of a family are influencing the decision of students to continue their studies in a specific educational entity. It is interesting to find out within this study if this is a factor that influenced the UAE national students. Even factors such as the stipend payment they would receive in the government vocational school, the bus transport, and the location of the school are perceived as economic factors and require testing. Research in that area did not take place previously in the UAE.

Guidance

Receiving career guidance is an essential requirement for the youth to understand their future possibilities after school time. A lack of professional advice and showing the future career perspective can result that a student might study for a major that he/she does not like. Career-related work programs such as internships or work placements can assist in discovering the work life and specific occupation. Previous research shows that students chose the vocational track due to their lower marks, or due to the career advice received from the former school. Since TVE has a general reputation for being for low achievers, it is important to test whether the performance of scholars in their previous schools could have had an impact on their selection of vocational education. Many scientists argue that career advice received has the primary influence on the choice towards a career path. This career advice could have been given through assigned career advisers or the teachers within the curriculum from the previous school. Research related to these factors did not yet take place in the UAE.

Gender, age, and location of living and growing up

Different generations have different perceptions about things so the age factor should be considered in this research. The literature review revealed that different opinions and influential factors exist within different age levels. The study will discover this as well in the case of the Emiratis' perceptions. Perceptions, according to age levels, will, therefore, be tested statistically. Gender has been often mentioned by researchers as an influential factor in choosing the technical and vocational education track. Females and males have different perceptions of TVE. The research will use those aspects and test differences in attitudes in the case of the whole UAE. Finally, the location of living and growing up may have an impact on the decision to use not the traditional academic pathway as found by several scientists. The research will consider this aspect and will test any differences in regard to the location.

Motivation

The literature has already several theories concerning factors that influence decisions. Considering the area of TVE and the available examinations regarding the aspects that impact students' choices in the UAE to study TVE is, however, not sufficient. Furthermore, the viewpoint of the dual system of vocational education has not yet been researched in the UAE.

Questions used in the survey to students relate to the study from Alsa'aideh [11] that tested the factors that were associated with the avoidance of TVE at students in Jordan.

The motivation of a person is needed to make a decision. To understanding the factors that motivate a person for a decision, it is important to consider various theories. Looking for motivation factors of Emiratis, Jabeen, Katsioloudes, and Das [12] found in their research conducted in the UAE with female Emirati entrepreneurs that the family is one of the essential motivation factors, but not the main one. It is more critical for those female Emiratis that they receive help and involvement of the family members for their success in their business [12].

As found before, the general perception towards TVE considering the sociocultural view is slightly negative. The general idea to continue education goes towards academic education. Further research is required to give more specific indications about what influenced students to pursue their education in the vocational field. It would be interesting to study the perception of acceptance in different Emirates.

3. Methodology

The scholar used the quantitative research method as a research strategy. The study has been performed cross-sectional as the data was collected at once in a one time period. The researcher developed a quantitative online questionnaire with general and Likert-style questions. The general questions intend to provide details about the participating sample. The Likert-style questions support to identify the different perceptions of students related to the influence factors. Descriptive and inferential statistical tests supported to receive results. First, to receive information about the participating sample within the descriptive study. Next, to determine the percentages of the survey statements with the frequencies analysis. The independent sample t-test provides results that inform if gender perceptions have statistically significant differences. To identify any variances of perceptions between the age level and living location, the one-way ANOVA test was performed. The researcher used the SPSS software for all analyses. A case study research was performed in order to test the practical implications of the main study findings.

The concept of the research design provides information about the plan of the research and its involved resources. The model demonstrates how the researcher gathered the required data and how the data is analyzed. Marczyk, DeMatteo, and Festinger [13] recommend starting research by reviewing previous literature and theories, to formulate a research problem, and to articulate falsifiable hypotheses. This should be the null and alternative hypotheses. Variables should be chosen and focused on within the research study. Those variables should be the independent and dependent variable of research.

The researcher finalized the qualitative study by reviewing the literature and theories and identifying the research problem. The next step was to formulate the research question and hypotheses while determining the variables.

The identified hypotheses are the following:

- (H₀1): "There is no statistically significant difference per influence factor related to the gender of UAE national students that study technical and vocational education."
- (H₀2): "There is no statistically significant difference per influence factor related to the age level of UAE national students that study technical and vocational education."
- (H₀3): "There is no statistically significant difference per influence factor related to the location of living of UAE national students that study technical and vocational education."

The formulated hypotheses require testing. The researcher used the quantitative online questionnaire to support receiving the answers to the hypotheses. The online survey has been distributed to the intended sample population. Taherdoost [14] argues that information collected within a questionnaire, allow receiving relevant data in a way that is reliable and valid. The collection of data within the quantitative method can be done very fast and includes precise information for the analysis [15].

The participants selected for the study are students from grade 11 and grade 12 of the Applied Technology High School (ATHS) and the Fatima College of Health Science (FCHS). The anonymous questionnaire has been sent by email from the respective school management to the students mentioned above. The email included information on how to access the online survey. The participation was randomly within the selected students out of the mentioned entities. The collection of the data happened cross-sectional within a one-time frame of two weeks, starting on 26th September 2018 until 11th October 2018. Of the study population, 466 surveys were completed and received back by the scholar. Students that indicated they are not UAE nationals have been excluded from the result (N = 38). Finally, a total of 428 survey results were used for further analysis for the main study. Results were analysed and evaluated.

The case study research was performed in order to test the practical implications of the main study findings. The Secondary Technical School (STS) in the UAE was approached for the practical test of the research findings. The same quantitative online survey was distributed by email to Grade 11 and Grade 12 UAE national male and female students from the school principals after approval from the High School Director. 171 UAE national students participated in the quantitative online survey that included general demographic questions, and the same five-point Likert-style self-report questions as in the initial study. The results of the analyses were coded and examined with the SPSS program. The same descriptive and inferential statistical tests were performed as in the main study to guarantee a comparison of the results. Tables and graphs were used to compare the findings of the two studies.

Students received the option to provide answers while choosing different reply choices according to the five-point Likert symmetric scale. The reply options were testing the perception of the students while they were asked to answer with either (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree. The usage of coding the answer supported in performing the statistical analysis. The answers are inter-linked with each other and inform about a specific dimension, considering the attitude about something [16]. Descriptive and inferential statistical tests supported to receive results for the hypotheses.

4. Findings

The following chapter provides details about the practical significance related to the findings from the initial empirical study while comparing the results with the case study findings. Both studies involved male and female students who were enrolled in TVE at the time of research. The types of research were conducted within the same quantitative online survey. Students participated voluntarily and were informed about the confidentiality of their data before participating. The results are compared and summarized with tables and graphs.

4.1. Plan after graduation

Comparing the plan after graduation from both studies, it shows that the initial plan is quite similar, as presented in Figure 3. Most of the students planned to study in one of the public university or college in the UAE. Only a few students planned to continue their education in one of the ACTVET entities, whereas more students from the case study indicated the interest

than from the initial research. It is essential to note that the main study included also students who were enrolled at the college level.

Practical implications:

The results confirm that even though students were involved in TVE courses, the majority still planned to continue in one of the governments funded higher education academic institutions. The Higher Colleges of Technology (HCT) uses practical work placement aspects and would, therefore, contribute to TVE characteristics when students would choose to continue studies there. Farias and Sevilla [17] found in their study in Chile that where students continue the vocational study area from secondary to the postsecondary, would have a better study outcome in comparison to students with an academic degree only. Hence, ACTVET requires to improve measures to retain high school students that are already enrolled in TVE to remain in that field and continue studies in one of the IAT or ADVETI higher education entities. This measure will secure to have more young Emiratis with vocational degrees and, most importantly, with professional skills as those skills are the ones required from the labor market as per the National Agenda and UAE Vision 2021 [18].

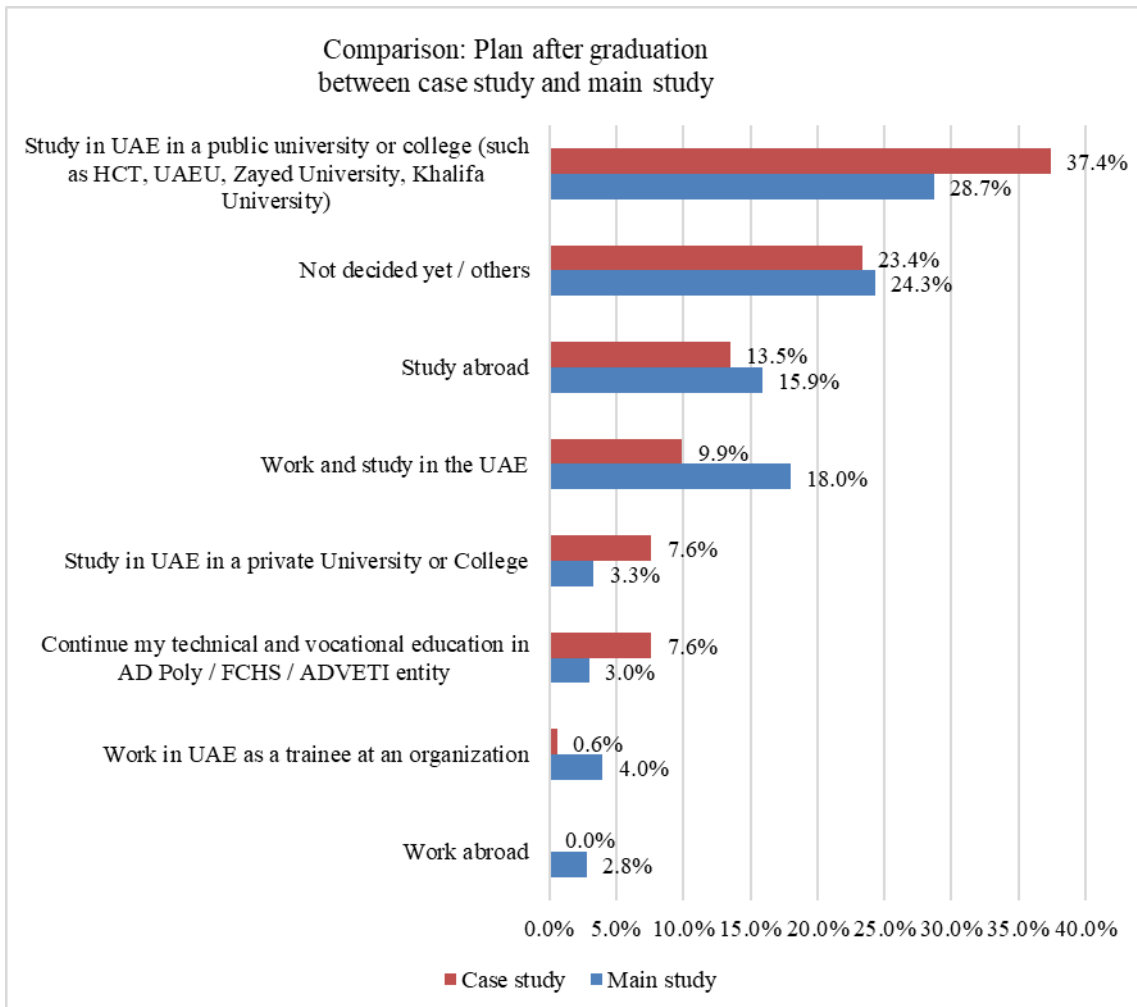


Figure 3 “Plan after graduation” in the case study and main study: a comparison

4.2. Profession of parents

The question considering the profession of the parents should indicate if students have been influenced to study for the same job as their parents. Especially the question about the occupation of the parents to be an engineer might have influenced the student to choose the technical field. Both studies indicated that about a third of the scholars are not aware of the profession of their parents. More fathers than mothers are engineers. However, the overall figure is quite low. Most students replied with “others” (above 40%) and provided the profession of the parents, as indicated in Figures 4 and 5. Students informed in both results that most of the fathers work for the military or police, and the majority of the mothers are housewives.

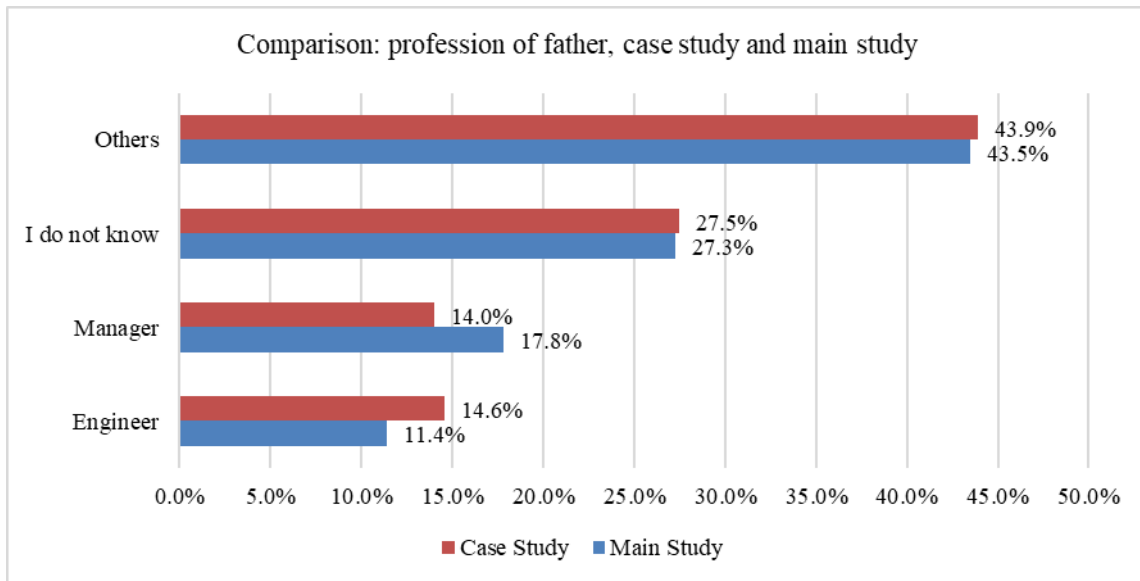


Figure 4 Fathers’ professions in the case study and main study: a comparison

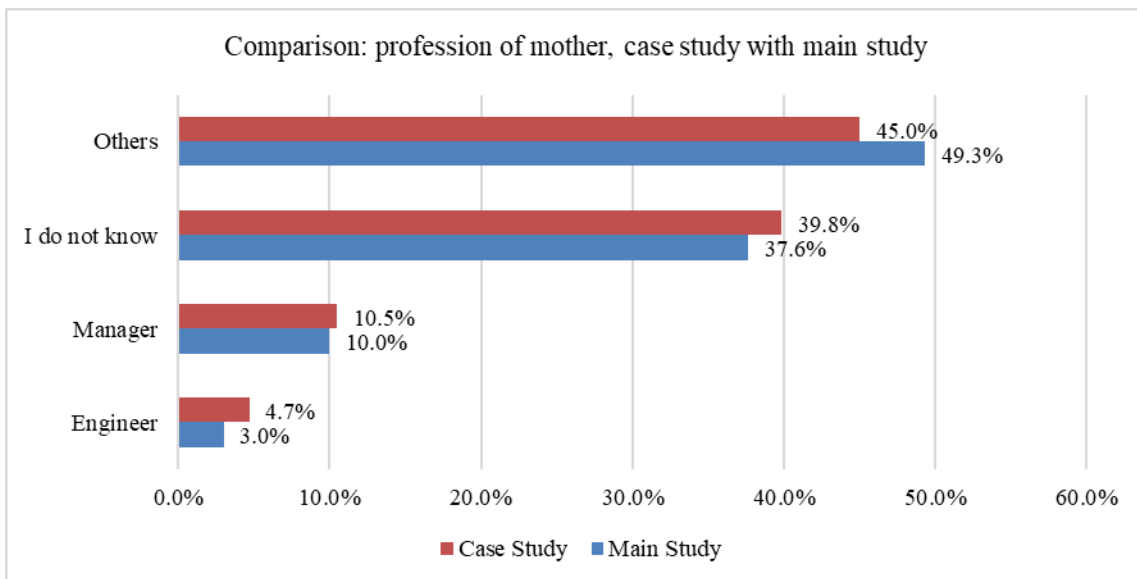


Figure 5 Mothers’ professions in the case study and main study: a comparison

The result shows for the main and case study that

- About a third of the students are not aware of the profession of their parents.
- The parent’s profession as an engineer could not have influenced most of the scholars in their decision to study TVE.

As found before are the parents one of the primary influencers of students to continue their education in TVE. It is therefore recommended that parents talk with their children about their educational and professional background. Schools could endorse this by organizing parent profession days.

The researcher included in the survey one direct question that tried to find out if the parent’s profession has influenced the student’s choice to study TVE to perform the same job as their parents. This supposed to be a direct question to the student.

Figure 6 presents the comparison. The figures link the reply for “disagree” and “strongly disagree” as a non-confirmative reply and the reply for “agree” and “strongly agree” as a confirmative reply. Results are quite similar and show for the case study and the main study that more than 40% disagreed with the statement to be influenced by the parent's profession. However, there were still about a third of the students that confirmed the statement.

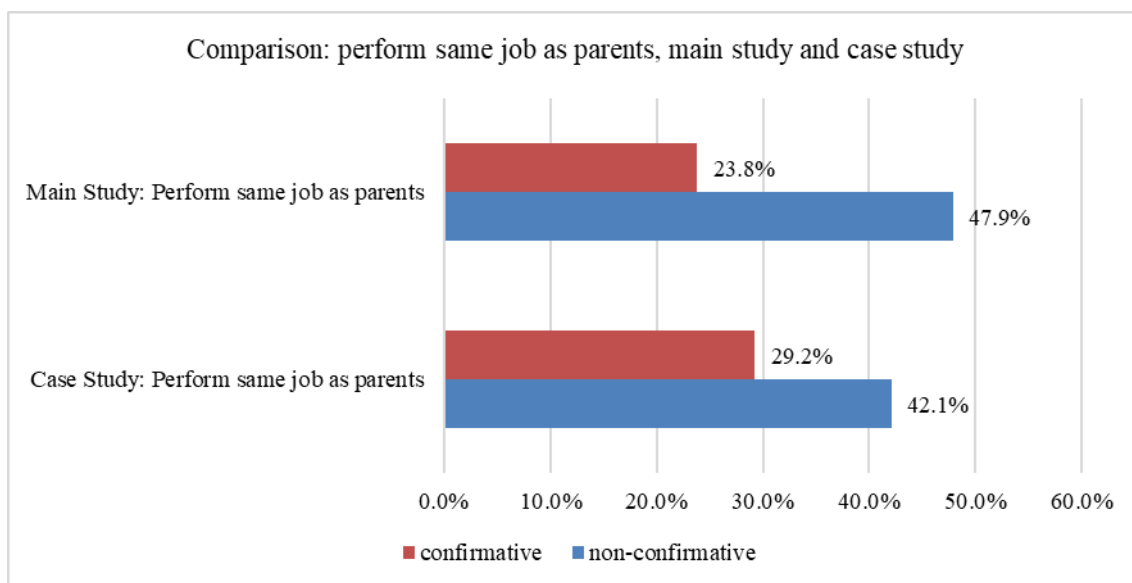


Figure 6 Comparison: profession of mother, case study and main study

Practical implication:

- About a third of the students confirmed to be influenced by the parent’s profession to perform the same job as them when choosing TVE as their study option.

Rutlege and Mardi [10] found in their study that when parents work in the private sector, the children were likely to prefer the private sector as well. Both authors did however not indicate if the kind of work from the parents might have influenced the career decision of their children. Due to that more students disagreed with the statement of being influenced by their parent’s profession, it can be a possibility to attract students to the private employment sector even though the parents might work for the public sector.

4.3. Right career path

The students have been asked if they still agree that they chose the right study decision in the TVE field. Replying with “5” means they “strongly agree” while replying with “1” means they “strongly disagree”.

Comparing the results from the primary and case study showed that, in general, all students are still convinced they have chosen the right career tracks for their future career perspectives. The mean value of all replies was above 3. Those results indicate that the students agreed with the statements per question and were satisfied with their study paths.

The highest mean relates to the question that the students were convinced they would receive a job more easily with the foundation of TVE ($M = 3.66$). This was closely followed by the reply that they liked the idea of the dual system of vocational education ($M = 3.60$).

The outcomes from the case study are nearly identical with the results from the main research. Figure 7 shows the summary and comparison. This result confirms, consequently, the findings from the main study with the outcome of the case study.

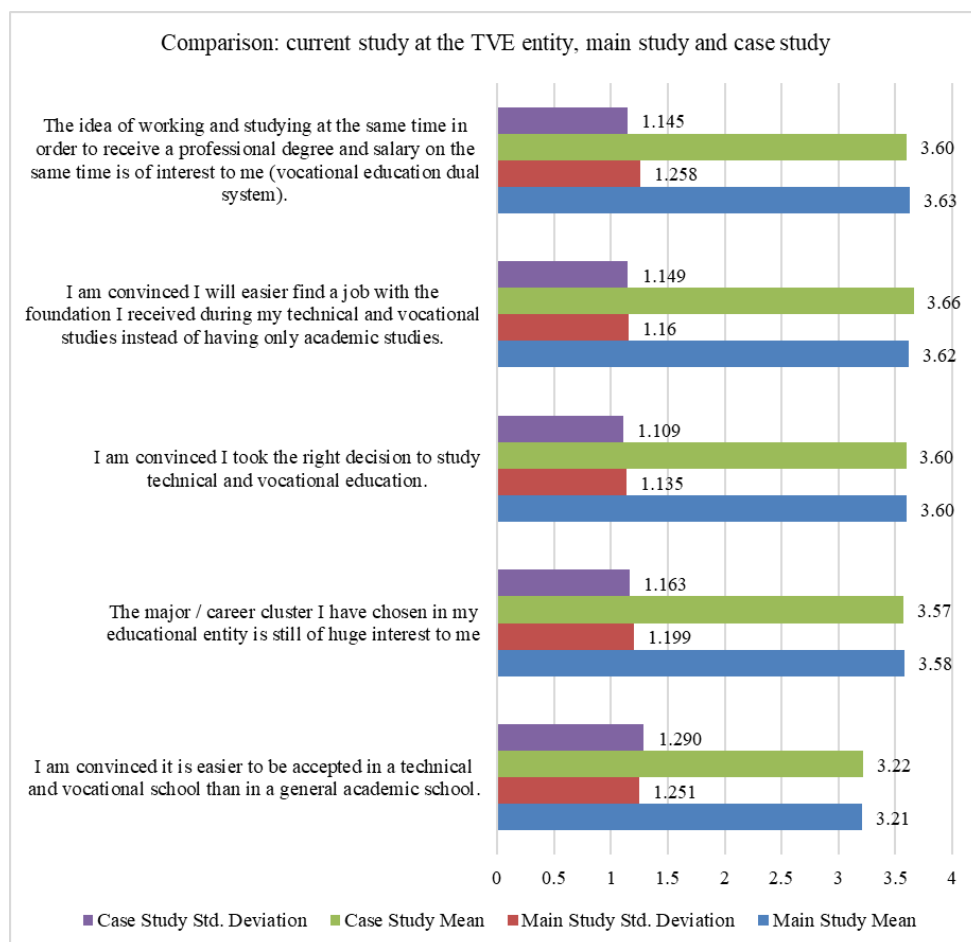


Figure 7 “Current study at the TVE entity” in the main study and case study: a comparison

Practical implication

- The result shows that students are still convinced they chose the right career path. This is a great finding, however, contradicts with the fact that most students still plan to continue their academic studies and would not be available directly for vocational further studies.

4.4. The dual system of vocational education

Considering only the question about the dual system of vocational education, the researcher was interested in discovering if the dual program, to work and study at the same time, might find interest and acceptance within the students.

Results in both, the first and case study showed that more than half of the scholars confirmed the comment. The overall results are extremely similar. This finding suggests that the program is of interest to UAE national students.

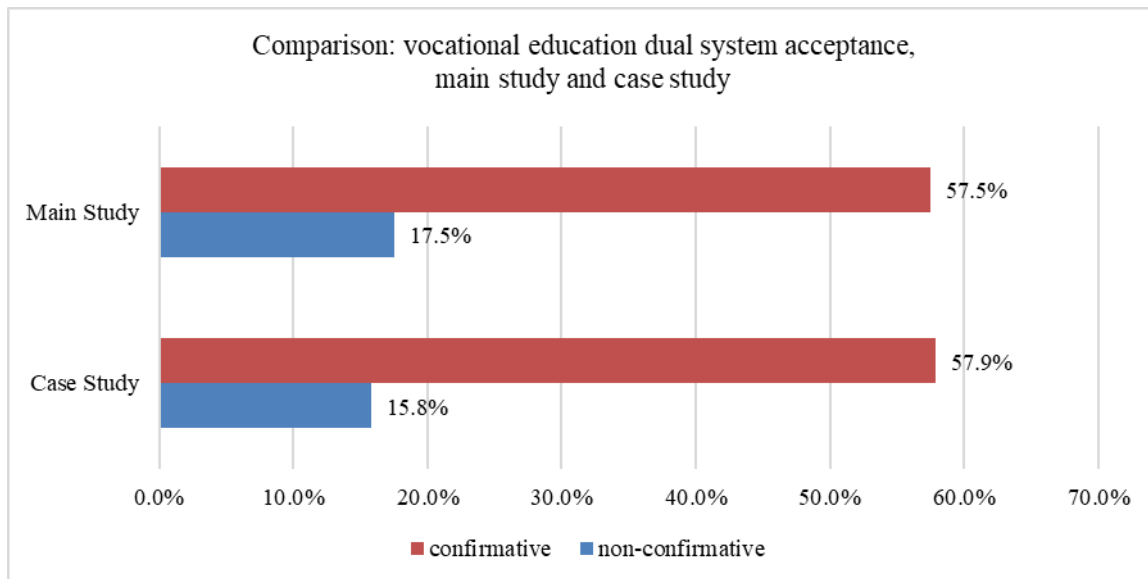


Figure 8 VEDS acceptance in the main study and case study: a comparison

Practical implication:

The fact that for both studies, students replied to confirm the statement and to like the idea of the program, shows that it is recommended to create strategies for further research and possible implementation of the program in the UAE. The literature does not give indications about the perception of students towards the dual system.

4.5. Influence Factors of UAE national students to study TVE

The exploratory factor analysis was performed for both studies to find any underlying factors and describe those factors by grouping the variables that correlate with each other. The factor analysis for the main study and the case study resulted in five underlying factors. Questions per identified factor could be combined with the following five factors:

1. Career factor
2. Economic factor
3. Guidance factor
4. Media factor
5. Social environment factor

However, the factor analysis combined slightly different questions in the case study, compared to the primary research for some of the identified factors. The aspect of marketing was combined with the social environment factor in the case study.

Main influence factor to study TVE:

Students received questions with answer option from a five-point Likert-style scale. Result one indicated strongly disagree, result five indicated strongly agree. Table 1 provides

the comparison of the mean (M) and standard deviation (SD) between the main study and case study for each influence factor.

Table 1 Influence factors in the main study and case study: a comparison

Influence Factor	Main Study		Case Study	
	Mean	Standard Deviation	Mean	Standard Deviation
Career Factor	3.48	0.867	3.61	0.899
Social Environment Factor	3.32	1.126	3.08	0.908
Media Factor	2.94	1.098	3.14	1.127
Guidance Factor	2.87	1.105	3.05	1.061
Economic Factor	2.69	1.072	2.89	1.095

Comparing the result of the main study, is the career factor ($M = 3.48$, $SD = 0.867$) perceived as the primary influential factor of UAE national students to study TVE. The result is confirmed within the case study ($M = 3.61$, $SD = 0.899$) to be the most influential one with the highest mean value.

This finding is corresponding with the study by Pimpa and Suwannapirom [19] which argues that the career perspective is a major influential aspect of students. However, they do not perceive it as the main factor. Both scientists discovered in their study that also further elements are essential for the career choice and considered only the perception of Thai students. The study from Alsa'aideh [11] agrees that the career aspect is an influential factor of students, but not the major one. Alexander, et. al [20] confirms that the career aspect, but as well the flexibility of work as one of the essential influence factors.

The next perceived core influential factor according to the first empirical study is the social environment ($M = 3.32$, $SD = 1.126$). For the case study is the value for the social environment as well above the mean value of three ($M = 3.08$, $SD = 0.908$). However, the next in the ranking would be according to the case study, the media factor ($M = 3.14$, $SD = 1.127$). The social environment factor is in the case study on the third ranking. The media factor is, however, according to the primary research below the mean value of three ($M = 2.94$, $SD = 1.098$). Another value above the mean value of three is the guidance factor ($M = 3.05$, $SD = 1.061$). Moreover, it is the fourth main perceived influence factor.

Practical implication:

- The findings from the main study, which were confirmed with the practical case study, suggest focusing on the career and social environment aspects when considering marketing TVE to Emirati students.
- All five identified factors require consideration as general influential factors. However, the two above mentioned can have the most impact and positive response.

The research done by Spearman et. al. [21] confirms that the presentation within social media was one major influential factor for students to choose a specific university.

4.6. Gender comparison

Comparing the mean reply from male and female students, it could be found within the independent sample t-test analysis that there was only one statistically significant difference in both studies for the economic factor;

The independent sample t-test was completed to elaborate any difference between the gender perception in consideration to the influence factors to study TVE. The test result of the first study showed that there is a statistically significant difference between males ($M = 2.81$, $SD = 1.066$, $N = 178$) and the females ($M = 2.6$, $SD = 1.066$, $N = 250$), in the economic factor ($t [426] = 2.042$, $p = 0.042$, $p < 0.05$).

The result of the independent sample t-test from the case study revealed as well a statistically significant difference among males ($M = 3.16$, $SD = 1.064$, $N = 61$) and females ($M = 2.75$, $SD = 1.09$, $N = 110$), in the economic factor only ($t [169] = 2.378$, $p = 0.019$, $p < 0.05$).

The mean value from the male students was in both analyses higher than for the females. This result indicates that male students perceive the economic factor as more important to choose the educational path than female students. The researcher could, therefore, reject H_01 and accept H_{a1} for the economic factor; the difference between the economic factor was statistically significant.

Practical implication:

The study outcome suggests focusing on the economic aspect when considering recruiting male students into the TVE field. This would have a higher effect than for females.

4.7. Age level differences

Comparing the different perception related to the influence factors per age level within the one-way ANOVA showed for the main study for all factors that no statistically significant difference among the groups per age level are existing.

The case study, however, revealed that there was a statistically significant difference, but only for the economic factor of the age level 15–17 ($M = 2.84$, $SD = 1.068$, $N = 160$) and the age level 18–19 ($M = 3.69$, $SD = 1.217$, $N = 9$), ($t [167] = 2.330$, $p = 0.021$, $p < 0.05$). Students in the age level 18–19 years were more influenced from the economic aspect than students in the age range of 15–17 years.

Results exposed that the tests for all factors supported the hypothesis (H_02); No statistically significant difference per influence factor among the groups of age level could be detected.

Practical implication:

- The outcome of the major study was not confirmed with the result from the case study due to that one of the influential factors presented a difference between the age level perceptions. However, only for the economic factor.
- It is assumed that no different perceptions related to the age level for the influential factor exist. The educational entity would, therefore, not need to focus on differences per age level when marketing TVE to the students.

4.8. Location of living difference

The one-way ANOVA was performed in the central and case study to elaborate a statistically significant difference per influence factor related to the location of living of UAE national students that study TVE.

The outcome of the one-way ANOVA from the main study, considering the location of living, provided a statistically significant difference in the economic factor ($F [7,420] = 4.278$, $p = 0.000$) and guidance factor ($F [7,420] = 2.438$, $p = 0.019$).

The Tukey post hoc test for the economic factor revealed a statistically significant different perception between Abu Dhabi and Al Ain ($p = 0.000$) and between Abu Dhabi and Ras Al Khaimah ($p = 0.022$). The modified Tukey's HSD test result showed no statistically

significant differences among the groups for the guidance factor in regard to the location of living ($p > 0.05$).

The one-way ANOVA determined if a statistically significant difference per influence factor related to the location of living of UAE national students that study TVE exists. The overall results of the one-way ANOVA from the case study, considering the area of living showed as well that there were statistically significant variances in the economic factor ($F [6,162] = 2.499, p < 0.05$), the guidance factor ($F [6,162] = 3.738, p < 0.05$) and even in the social environment factor ($F [6,162] = 3.228, p < 0.005$). The test supported the hypothesis (H_{a3}) that a statistically significant disparity among the groups exists.

Practical implications:

- Both studies reveal a significant difference in the economic and guidance factor. The case study also found a significant difference in the social environment factor.
- The significant differences in the economic factor were identified between perceptions from Abu Dhabi and Al Ain and Abu Dhabi and Ras Al Khaimah.
- The research suggests considering different aspects of marketing between those areas for the economic aspect. Students in Al Ain ($M = 2.89$) and from Ras Al Khaimah are significantly more influenced by the economic factor than students in Abu Dhabi ($M = 2.29$).

Alnaqbi [22] confirms from his study that different perceptions toward TVE exist in urban and rural areas. Whereas he did not consider any further aspects when comparing the different perceptions in his study. The study from Yingquan, et. al [23] revealed that vocational pathways are not preferred by students in the rural area. Those students rather prefer to continue their academic education. The specific influential aspects are not mentioned in their study.

4.9. Relationship from media and plan to study TVE

Main study: The result of the Pearson's correlation test provided a significant relationship among the social media and advertisement and the marketing used by the TVE entity ($r [426] = 0.000, p < 0.5$). The result indicates there is a relationship in being influenced by social media tools such as Twitter, Facebook, and the Internet and TV advertisements as a reason to study TVE and the marketing used by the current TVE entity as a reason to study there.

Case study: The result from the case study indicated as well that the correlation is significant ($r [169] = 0.000, p < 0.5$).

Practical implication:

- The research finding recommends considering social media tools when promoting TVE educational entities to the youth.

The case study examination assisted to test the practical implication of the outcomes from the main study. Reviewing the results from the studies confirm that the outcome is nearly the same for both. Some differences might occur because of the limitations from the case study that were identified, such as that no college level students enrolled in TVE.

Important to note is that the study aimed to discover the influence factors of UAE national students only. Focus was given towards the perception of Emiratis specifically as earlier research performed in Arabic countries are not easily comparable with the UAE. The findings support the Visions from the UAE government to develop a sustainable employment sector of Emiratis and to focus the private work sector. The study was conducted with high school students to find perceptions from an early age. Interesting is the fact that the young Emirati students are already aware about their career plans. The influence of the parents and

close relatives play, however, still an important role when finally deciding the career path. This is confirmed with the community interaction theory from Law [24].

One very important discovery of this study is the acceptance of national students towards the vocational dual program, which means to work and study at the same time. The UAE government plans with its new HCT 4.0 strategy to introduce young Emiratis to become technical leaders and entrepreneurs, where a close collaboration with the industry is essential to achieve this. Work placements in collaboration with especially the private employment sector provide students with the necessary work life skills [25]. The approach to implement a mandatory longer work placement period (vocational dual program) at the workplace can increase the work skills and experience of an individual tremendously.

The overall study results are not matching the findings from Alsa'aideh [11] at which the study and questions relate to. His study was performed in Jordan only. The economic factor as example is mentioned as an influential factor from Jordanian students while this is not an influential factor as perceived by Emirati students. Those findings are in line with the perception that a research was required for the UAE which considers a different cultural and economic characteristic compared to other Arabic countries. Both studies, however, have the social factor in common. Parents are perceived as major influence when it comes to choosing the career. Several authors agree with this perception as mentioned earlier in this thesis.

5. Conclusion

As a study option, TVE can open several opportunities for the Emirati youth and has positive impacts for the country. Skills in the professional and vocational area are required in the UAE, as researched before by several authors. However, to motivate students to pursue their education in that path is still challenging. Luckily some Emirati students have chosen not to continue with the traditional academic education but with the technical and vocational track. Positive to note is that those students can continue their education in the academic field if they wish to. However, the country requires technical and vocational skills to stay competitive and to grow, and that is needed immediately.

The insights were received from the study with a return of 428 surveys from UAE national students and practically tested with an additional 171 UAE national students. Those revealed that the career aspect and influence from the parents are the primary influence factors that ultimately motivated Emirati students to choose the technical and vocational sector. The findings are of great importance and benefit for the country. The element that students chose TVE to serve their country with technical skills is another precious aspect. Differences in perceptions that exist in the economic area should be addressed and improved to create strategies to promote TVE further.

The hands-on skills that are acquired within the TVE are of enormous benefit for the Emirati youth to be well prepared for the job market. Implementing the dual system of vocational education can assist in bringing the academia and industry (and especially the private sector) closer together. This initiative might have an impact on reducing the youth unemployment rate. The study revealed that UAE national students may be interested in studying and working in parallel. Providing this opportunity could be the first step to implement initiatives to endorse this program further to the educational sector.

Overall, this study may have a substantial impact on the benefit of the UAE and its economy if applied directly with implementation strategies. The scholar recommends future regular research that includes a much larger sample size of more UAE national students enrolled in TVE subjects. It is of importance to continuously discover if any perceptions differ per generation. It is furthermore recommended to perform research that does not only include

students studying in TVE, but rather UAE national students in general and their parents, to learn about their perceptions towards TVE and if they are aware of the concept. A decade ago, the influence of social media was not as it is nowadays. This might change again in another 10 years. The perceptions of female students might have changed because of a transformation in the environment in the UAE. One innovation was that the public schools from the primary level started to mix the genders in the classes.

The perception of the location can change because rural areas might evolve quickly to become urban areas. Places such as Fujairah and Ras Al Khaimah have developed tremendously in the last years; this can influence the perception of the society. Especially the perception of other parties such as the companies, government, and community in general towards the vocational education, collaboration with academia, and the dual system of vocational education should be elaborated.

It is highly recommended to continue informing the UAE national community about the vocational education concept and its benefits and outcomes. Social media marketing is a brilliant tool for the generation to promote the program. It is additionally endorsed that research in that field should proceed due to its importance for the economy, the growth, and hence the benefit for the entire country and its people.

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