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A – Study Design
B – Data Collection
C – Statistical Analysis
D – Data Interpretation
E – Manuscript Preparation
F – Literature Search
G – Funds Collection

SEX-RELATED DIFFERENCES IN PHYSICAL THERAPY CAREER EXPECTATIONS IN HA'IL, SAUDI ARABIA

Hisham M. Hussein^{1,2[A,B,C,D,E,F]}, Salma F. Alshammari^{1[A,B,C,F,G]},
Ibtisam A. Alanazi^{1[A,B,C]}, Gharam M. Alenzay^{1[A,B,C]},
Renad H. Alrashidy^{1[A,,B,C]}

¹ Department of Physical Therapy, College of Applied Medical Sciences, University of Ha'il, Ha'il, Saudi Arabia

² Department of Basic Science, Faculty of Physical Therapy, Cairo University, Giza, Egypt

Background:

Social and cultural factors can lead to gender-biased expectations in physical therapy (PT) career. In Saudi Arabia, female physical therapists might be undergoing more cultural competencies than males to develop their career. This study aimed to investigate whether there are differences between men and women physical therapists (PTs) in their career expectations in Saudi Arabia.

Material/ Methods:

We tested 496 responses 192 (38.7%) were males and 307 (61.3%) were females. 325 (65.5%) responses were obtained from students including those in the internship year while the rest of the responses 171 (34.5%) were from graduated PTs. A descriptive cross-sectional study was undertaken using a questionnaire sent electronically to PT students and graduates in Ha'il City, Saudi Arabia. The answers to questions regarding the future career expectation and the perception of PT career among other healthcare professions were analyzed.

Results:

Statistically higher female numbers were expected to conduct research activity, become faculty teaching staff, continue their education, and attend special courses. No sex-related differences were found regarding the expectation to occupy a governmental job, own a private business and participate as an active member of the Saudi Physical Therapy Association. A higher proportion of females see that PT practice is as independent and prestigious as other medical and health specialties. Both genders considered PT is an prestigious as other health professions.

Conclusions:

There are sex-related differences in PT career expectations and the perception of PT career compared to other healthcare professions.

Key words: Gender equality, females, physical therapy, career expectation

SUMMARY

INTRODUCTION

Since the beginning of physical therapy, women have contributed significantly to its programs and still dominated this field of healthcare. Men started to join physical therapy service immediately after World War I [1,2]. However, only 28% of female therapists hold managerial positions, compared to 61% of male therapists [3].

Many social and cultural factors can lead to gender-biased expectations in physical therapy career [4]. For example, in Saudi Arabia, female physical therapists face a huge challenge to improve their professional career without jeopardize the cultural traditions and family responsibilities. This hard equation sometimes control the female choices and preferences regarding multiple issues such as working place, pay expectations, career shift and consequently, hinder their power to invade new areas in their career that have been dominated by men [5].

Previously, sex-differences in career expectations among physical therapy students were investigated where items such as expectations to own private business, conduct research work, join academic positions, become an administrator in work place, and to have high income [6]. Unfortunately, Johanson study observed that men showed higher expectations in almost all measured variables compared to women. Other researchers tried to investigate career-related issues such as satisfaction [7-9], gender-differences in pay expectations [10,11].

Expectations regarding physical therapy career among other health care professions is considered an important issue as well. Positive perception could increase self satisfaction and improve motivation to work which in turn could affect the quality of service introduced to patients [12]. Motivated physical therapist is more willing for continuing education and gaining more experience, and less likely underwent career shift [7].

In Saudi Arabia, the authorities tend to support women in their career development through procedures designed to eliminate work stress and gender related bias. These procedures were established as apart of the 2030 vision of the Kingdom Saudi Arabia [13]. Additionally, the American Physical Therapy Association (APTA) established list of goals directed to improve the position of women in physical therapy career and enhance their achievements worldwide [6]. Yet, reports discussing different aspects of physical therapy career expectations in Saudi Arabia is scarce [7]. Thus, this study aimed to investigate whether there is differences between men and women physical therapists in their career expectation in Saudi Arabia.

MATERIAL AND METHODS

Design and sample

A descriptive cross-sectional study was undertaken to look into sex-related differences in career expectations among physical therapists (students and employed) in Saudi Arabia. This study was conducted in the period between August

2021 and May 2022. The research protocol was ethically approved by local ethical committee board and consent form was signed by all participants.

Data collection

An electronic form of a survey was constructed using google forms and sent to the target population through many ways such as social media, whats app groups, personal communication, and emails. The elements of this survey was modified from a survey used previously by Johanson [6]. Subjects who were willing to complete the survey were asked to accept the consent attached with the survey.

The survey questionnaire used in this study consists of three sections; the first one contains demographic data (age, sex, region, contact method, occupation / studying data....), the second section includes the career expectations 5-10 years in future, the third section consists of questions comparing the physical therapy career with medical and other heal care professions. The second and third sections were 5-points likert scale where the participant should chose between 5 options; 1) stronglydisagree, 2) disagree, 3) don't know yet, 4) agree, 5) strongly agree.

Data Analysis

Descriptive data were expressed in the form of numbers and percentages. Chi-square analysis was used to test for proportional differences in career expectations between males and females. An alpha level $<.05$ was considered statistically significant.SPSS version 23 was used to conduct the analysis.

RESULTS

Response Rate

A total of 496 responses were received from the target population, of them 192 (38.7%) were males and 307 (61.3%) were females. 325 (65.5%) reponses were obtained from students including those in the internship year while the rest of responses 171 (34.5%) were from therapists who are graduated and employed. These employed participants demenstrated no sex-related statistical significance proportional differences in salary obtained ($X^2=6.56$, $df=5$, $p=.255$). Other sample characteristics were summarized in table 1.

Chi-square analysis. as shown in table 2, demonstrated that, within 5 to 10 years significantly larger proportions of males than females expected to practice as senior staff, become a manager or admin staff in their working place ($p= .000$ and 006) respectively. On the other hand, statistically significant proportion of females expected to participate in research activity and publish their research work, become faculty member, join continued education programs and attend special courses to improve their knowledge and experience ($p=.000$, $.000$, $.000$, and $.001$) respectively.

Table 1. Sample characteristics

Variable	Men (n=192)		Women (n=304)	
	n	%	n	%
Marital status				
Single	117	60.9	182	59.8
Married	75	39.0	122	40.1
No of dependents				
None	104	54.1	205	67.4
1	55	28.6	24	7.8
2 or more	33	17.1	75	24.6
Educational level/ last degree				
Students	122	63.5	203	66.7
BSc	43	22.3	59	19.4
MSc	16	8.3	28	9.2
PhD	2	1.0	0	0
DPT	9	4.6	14	4.6
Region (address)				
Hail region	66	34.3	103	33.9
Riyadh	27	14.0	37	12.2
AL-Qassim	21	10.9	44	14.4
Dammam	16	8.3	34	11.2
Tabuk	37	19.3	36	11.8
AlMadinah	25	13.0	50	16.4
University				
University of Hail	78	40.6	121	39.8
Alqassim	24	12.5	30	9.8
Taibah	27	14.0	38	9.2
King Abdulaziz	12	6.2	27	8.9
King Saud	12	6.2	12	3.9
Taif	30	16.5	33	10.8
Princess Nourah	0	0	16	5.2
Majmaah	0	0	27	8.9
Workplace				
Governmental Hospital	83	43.2	100	32.9
Private clinics	10	5.2	26	8.5
Governmental Rehab centers	12	6.2	14	4.6
Work title				
Practitioner	46	23.9	66	21.7
Specialist	22	11.4	34	11.2
Consultant	2	1.0	0	0

There were no statistically significant differences between both males and females regarding the expectation to occupy governmental job ($p=.072$), own private business ($p=.323$), being an active participant in the Saudi Physical Therapy Association ($p=.192$). The highest proportion of both sexes were expecting to have a governmental job (90.6%), while low proportion was expecting to have private physical therapy business (28.7%).

Regarding the status of practice in comparison to other professions in health systems, females demonstrated statistically significant higher proportion seeing that physical therapy practice has the same degree of independence as physician ($p= .000$) and other health care professions ($p=.000$). Similarly, statistically significant higher proportion of females were considering physical therapy practice was as prestigious as physician ($p=.000$). On the other hand, there was no

statistical significant difference between males and females who decided that physical therapy was as prestigious as other health care professions ($p=.101$) (Table 3).

Table 2. Sex-related difference in career expectations within 5-10 years

Future career expectation after 5 – 10 years	Scale	Males (n=192)		Females (n=304)		X ² value	p
		n	%	n	%		
I plan to do and publish some research in professional journals.	5	10	5.2	71	23.3	118.91	.000
	4	27	14.0	113	37.1		
	3	41	21.3	57	18.7		
	2	67	34.9	59	19.4		
	1	47	24.4	4	1.3		
Governmental job is my primary goal	5	43	22.4	50	16.4	8.61	.072
	4	101	52.6	165	54.2		
	3	25	13.0	52	17.1		
	2	20	10.4	37	12.1		
	1	3	1.5	0	0		
I plan to practice as a senior staff physical therapist and serve as a supervisor for other therapists.	5	40	20.8	6	1.9	182.12	.000
	4	91	47.4	44	14.4		
	3	44	22.9	57	18.7		
	2	17	8.8	112	36.8		
	1	0	0	85	27.9		
I plan to own a private physical therapist practice.]	5	6	3.1	16	5.2	4.66	.323
	4	32	16.6	60	19.7		
	3	65	33.8	79	25.9		
	2	55	28.6	88	28.9		
	1	34	17.7	61	20.0		
I plan to be a faculty member.	5	2	1.0	64	21.0	82.10	.000
	4	50	26.0	115	37.8		
	3	69	35.9	83	27.3		
	2	41	21.3	37	12.2		
	1	30	15.6	5	1.6		
I plan to be a physical therapist manager or administrators	5	3	1.5	7	2.3	14.36	.006
	4	24	12.5	68	22.3		
	3	55	28.6	62	17.1		
	2	63	32.8	116	38.1		
	1	47	24.4	51	16.7		
I plan to be an active member of the Saudi Physical Therapy Association	5	4	2.0	3	0.9	7.41	.192
	4	28	14.6	54	17.7		
	3	58	30.2	73	24.0		
	2	60	31.2	117	38.4		
	1	42	21.8	57	18.7		
I plan to attend continuing education programs and conferences to improve my knowledge	5	25	13.0	67	22.0	49.45	.000
	4	55	28.6	147	48.3		
	3	31	16.1	42	13.8		
	2	63	23.8	41	13.4		
	1	18	9.3	7	2.3		
I will attend special course to increase my experience in clinical practice	5	56	29.1	52	17.1	18.85	.001
	4	77	40.1	168	55.2		
	3	33	17.2	48	15.7		
	2	16	8.3	31	10.2		
	1	10	5.2	5	1.6		

5, strongly agree; 4, agree; 3, don't know yet; 2, disagree; 1, strongly disagree; n, number; % percentage; X², Chi square value; p, significance

Table 3. Sex-related opinion about the status of practice in comparison to other health professions

Future career expectation	scale	Males		Females		X ² value	p
		n	%	n	%		
I will practice / am practicing with the same degree of independence as a physician	5	21	10.9	94	30.9	175.77	.000
	4	35	18.2	144	47.3		
	3	0	0	23	7.5		
	2	65	21.3	33	10.8		
	1	71	36.9	10	3.2		
I will practice / am practicing with the same degree of independence as other non-physician health care professionals, such as Clinical Laboratory Sciences, Clinical Nutrition and Diagnostic Radiology.	5	6	3.1	83	27.3	61.79	.000
	4	156	81.2	167	54.9		
	3	0	0	9	2.9		
	2	30	15.6	38	12.5		
	1	0	0	7	2.3		
My practice will be / is as prestigious as that of a physician	5	32	16.6	106	34.8	114.32	.000
	4	44	22.9	154	50.6		
	3	12	6.2	4	1.3		
	2	65	33.8	22	7.2		
	1	39	20.3	18	5.9		
My practice will be / is as prestigious as that of other non-physician health care professionals such as, Clinical Laboratory Sciences, Clinical Nutrition and Diagnostic Radiology	5	49	25.5	70	23.0	7.74	.101
	4	101	52.6	161	52.9		
	3	10	5.2	10	3.2		
	2	27	14.0	38	12.5		
	1	5	2.6	25	8.2		

5, strongly agree; 4, agree; 3, don't know yet; 2, disagree; 1, strongly disagree; n, number; % percentage; X², Chi square value; p, significance

DISCUSSION

The current work investigated the differences in physical therapy career expectations between males and females in Saudi Arabia. Higher proportion of males than females were expecting to be senior staff, occupy admin post in future.

Higher proportion of females were expecting to conduct research activity, become a faculty teaching staff, continue their education, and attend special courses. No sex related differences found regarding the expectation to occupy governmental job, own private business, being an active participant in the Saudi Physical Therapy Association. Additionally, higher proportion of females seeing that physical therapy practice is as independence as other medical and health specialties.

Up to authors knowledge, a single study was conducted to assess gender differences in career expectations among physical therapists [6] where 919 physical therapy students comprised the main sample. The results demonstrated higher percentage of men expecting to own private physical therapy business, join academic career, occupy administrative position, and publish research work. Our study findings were in accordance with the findings of the Johanson's study regarding occupying administrative position or practice as a senior staff in work place where the males showed the higher percentages. On the other hand, the female participants demonstrated higher percentages regarding desire to publish research work, and become an academic staff.

The reasons for the current study findings could be attributed to several factors; firstly, the cultural habits in Saudi Arabia as many of the Arabic countries directs the women to seek the job which has less working hours and commitments, so that, less number of females seek to occupy administrative position or owning private business [14]. It is well known that family responsibilities which are the main concern in eastern countries as Saudi Arabia [15], could be affected by longer working hours that could be a mandatory duty for a private business owner or a leader of a department or hospital. Secondly, the nature of the females makes preparing a less risky and more stable occupation so that they might prefer governmental posts rather than private business. Thirdly, males, because of their multiple responsibilities, usually seek high-salary jobs so that they prefer to take a leader position or start private business which is more risky but could provide more income [3].

Studying female PTs' concerns and their perception of the PT career in comparison to male PTs is crucial to the development of PT career itself. Recognizing the factors that might affect or hinder the development of female PTs could facilitate the responsible authorities to take corrective actions to solve the problem. And allowing equal opportunities to their male counterparts. Changes in educational courses at the undergraduate level could better prepare the graduate PTs to face the work challenges and make meaningful changes [16].

Limitations

The current findings are applicable only to the PTs living in Ha'il region and could not be generalized. Due to cultural reasons we could not ask about the role of family members in the females' career expectations.

CONCLUSION

There are sex-related differences in PT career expectations and in the perception of PT career compared to other health care professions.

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Corresponding Author

Salma F. Alshammari

Department of Physical Therapy,
College of Applied Medical Sciences,
University of Hail, Ha'il, P.O. Box 2576,
Saudi Arabia

Salmaalfarhan255@gmail.com

ORCID: 0000-0003-3494-2787