



Senior Occupational Therapy Students in Select Arab Countries: Characteristics, Perspectives, and Academic Satisfaction

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Abstract

Occupational therapy (OT) is a relatively new profession in the Arab world. The aim of this study is to describe the characteristics, perspectives, and academic satisfaction of 204 senior OT students in Jordan, Palestine, Saudi Arabia, and Kuwait. A cross-sectional survey design was employed in this study. Results revealed that the majority of the students surveyed indicated they chose to study OT because it is a humanistic profession. Most students first heard about it from their relatives and friends. Participants reported a preference for working in hospitals or centers and with pediatric population. The majority of students would choose to study OT if given the opportunity to go back in time. Most of the participants reported they were satisfied with individual course foci, academic assignments, and external training sites. They were least satisfied with lab tools availability, practical training being adequate, and the study plan. Generally, students were satisfied with the didactic theoretical part but less satisfied with the institutional infrastructure and the clinical training intended to prepare them to be competent entry-level practitioners. This study provided preliminary useful data for decision-makers and educators about the students' desired career goals and satisfaction level in their professional education.

Keywords: Satisfaction, perspective, occupational therapy students, Arab countries.

طلبة العلاج الوظيفي في الدول العربية: الخصائص والتوجهات والرضى عن التخصص الأكاديمي

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ملخص

هدفت هذه الدراسة الى تطوير المحتوى المعرفي التكنولوجي البيداغوجي الخاص لتدريس الرياضيات لدى معلمي الرياضيات قبل الخدمة والمعلمين الذين يدرسون في المرحلة الاساسية من خلال استخدام برمجيتين رقميتين (استكشاف الجبر، واستكشاف الاعداد والعمليات). استخدم تصميم قبلي -بعدي على مجموعة واحدة لفحص مدى فاعلية البرمجيات في المعرفة وهل هناك فروق ذات دلالة احصائية في معرفة المعلمين البيداغوجية التكنولوجية الخاصة لتدريس الرياضيات باستخدام البرمجيات الرقمية نتيجة مروههم بتجربة تعلم هذه البرمجيات. وتكونت عينة الدراسة من 53 معلما ومعلمة؛ حيث أجابوا عن استبيان جرى تبنية بعد التعديل على قبل وبعد المرور بالتجربة. وايضا أجريت مقابلات فردية وجماعية في اثناء تعلمهم البرمجيات. بينت نتائج t-test على المجموعة فروق ذات دلالة احصائية في معرفة المعلمين المتعلقة بالمحتوى المعرفي التكنولوجي البيداغوجي على جميع مستوياته يعزى الى التعلم استخدام البرمجيتين الرقميتين والخبرة التي مروا فعمل لتعلمهما. كما بينت نتائج المقابلات والتغذية الراجعة في اثناء تعلمهم على اثر كبير في تعلمهم.

الكلمات الدالة: التكنولوجيا الرقمية الخاصة، المحتوى المعرفي الخاص، الحس العددي، المحتوى المعرفي التكنولوجي البيداغوجي الخاص..



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Introduction

Occupational therapy (OT) is a relatively new profession in the Arab world. The first steady and constant OT educational program was established in 1989 at the Royal Rehabilitation Center in Jordan as a three-year diploma program (Busuttil, 1991). The first bachelor's degree program was established in Palestine at Bethlehem University in 1995 followed thereafter by multiple bachelor's degree programs. Currently, there are 16 active bachelor's degree programs and two diploma level programs (Malkawi, 2017). Refer to Table 1 for the educational programs in the Arab world.

Table 1: Occupational Therapy Programs in the Arabic-Speaking Countries

Country	Academic Program	Date of establishment	Degrees offered
Algeria	Higher Institute of Semi-Medical/Algeria	1984*	Diploma
Jordan	1-Royal Rehabilitation Center/ Amman (Program closed in 1997)	1989	Diploma
	2 - University of Jordan - Faculty of Rehabilitation Sciences/ Amman	1999	Bachelor
	3- The Hashemite University - Faculty of Allied Medical Sciences/Zarqa	1999	Bachelor
	4- Jordan University of Science and Technology -Faculty of Applied Medical Sciences/Irbid	1999	Bachelor
Kuwait	Kuwait University - College of Allied Medical Sciences/Kuwait	2009	Bachelor
Lebanon	Lebanese University - Faculty of Public Health /Beirut	1997	Bachelor
Morocco	Higher Institute of Nursing and Health Professions /Rabat	2017	Bachelor
Palestine	1- Bethlehem University - College of Nursing and Health Sciences/Bethlehem	1995	Bachelor
	2- Arab American University - College of Allied Medical Sciences/Jenin	2000	Bachelor
Saudi Arabia	1- King Saud University - Faculty of Allied Medical Sciences/Riyadh	2008	Bachelor
	2- Princess Noura University - Faculty of Health and Rehabilitation Sciences/Riyadh	2010	Bachelor
	3- University of Taiba - College of Medical Rehabilitation Sciences/Al-Madina	2011	Bachelor
	4- King Saud bin Abdulaziz University for Health Sciences/Riyadh	2011	Bachelor
	5- King Saud bin Abdulaziz University for Health Sciences/Jeddah	2016	Bachelor
	6- King Saud bin Abdulaziz University for Health Sciences/Ihsa'	2017	Bachelor
	7- Batterjee Medical College/Jeddah	2017	Bachelor
Syria	Almanara University - Faculty of Health Sciences/Lattakia	2019	Bachelor
Tunisia	University El Manar - Higher School of Health Sciences and Techniques	2000	Diploma

* Program closed and reopened several times depending on job market needs

Characteristic and perspectives of OT students

A literature search found a paucity of current research about characteristics and perspectives of the OT students. The existing literature reported the perspectives of students enrolled in programs in the United States, United Kingdom, Canada and Australia and is now dated (Craik et al., 2001; Craik & Naphine, 2001; Craik & Zaccaria, 2003; Dudgeon & Cunningham, 1992; Esdaile et al., 1997; Fleming et al., 1997; McKenna et al., 2001; Tryssenaar & Perkins, 2001), with no information about the perspectives of OT students in the Arab world. Understanding the characteristics and perspectives of

students enrolled in OT programs in Arabic-speaking countries will guide the recruitment and retention of students, influence curricula development to better meet the needs and expectations of students during the academic and fieldwork portions of the programs.

Different reasons for OT career choice among students were documented in the literature, such as the varied and challenging nature of the profession (Craik & Zaccaria, 2003), the interest in people and a wish to help disabled people (Craik et al., 2001), the suitability of OT for students' interests (Esdaile et al., 1997), altruistic and practical influences (Fleming et al., 1997), the holistic nature of the OT profession and self-development (Randolph & Johnson, 2005), and interest in allied health (Dudgeon & Cunningham, 1992). Material aspects, such as job availability, promotion and salary, were the least important (Craik et al., 2001; Esdaile et al., 1997).

Occupational therapy students learned of the profession through several methods such as working in health and social care environments (Craik & Naphthine, 2001, Craik & Zaccaria, 2003), or volunteer experiences (Dudgeon & Cunningham, 1992). In terms of field choices within OT, students expressed a preference for a career in application of OT to the pediatric field, followed by physical dysfunction. Little interest was expressed in the application of OT to the areas of mental health (McKenna et al., 2001).

Satisfaction with professional education

Academic satisfaction is important as it will help in evaluating and improving current programs and in identifying weaknesses otherwise not recognized by the academic staff. Factors studied in OT students' academic satisfaction include satisfaction with didactic coursework, clinical fieldwork, and infrastructure of the academic institution. These factors were studied as reported by students of different educational levels; bachelor's (starting or exiting the program), masters, and even in the first year of professional life.

With regard to satisfaction with coursework, Iranian OT students reported deficiencies in the didactic portion of the curriculum that showed a gap between coursework and fieldwork in addition to challenges in the educational environment (Rezaee et al., 2014). However, in a Canadian study, students expressed concerns about not having the clinical skills needed for their careers as OTs in the future. They were most satisfied with the relevance of their courses to date, the range of modules offered, their class size, and were not satisfied with their clinically-based skills courses (Hodgetts et al., 2008). Tryssenaar and Perkins (2001) followed six OT students who were in their final two weeks of fieldwork placement and their first year of practice in Canada. The study concluded that students felt high levels of stress and perceived that there were deficiencies in their program. The authors identified four consecutive stages through which students move to finish the program and enter practice: transition, euphoria and angst, reality of practice, and adaptation. Elsewhere, Pfeifer and colleagues (2008) surveyed 29 entry-level masters' students in the USA. They expressed being overwhelmed by both the didactic and clinical portions of the program and reported experiencing stress levels above the average or the highest experienced in their lives.

The purpose of this study was to explore the perspectives and satisfaction of OT senior students in Arabic speaking countries. Specific research aims were: (1) to understand how OT students choose their profession; (2) to learn about the methods OT students commonly use in studying and the skills they learned; and (3) to examine students' satisfaction with their educational programs. The importance of this study is that it is the first to examine the perspectives, characteristics, and satisfaction of OT students in the Arab world. The findings of this study will impact educators and OT program directors to understand the characteristics and perspectives of OT students, and, consequently, potentially use this information to aid in the recruitment and retention of students and to describe the challenges students encounter when enrolled in an OT program. Moreover, this study will give information about how educators can improve students' satisfaction.

Methods

This study is a cross-sectional survey design. Data was collected in 2019. The inclusion criteria for this study were (1) Senior OT students (2) being enrolled in a bachelor's degree OT program in an Arabic-speaking country. The total sample was 204 students. Senior students were chosen as they are expected to have completed most of the program requirements

in their respective universities including both didactic and clinical fieldwork. In addition, it is important to note here that bachelor's degree holders in all Arabic-speaking countries are considered the entry requirement for professional practice, and, as such, academic programs are designed to meet the professional didactic and clinical requirements to practice. Therefore, senior students are hypothesized to have matured views and can better express their evaluation of the program as if it meets the demands of the job market.

The study authors developed an online, self-administered survey using Google Docs which contained a total of 22 questions: 3 checklist questions and 19 multiple-choice questions. Nine of the questions were used to rate program satisfaction using a Likert scale that ranged from one to five and one open-ended question.

The construct for this survey comes from earlier theories and models of college major satisfaction (Milsom & Coughlin, 2015; Schenkenfelder, 2017). As such, both career insight and self-awareness developed during students' college years through opportunities they are exposed to, resulting in their satisfaction with academic major. These opportunities are available in OT academic programs through didactic but more through fieldwork/clinical coursework. The preparedness of the academic institution plays a major role in students' satisfaction of their major. Therefore, the survey devised here evaluated satisfaction in these three areas with the academic major. It was not the purpose of this study to investigate the personality factors leading to OT major satisfaction. Therefore, that part was not investigated.

To ensure face validity of this survey, it was piloted on ten senior OT students. Suitability and wording of the survey questions were checked, resulting in some word changes and better understanding of information sought by each of the questions.

Internal reliability (consistency) of the survey closed-ended questions were evaluated using Cronbach's alpha. The questions used were divided into three subcategories as they were evaluating students' satisfaction with different parts of their academic program; namely *didactic coursework*, *clinical training fieldwork*, and *institution infrastructure*, with three questions in each category. Internal consistency was evaluated for each of these subcategories and for the overall satisfaction questions. Cronbach's alpha results reveal that this satisfaction survey questions have good internal consistency for didactic coursework questions (Cronbach's alpha = 0.668), clinical training/fieldwork (Cronbach's alpha = 0.618), institution infrastructure (Cronbach's alpha = 0.689), and overall (Cronbach's alpha = 0.814).

Recruitment began following approval from the University of Jordan's Institutional Review Board and participants responded over a three-week period. Students were instructed that their participation in the survey is considered as consent to being part of this study. They were told that their information will be kept private for research purposes and they can withdraw from the study if they wish not to complete all the survey questions.

The authors identified all OT programs in the Arabic-speaking region and contacted program directors via email to request that the survey be distributed to their senior students. Additionally, the survey was posted on OT senior students' social media and study forums. Students from eight programs participated in the survey; three programs from Jordan, two from Palestine, two from Saudi Arabia and one from Kuwait. The overall return rate for the survey was 70.48%. Refer to Table 2 for the individual response rate.

Table 2: Response rate in different educational programs (N=204)

Country	Program	No. responding	No. total seniors	Percentage responding
Jordan	1	37	40	92.5 %
	2	39	39	100.0 %
	3	20	24	83.3 %
Palestine	1	52	80	65.0 %
	2	5	28	17.8 %
Saudi Arabia	1	12	25	44.0 %
	2	12	20	55.0 %
Kuwait	1	27	27	100.0 %
Overall Response Rate	8 programs	204	283	70.5 %

Data were analyzed using Statistical Package for the Social Science (SPSS version 22; IBM Corp, 2013). Simple descriptive analysis was conducted to get means, standard deviations, and frequencies. The open-ended question of the survey was analyzed using thematic analysis methodology. Triangulation method was used to ensure instrument reliability by mixing and comparing of the two different methods of open and closed ended questions in the survey. The coding was performed spontaneously and independently by the primary investigator and another coauthor, who had both been educated in qualitative research methods. The coding process started by mapping out two general categories of the survey responses (Positive views and negative views of the OT profession). Then subcategories/codes were created underneath each category and numbers were put on each of the codes. Finally, similar codes were grouped and further refined into themes. Each interview was coded separately with no predetermined codes; this was done to ensure previously coded interviews did not influence the emergence of new codes. The primary investigator and the coauthor did the coding blindly and independently. Then, they both met, compared their findings, and engaged in robust discussion until consensus was reached about the developing theme, thus increasing the trustworthiness and legitimacy of the findings. Moreover, audit trails were established during the data analysis to ensure the confirmability of the findings. Embedding of participants' actual words lends credibility to the findings. Finally, dependability was established by comparing and contrasting the findings of the thematic analysis to the findings of the quantitative data.

Results

Two hundred and four senior OT students from institutions in four different Arabic-speaking countries completed the survey. The majority of the study participants were females (87.3%). The age range of the sample was 20 to 26 years. Table 3 shows the demographic characteristics of the sample.

Table 3: Demographic characteristics of occupational therapy students (N = 204)

Variable	n	%
<i>Gender</i>		
Male	26	12.9
Female	178	87.1
Student GPA (out of 100), M (SD)	87.8 (8.2)	
Student age, M (SD)	21.8 (1.1)	
<i>Country</i>		
Jordan	96	47.1
Palestine	57	28.0
Saudi	24	11.8
Kuwait	27	13.1
<i>University</i>		
Jordan		
University of Jordan	37	18.1
Hashemite University	39	19.1
Jordan University of Science and Technology	20	9.8
Palestine		
Arab American University in Jenin	52	25.5
Bethlehem University	5	2.5
Saudi Arabia		
Princess Nora University	12	5.9
King Saud University	12	5.9
Kuwait		
Kuwait University	27	13.2

Figure 1 shows the methods that OT students first heard about OT. Most students reported that they first heard about OT from their relatives (27.9%) and the least common method is through media resources (2.5%). Students were asked to mention the top two reasons that led them to study OT. Table 4 shows the most common factor that influence students' decision to study OT was the humanistic nature of the profession (58.3 %), and the least influential factor was reading about it (0.5%).

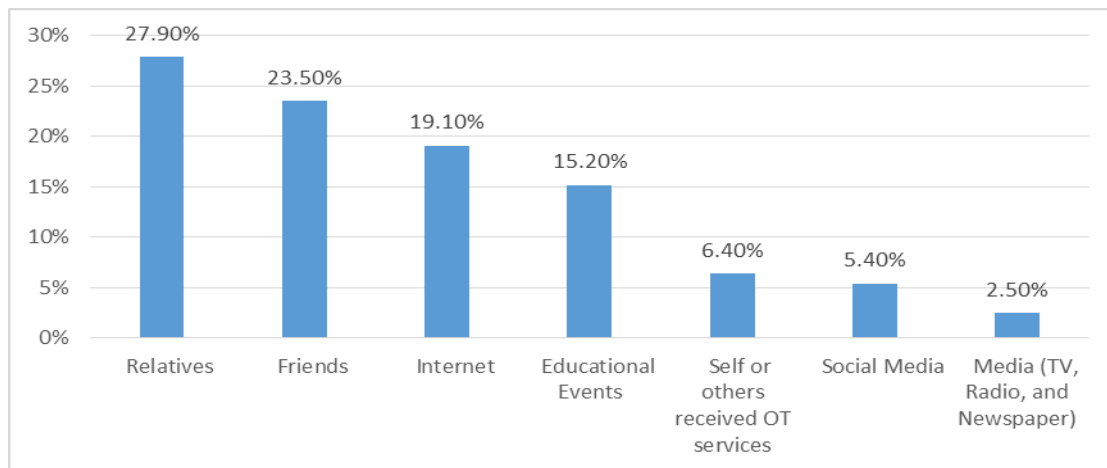


Figure 1 Methods of first hearing about occupational therapy as reported by senior occupational therapy students

Table 4: Rank order of reasons that led senior occupational therapy students choose their profession (N=204)

Variable	n	%
Humanistic profession	119	58.3
Medical profession	103	50.5
High school grades	45	22.1
Job market	35	17.2
Parent/relative opinion	30	14.7
Personal experience	12	5.9
Read about it	1	0.5

Most of the students (59.3%) indicated that they aimed to be an OT in a hospital/center as their future career. Twenty percent said that it is too early to decide and two percent of students reported they will not work in the OT field after finishing the degree (See Figure 2). A follow up question regarding the preferred population to work with revealed that working with pediatrics was the most preferred (34.8%) followed by physical clients (27.5%), then psychological clients (22.1%), and the least preferred population to work with was the neurological clients (16.7%).

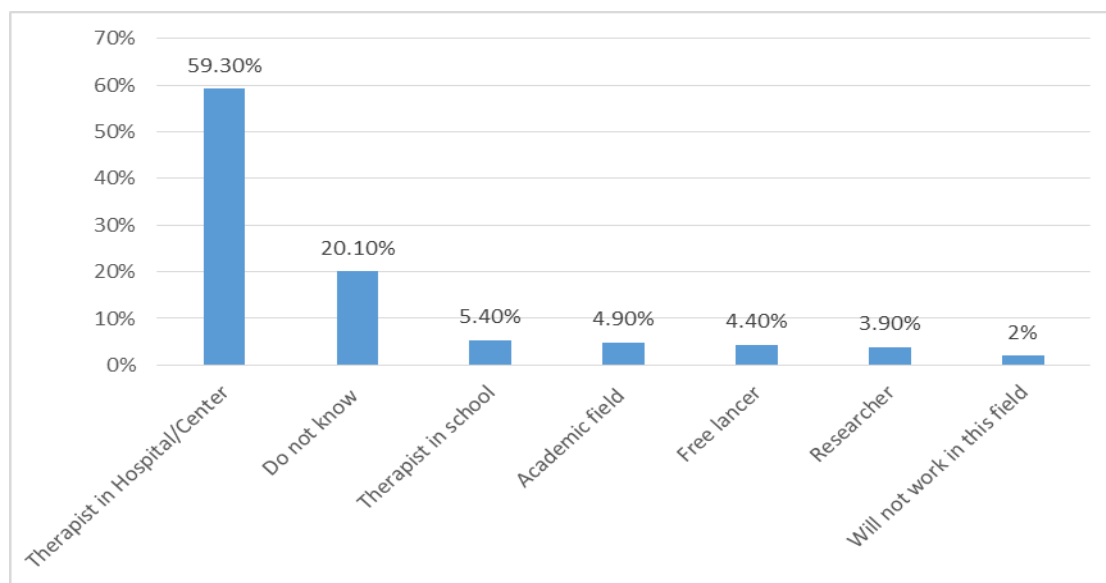


Figure 2 Future Career among Senior OT Students (N=204)

Table 5 shows the skills that senior students learned throughout their studies. They most frequently reported acquired skill was perseverance (61.3%), followed by developing keen observation skills (56.9%).

Table 5: Ranking of common skills learned by senior occupational therapy students (N = 204):

Variable	n	%
Perseverance	125	61.3
Observation skills	116	56.9
Social communication skills	112	54.9
Teamwork skills	111	54.4
Problem solving skills	113	55.4
Creative skills	100	49.0
Active listening skills	97	47.5
Flexibility	92	45.1
Leadership skills	73	35.8
Time management skills	68	33.3
Compassionate skills	63	30.9

Senior OT students in the Arab world reported highest levels of satisfaction for the didactic coursework of their respective program (mean = 60.9), followed by clinical fieldwork (mean = 49.3%), then institution infrastructure (mean = 46.2%) (See Table 6). In addition, students reported highest levels of dissatisfaction for institution infrastructure (mean = 26.4%), followed by clinical fieldwork (mean = 22.1%), then didactic coursework (mean = 16.3%).

In the didactic coursework group, students reported the highest levels of satisfaction for courses focus (69.9%) and assignments appropriateness (65.7%). A marked reduction was noted in reported satisfaction of study curriculum plan suitability (47.5%). Students reported highest levels of satisfaction within the clinical fieldwork group for suitability of clinical sites (55.4%), with considerably lower levels of satisfaction reported for the adequacy of practical education (47.1%), and practical training (45.6%). As for satisfaction with the institution's infrastructure, students reported the highest satisfaction scores for the efficiency of academic staff (51.5%) and availability and affordability of textbooks (47.5%), which were slightly different. However, a much lower satisfaction score was reported for the availability of lab tools (39.7%).

Table 6: Satisfaction with education among senior occupational therapy students (N=204)

	Satisfied		Neutral		Not satisfied	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Courses focus on students' needs ^a	142	69.6	36	17.6	26	12.7
Assignments are appropriate ^a	134	65.7	48	23.5	22	10.8
Study curriculum plan is suitable ^a	97	47.5	55	27.0	52	25.5
Clinical training sites are suitable ^b	113	55.4	48	23.5	42	20.6
Clinical experience is adequate to begin working ^b	96	47.1	69	33.8	39	19.1
Practical training is adequate ^b	93	45.6	55	27.0	54	26.5
Academic staff are efficient ^c	105	51.5	47	23.0	52	25.5
Books available with affordable prices ^c	97	47.5	57	27.9	50	24.5
Lab tools are available in the university ^c	81	39.7	63	30.9	60	29.4

*a: Didactic**b: Practical/clinical**c: Infrastructure***Qualitative Results: Would you study OT again? And why?**

Senior OT students were asked: "if they went back in time, would they study OT again", the majority (69.9%) answered "yes". Several themes emerged when analyzing the open-ended question: "Why would you study OT again" they were as follows:

Positive views of the OT Profession*Humanistic nature of the profession*

The majority of respondents expressed that the humanistic nature of OT was the most common reason why they are satisfied with the profession. They stated that OT empowers clients to take control of their lives and OT assists clients to participate in the occupations that they need, wish, and are expected to do. One student stated satisfaction that comes to the therapists in helping their fellow human being is joyful

"OT is a humanistic specialty that cares about helping people regardless of their background, history, or differences. It gives them hope for a better life"

Self-development

The second source of satisfaction among senior OT students was that the OT profession helped them be a better person, improved their life skills, and developed their personalities. Most of the students said that OT helped them understand themselves and work on their areas of need so they could be a better therapist in the future.

"The profession has helped me be more patient, self-confident, and appreciative. It has given me the opportunity to learn more about the human being more than any other specialty"

Holistic nature of the profession

OT senior students stated that the profession appealed to them because they believed it is holistic. They stressed the unique way the profession views human beings where mind, body, and spirit are intertwined. Moreover, they appreciated how OT addresses the interaction of the physical, social, psychological, and environmental factors in humans and how OT addressed these factors in their assessment and intervention. One student stated "I have found that OT is one of the most holistic health care professions. As an OT, I can work with clients of all ages, can work in numerous settings, such as hospitals, schools, or private clinics, and can work on all areas that affect people's health".

Negative Views of the Profession

Thirty percent of senior OT students said that if they went back in time, they would not study OT again. Regarding the reasons behind their answers, the analysis revealed the following three themes:

Limitation in the job market

Some OT senior students were not satisfied with the limited job opportunities that exist in the Arab world. This,

in part, is due to the fact that OT is a relatively new profession and many employers confuse it with physiotherapy, which is more established and more recognized by the general population. They also reported feeling discouraged by the low salaries compared to the effort required to obtain the degree:

"OT still needs a lot of development in our Arab countries. If we find a job opportunity, the salary is not suitable for the effort that we put into work."

Physical and psychological stress

Some OT students expressed their fear of experiencing burnout. This, in part, was attributed to the current state of the profession where OTs report high patient caseloads, heavy documentation requirements, and the stress of dealing with clients who have a severe disability or terminal illness:

"I am feeling nervous all the time about the clients during clinical training... you need to forget your problems. The physical fatigue and the psychological stress from this specialty is too much to handle"

Not suitable for my personality

A minority of OT students thought that OT needs special personality characteristics to be a successful therapist. Even though they are in their senior year, some OT students thought that OT is not a "perfect fit" and they would do better in a different profession.

"OT is a great specialty and I work hard to do the best in my studies, but it wasn't suitable for my personality. I thought I was better able to deal with patients, but the task is not easy"

Discussion

This is the first study to represent the perspectives and satisfaction of OT senior students in the Arab world. We surveyed 204 senior OT students from current OT bachelor programs in Jordan, Palestine, Saudi Arabia, and Kuwait.

Consistent with other studies, most of the surveyed students were females (87.3%). OT is a female-dominated profession in western countries (Canadian Institute for Health Information, 2011; Grant et al., 2004; Hussein, 2016), and the number of female students in the Arab world's programs shows similar female dominance. More efforts are needed to recruit more male students into OT educational programs so they can serve male clients, especially in Arab or Islamic communities. Future research could target identifying inherent characteristics of the OT profession that seems not to appeal to the male personality. Such research has the potential to present the profession of OT in the most appealing form to male recruits.

Characteristic and perspectives of OT students

Unlike the OT students in the UK who identified working in a healthcare setting as the top method for knowing about OT as a profession (Craik & Naphthine, 2001, Craik & Zaccaria, 2003), the Arab students identified informal methods, such as hearing about OT from relatives and friends, as the top method of knowing about the profession. This discrepancy can be explained by the close social network in the Arab world, and the influence of family members on individuals' decisions, which explains the high percentage of current OT students (30%) who would not study OT again given the opportunity. Furthermore, it is uncommon for students in the Arab world to take a gap year after finishing high school, which limits their ability to independently explore their career choices. This also means that OT departments and all OTs need to do more outreach programs to promote OT as a profession, especially for high school students and their families. This promotion may attract more mature students and may positively influence those who have already heard about the profession through relatives and friends. Utilizing media, social media, and the internet were found to be the lowest recruitment methods of OT students in the current study. More efforts need to target these contemporary recruitment methods in addition to currently utilized old ones.

The humanistic and medical nature of the profession is one of the leading reasons for choosing OT as a profession in the Arab world. This can be seen as an intrinsic rewarding aspect of the profession and it may serve as an internal motivation for new graduates and therapists to advance the profession. Similar to Randolph and Johnson (2005) findings,

the holistic nature of the profession and self-development emerged as main themes for choosing OT as a profession in the Arab world. All of these are intrinsic factors that can motivate growth and accomplishment within the field. The results of the current study were in accordance with those reported by Dudgeon and Cunningham (1992), Craik et al. (2001), and Esdaile et al. (1997) listing the healthcare nature of the profession of OT as the top reason to study OT and the status of the job market amongst the least of these reasons. A formal or informal personality test could be suggested as one of the admission requirements for OT programs, or can be administered in the first weeks of OT student enrollments into their first OT classes (usually an introduction course). Students with a high level of humanistic personality traits are given priority in admission, while others with low levels are advised and steered into different majors.

Finally, the majority of the students reported that they learned skills of perseverance, observation, social communication, teamwork, and problem solving through their curriculum. These skills were reported by several resources as essential skills for every occupational therapist (Malkawi, 2017, World Federation of Occupational Therapists, 2020).

The clinical populations that Arab OT students prefer to work with in the future are pediatric, followed by physical dysfunction then mental health. This result was consistent with McKenna and colleagues (2001). This result could be attributed to the increased population awareness and interest in the field of pediatric OT compared to others. More awareness efforts should target scope of OT practice and services provided to other than pediatric population.

When inquired about the preferred job placement choices, results of this study revealed that most senior OT students in Arabic-speaking countries chose hospital/center as their place of choice, with other placement choices receiving little interest. This job placement preference could be a result of students' clinical training placements during their fieldwork, as they are placed either in hospital or center settings. A change in the clinical training placement pattern is warranted to include a variety of settings other than those currently available. Further, efforts to increase students' awareness of possible OT job settings should target these underrepresented settings, including career-choice awareness seminars with guest speakers from different OT settings to share experiences with students.

Satisfaction with professional education

Overall, the senior OT students reported higher satisfaction rates about their courses and assignments, and some dissatisfaction about their preparedness to start clinical practice and the institutions' infrastructure. The results of this study were consistent with that reported of students in Canadian universities (Hodgetts et al., 2007). However, results were not consistent with those reported for students in an Iranian study by Rezaee et al. (2014). These results identified deficiencies in OT programs in Arabic-speaking countries. Action should be taken to rectify these identified deficiencies by all decision-making personnel at academic institutions.

For the didactic coursework satisfaction rating, students reported higher satisfaction scores for courses and assignments, with a marked reduction in curriculum plan satisfaction rating. These results highlight the need for periodic curriculum re-evaluation and reform. Several ideas for curriculum reevaluation could be suggested. A more market-oriented approach to curriculum reform is advocated. In addition, using periodic surveys of practicing alumni could be used.

The reported emphatic reduction in satisfaction among OT students of clinical/fieldwork training is alarming. Multiple remediation strategies could be suggested here for implementation. It is worth noting that this result is common for all universities included in the study. As such, it is recommended that both a pan-Arab and a country-wide (or at least institution-specific) ad hoc committees of clinical training reform should be formulated to discuss the clinical training situation and to suggest and implement changes to ensure a higher quality of clinical education. Although training sites received a higher satisfaction rating, the training received within the sites received one of the lowest satisfaction ratings. Standards for both training personnel and procedures need to be developed and later implemented. Standards for clinical training personnel could include elements like minimum years of experience and attending a mandatory clinical supervision workshop to be offered by university faculty. Clinical training procedural standards should emphasize documentation of actual patient interaction hours during clinical training in a clinical portfolio for each student during both assessment and treatment phases.

The lowest satisfaction rating in this study was ascribed to institutions' infrastructure. This alarming finding could be attributed to the lack of professional OT bodies to require minimum infrastructure standards to be met by academic institutions. Formation of such bodies or their role in ensuring infrastructure availability at institutions should be activated. OT program directors at each academic institution should seek both intramural and extramural funds to develop higher levels of infrastructure to ensure better education experiences by prospective students.

Qualitative results

Regarding the qualitative results, themes that emerged from those who would chose to study OT again if they could go back in time (humanistic nature of the profession, self-development, and holistic nature of the profession) matches our quantitative results and results from previous literature. Moreover, themes that emerged from those who wouldn't chose OT as a profession if they could go back in time (limitation in job market, physical and psychological stress, and not suitable for my personality), were also consistent with Pfeifer and colleagues (2008) and Tryssenaar and Perkins (2001) who similarly found that OT students are having tremendous amount of stress during their studies, as well as Esdaile and colleagues (1997) findings that OT students chose this major because it suits their personality and interests. This indicates that educators should put more effort into understanding the sources of the physical and psychological stresses that are experienced by students and developing strategies to help them address these factors while in the program. Moreover, professional organizations and OTs, in general, should advocate for the profession at the governmental level to create more job opportunities and addressing the students' concerns regarding the limitations in the job market. Lastly, academic advising in different educational institutions should focus on helping those who think that OT is not suitable for their personalities early on in the program and providing them with alternative choices.

Study limitation and Future Research

Even though all students from different Arab countries have had the chance to participate in this study, the authors acknowledge that all students from the OT programs who chose to participate in this study may not be representative of all students. Like all survey studies, volunteer bias is probable, and it is possible that more students who were satisfied with their programs participated in the study. Therefore, it is important for future studies to increase efforts to maximize the response rate from all countries.

For the current study, the researchers piloted the survey to test using it with OT students; however, they did not address the reliability and validity of the survey items. Future studies should consider placing an emphasis on testing the survey and make it valid and reliable. The poor response rate from some programs prohibited the comparisons of the experiences of students across various programs. We suggest that future studies should include more students in each program so that such comparisons will be possible.

Conclusion

This study provided preliminary useful data for decision-makers and educators about the students' desired career goals, and satisfaction level in their educational programs. Moreover, this study adds to the developing literature on OT education research in the Arabic-speaking countries and provides OT curriculums with essential information on the perspectives and characteristics of senior OT students.

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