



Journal of University Studies for inclusive Research (USRIJ)  
مجلة الدراسات الجامعية للبحوث الشاملة

**Journal of University Studies for inclusive Research**

**Vol.2, Issue 16 (2021), 2660–2690**

**USRIJ Pvt. Ltd.,**

## **Saudi Arabia Medical Specialization Board of Family Medicine in Yanbu**

**Educational environment and family medicine residents perception  
toward training program in Al-Madinah region , Saudi Arabia(2020)**

**(December 2020 –December 2021)**

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This research was submitted in Partial Fulfilment of the Saudi Board in FM, 2021

### Abstract

**Introduction:** Family medicine is the cornerstone of medical care in the worldwide[1] , and family physicians provide comprehensive health care for whole family ,from the youngest to the oldest and for all genders and ages [2] , so family medicine residents need well trained to deliver medical care that is of the highest quality [1] . The educational environment is referred to as climate, atmosphere or tone, is a set of factors that describe what it is like to be a learner within that organization..[4]. The educational environment can be considered as composed of three subdivisions: (1) The physical environment; (2) The emotional climate and (3) The intellectual climate [5].

**Methods:** sample of 155 residents of all the male and female family medicine residents(R1 – R4) in Al-Madinah region ( AL-Madinah and yanbu residents) and assessed using a questionnaire. This paper describes the development and validation of a 40-item inventory who were asked to indicate their agreement using a 5-point Likert scale; these range from strongly agree (4), agree (3), unsure (2), disagree (1), to strongly disagree (0), the Postgraduate Hospital Educational Environment Measure (PHEEM), by researchers in Scotland and the West Midlands using a combination of grounded theory and Delphi process. The instrument has since returned an alpha reliability >0.91 in two administrations in England and may be a useful instrument in the quality assurance process for postgraduate medical education and training.

**Results:** shows the level of agreement on (Perceptions of role autonomy), where the means of the items ranged between 1.46 (41.0%) out of 4 to 2.85 (71.3%) out of 4. And shows the level of agreement on (preceptions of teaching), where the means of the items ranged between 2.04 (51.0%) out of 4 to 2.85 (71.3%) out of 4. And shows the level of agreement on (preceptions of of social support), where the means of the items ranged between 1.39 (34.8%) out of 4 to 3.01 (75.3%) out of 4.

**Conclusions:** this study shows that perceptions of role autonomy is more positive perception of one's role from the study sample point of view, and perceptions of teaching is moving in the right direction, the results also shows that perception of social support has more pros than cons. As overall conclusion, the results shows that the three PHEEMS have more positive than negative from the study sample point of view.

**Recommendation:** which include providing an informative induction programme and a good clinical supervision at all time to them, also making contracts of employment that provides information about hours of work, providing a physically safety within the hospital environment to the employees, providing a suitable opportunities to acquire the appropriate practical procedure for employees' grade. The researcher also recommend to promote an atmosphere of mutual respect from the clinical teachers and the spirit of team work between employees. **keywords : family medicine , educational environment , training program , residents.**

## 1. INTRODUCTION

### 1.1 BACKGROUND

Family medicine is the cornerstone of medical care in the worldwide[1] , and family physicians provide comprehensive health care for whole family ,from the youngest to the oldest and for all genders and ages [2] , so family medicine residents need well trained to deliver medical care that is of the highest quality [1].

The scientific board of the Saudi Commission for Health Specialties (SCFHS) has reviewed , edited and approved the whole curriculum of FM training of Saudi Arabia[3]. The duration of Residency training programs in family medicine in Saudi Arabia is 4 years and in response to urgent requirements to expand FM services to achieve the transformative goals of the new Saudi Vision 2030, many recommendations regarding curriculum design changes were suggested. A revealing recommendation was to reduce the residency training curriculum to three years. The Canadian Medical Education Directions for Specialists ( CanMEDs) competency framework has been adopted by the SCFHS since 2011. The current curriculum is

comprehensive, with clear competencies that were mapped with CanMEDs' competency framework [3].

As part of family resident , participate in integrated inpatient and outpatient learning and training in the major medical departments include : pediatrics , internal medicine , surgery , obstetrics and gynecology , and psychiatry and many other departments .[3]

The educational environment is referred to as climate, atmosphere or tone, is a set of factors that describe what it is like to be a learner within that organization..[4] .The educational environment can be considered as composed of three subdivisions: (1) The physical environment; (2) The emotional climate and (3) The intellectual climate [5].

There are five basic points is important that make the evaluation of the educational environment. These five points are (1) provision of an insight for the prospective trainee and trainers; (2) being a central part in curriculum development; (3) exposure of the informal and hidden curriculum; (4) being a tool for quality assurance and improvement; and (5) provision of vital evidence for change and policy development [6].

## **1.2 RATIONALE**

1- There are no studies addressed about family medicine resident educational environment and perception toward training program in Al-Madinah region, Saudi Arabia.

2- The researcher is interested about educational environment and family medicine residents perception toward training program

## **1.3 AIM :**

To assess educational environment and family medicine residents perception toward training program in Al-Madinah region , Saudi Arabia.

## **2. OBJECTIVES:**

### **2.1 GENERAL OBJECTIVE:**

The study will be conducted to :

- 1- To evaluate perception toward training program by family medicine residents in Al-Madinah region.
- 2- To assess the educational environment by family medicine residents in Al-Madinah region.

### **2.2 SPECIFIC OBJECTIVE**

- 1- To evaluate the perception of teaching environment among the family medicine residents in Al-Madinah region.
- 2- To explore the educational environment for family medicine residents in Al-Madinah region.

## **3. METHODOLOGY:**

### **3.1 STUDY DESIGN:**

The study was cross sectional community-based Description Design.

### **3.2 STUDY POPULATION:**

We will include all the male and female family medicine residents(R1 – R4) in Al-madinah region ( AL-madinah and yanbu residents).

### 3.3 STUDY AREA:

Al-Madinah region (Al-Madinah city and Yanbu city ) – Saudi Arabia.

### 3.4 INCLUSION CRITERIA:

All male and female family medicine residents(R1 – R4) , Al-Madinah region (Al-Madinah city and Yanbu city ) will be included in the study after their consent.

### 3.5 EXCLUSION CRITERIA:

The Residents have a vacation .

### 3.6 Sample Size:

The questionnaire (survey) targeted (150) , and (155) questionnaires had been distributed to (174).

### 3.7 Data Collection Procedure:

In this research, the questionnaire will be relied upon as a means of collecting data for the study, as well as relying on scientific observation.

- **The first part:** It concerns the personal information of the sample (Gender - city - Age - Level of resident grade - Year of graduate - Years of experience - Marital Status - monthly Income - Number of children - Number hours of work / week).
- **The second part:** describes the following:
  1. **Perceptions of role autonomy:** contains (14) phrases.
  2. **Preceptions of teaching:** contains (15) phrases.
  3. **Perceptions of social support:** contains (11) phrases

In order to answer the phrases of the second and third parts of the survey, a 4 point Likert scale is relied upon, and due to its use in many previous studies in this field, respondents are required to give a score of their agreement with each of the phrases on the 4 point Likert scale as well as follows:

0= Strongly Disagree, 1= Disagree, 2 = Uncertain, 3= Agree, 4= Strongly Agree.

### 3.8 Data Analysis Method :

In order to analyze the data collected through the survey lists, the process of unpacking the data is carried out in Excel and using the SPSS program, whereby a set of statistical methods are relied upon as follows:

- Use frequencies and percentages to describe the demographics of the study sample.
- Use of arithmetic means.
- Use standard deviations.
- Coefficient of stability; Cronbach's Alpha criterion;

### 3.9 Tool of the study (instrument) :

The research tool is a valid , reliable, paper- based , self-administrated questionnaire(Postgraduate Hospital Educational Environment Measure (PHEEM))[7] adopted from another studies . the questionnaire in English .

This paper describes the development and validation of a 40-item inventory who were asked to indicate their agreement using a 5-point Likert scale; these range from strongly agree (4), agree (3), unsure (2), disagree (1), to strongly disagree (0), the Postgraduate Hospital Educational Environment Measure (PHEEM), by researchers in Scotland and the West Midlands using a combination of grounded theory and Delphi process. The instrument has since returned an alpha reliability >0.91 in two administrations in England and may be a useful instrument in the quality assurance process for postgraduate medical education and training.

### **The PHEEM – items grouped by sub-scale:**

1-Perceptions of role autonomy include items (1,4,5,8,9,11,14,17,18,29,30,32,34,40)  
14 items/max score 56 for this sub -scale.

2- Perceptions of teaching include items (2,3,6,10,12,15,21,22,23,27,28,31,33,37,39)  
15 items/max score 60 for this sub-scale.

3- Perceptions of social support include items (7,13,16,19,20,24,25,26,35,36,38)  
11 items/max score 44 for this sub-scale.

#### **#interpreting the sub-scales:**

##### **1- Perceptions of role autonomy:**

- 0-14 very poor
- 15-28 a negative view of one's role
- 29-42 a more positive perception of one's job
- 43-56 excellent perception of one's job

##### **2- Perceptions of teaching:**

- 0-15 very poor quality
- 16-30 in need of some retraining
- 31-45 moving in the right direction
- 46-60 model teachers

##### **3-Perceptions of social support:**

- 0-11 non-existent
- 12-22 not a pleasant place
- 23-33 more pros than cons
- 34-44 a good supportive environment

### **Instrument Validity**

A number of tests are performed on the questionnaire to ensure its validity and stability. The validity of the questionnaire has been checked by two means:

#### A. The validity of Internal Consistency

The internal validity of the questionnaire is the first statistical test that used to test the validity of the questionnaire. Internal validity measured through the correlation coefficients between each item in the construct and its total.

#### 1. First Axis: Perceptions of role autonomy

**Table 1: Correlation coefficient of each paragraph of the first axis (Perceptions of role autonomy) and the total of this axis**

No.	Paragraph	Correlation Coefficient	Sig.
1.	I have a contract of employment that provides information about hours of work	0.428	0.000
2.	My clinical teachers set clear expectations	0.455	0.000
3.	I have protected educational time in this post	0.565	0.000
4.	I had an informative induction programme	0.435	0.000
5.	I have the appropriate level of responsibility in this post	0.533	0.000
6.	I have good clinical supervision at all time	0.512	0.000
7.	There is racism in this post	0.627	0.000
8.	I have to perform inappropriate tasks	0.567	0.000
9.	There is an informative Junior Doctors handbook	0.553	0.000
10.	My clinical teachers have good communication skills	0.560	0.000
11.	I am bleeped inappropriately	0.714	0.000
12.	I am able to participate actively in educational events	0.450	0.000
13.	There is sex discrimination in this post	0.635	0.000
14.	There is clear clinical protocols in this post	0.566	0.000

\*\*Correlation is significant at the 0.01 level (2-tailed).

The previous table clarifies the correlation coefficient for each paragraph in the first axis (Perceptions of role autonomy) and the total of the axis. The p-values (Sig.) are less than 0.05, so the correlation coefficients of all paragraphs are significant at ( $\alpha \leq 0.05$ ), so it can be said that the first axis is valid to be measured what it was set for to achieve the main aim of the study.

## 2. Second Axis: Preceptions of teaching

**Table 2: Correlation coefficient of each paragraph of the second axis (Preceptions of teaching) and the total of this axis**

No.	Paragraph	Correlation Coefficient	Sig.
1.	My clinical teachers are enthusiastic	0.698	0.000
2.	I have good collaboration with other Doctors in my grade	0.413	0.000
3.	My hours conform to the new deal	0.698	0.000
4.	I have the opportunity to provide continuity of care	0.632	0.000
5.	I have suitability access to careers advice	0.451	0.000
6.	This hospital has good quality accommodation for junior doctors , especially when on call	0.656	0.000
7.	There is access in a educational programme relevant to my needs	0.610	0.000
8.	I get regular feedback from seniors	0.713	0.000
9.	My clinical teachers are well organised	0.812	0.000
10.	I feel physically safe within the hospital environment	0.681	0.000
11.	There is a no-blame culture in this post	0.755	0.000
12.	There is adequate catering facilities when I am on call	0.647	0.000
13.	I have enough clinical learning opportunities for my needs	0.643	0.000
14.	My clinical teachers have good teaching skills	0.622	0.000
15.	I feel part of a team working here	0.719	0.000

\*\*Correlation is significant at the 0.01 level (2-tailed).

The previous table clarifies the correlation coefficient for each paragraph in the second axis (Preceptions of teaching) and the total of the axis. The p-values (Sig.) are less than 0.05, so the correlation coefficients of all paragraphs are significant at ( $\alpha \leq 0.05$ ), so it can be said that the second axis is valid to be measured what it was set for to achieve the main aim of the study.

### 3. Third Axis: Perceptions of social support

**Table 3: Correlation coefficient of each paragraph of the third axis (Perceptions of social support) and the total of this field**

No.	Paragraph	Correlation Coefficient	Sig.
1.	I have opportunities to acquire the appropriate practical procedure for my grade	0.361	0.000
2.	My clinical teachers are accessible	0.320	0.000
3.	My workload in this job is fine	0.328	0.000
4.	Senior staff utilize learning opportunities effectively	0.533	0.000
5.	The training in this post makes me feel to be ready to SpR/consultant	0.714	0.000
6.	My clinical teachers have good mentoring skills	0.520	0.000
7.	I get a lot enjoyment out of my present job	0.515	0.000
8.	My clinical teachers encourage me to be an independent learner	0.680	0.000
9.	There are good counselling opportunities for junior doctors who fail to complete their training satisfactorily	0.536	0.000
10.	The clinical teachers provide me with good feedback on my strengths and weaknesses	0.487	0.000
11.	My clinical teachers promote an atmosphere of mutual respect	0.617	0.000

\*\*Correlation is significant at the 0.01 level (2-tailed).

The previous table clarifies the correlation coefficient for each paragraph in the third axis (Perceptions of social support) and the total of the axis. The p-values (Sig.) are less than 0.05, so the correlation coefficients of all paragraphs are significant at ( $\alpha \leq 0.05$ ), so it can be said that the third axis is valid to be measured what it was set for to achieve the main aim of the study.

### B. Construct validity

Construct validity evaluates whether a measurement tool really represents the thing we are interested in measuring. It's central to establishing the overall validity of a method.

**Table 4: Correlation coefficient of each field and the total of the questionnaire**

No.	Axis	Correlation Coefficient	Sig.
1.	First Axis: Perceptions of role autonomy	0.925	0.000
2.	Second Axis: Preceptions of teaching	0.938	0.000
3.	Third Axis: Perceptions of social support	0.888	0.000

\*\*Correlation is significant at the 0.01 level (2-tailed).

The previous table clarifies the correlation coefficient for fields and the total of the questionnaire. The p-values (Sig.) are less than 0.05, so the correlation coefficients of all fields are significant at ( $\alpha \leq 0.05$ ).

### Instrument Reliability:

The reliability of an instrument is the degree of consistency which measures the attribute; it is supposed to be measuring. The less variation an instrument produces in repeated measurements of an attribute, the higher

its reliability. Reliability can be equated with the stability, consistency, or dependability of a measuring tool.

To insure the reliability of the questionnaire, Cronbach's Coefficient Alpha should be applied.

**Table 5: Cronbach's Alpha for each field of the questionnaire**

No.	Axis	No. of Paragraphs	Cronbach's Alpha
1.	First Axis: Perceptions of role autonomy	14	0.739
2.	Second Axis: Preceptions of teaching	15	0.903
3.	Third Axis: Perceptions of social support	11	0.717
	<b>Total Paragraphs</b>	40	0.927

The previous table shows the values of Cronbach's Alpha for each field of the questionnaire and the entire questionnaire. Cronbach's Alpha equals 0.927 for the entire questionnaire which indicates an excellent reliability of the entire questionnaire.

Thereby, it can be said that the researcher proved that the questionnaire was valid, reliable, and ready for distribution for the population sample.

#### **4. Ethical approval:**

This proposal will be presented to the research ethics Committee for ethical and scientific approval.

##### **4.1 Ethical consideration:**

- a. Permission from Al-Madinah joint program of family medicine will be obtained.
- b. Permission from yanbu joint program of family medicine will be obtained.
- c. Permission from ministry of health will be obtained .
- d. Consent form from residents will be obtained.
- e. Confidentiality the information

## 5. LITERATURE REVIEW:

### 5.1 PREVIOUS STUDY:

1- In a study performed in Riyadh , 2019, the study was designed to assess Family medicine residents educational environment and satisfaction of training program and About 187 surveys were distributed and 140 were collected. The results are better than what had been found in the previous studies, but more attention and effort should be done, the overall score of the PHEEM was 86.73 (standard deviation [SD]: 19.46). The perception of teaching score was 33.11 (SD: 8.80) out of 60, the perception of role autonomy score was 28.60 (SD: 7.35) out of 56, and the perception of social support was 25.02 (SD: 5.43) out of 44.(6)

2- In another study , in the central region of Saudi Arabia ,2015, the study was distributed to 101 trainees . they found that There are many problems in the training program. Urgent actions are needed to improve the residents' learning experience particularly during rotations. Also, the curriculum should be restructured, and effective training methods introduced using the Best Evidence in Medical Education to meet the expectations and learning needs of family physicians. The overall score was 67.1/160 (SD: 20.1). The PHEEM's domains scores: 24.2/56 (SD: 7.13) for perception of role autonomy; 25.3/60 (SD: 8.88), for perception of teaching; and 17/44 (SD: 5.6), for perception of social support. (5)

3- In another study , conducted a study back in 2015 included 72 of Saudi urology residents of different levels of residency training from regions of Saudi Arabia using the postgraduate hospital educational environment measure (PHEEM) inventory, the results showed The residents did not perceive their environment positively ( $77.7 \pm 16.5$ ). Residents from different health care sectors differed significantly regarding the total PHEEM score ( $P=0.024$ ) and the teaching subscale ( $P=0.017$ ). The inventory showed a high internal consistency with Cronbach's alpha of 0.892.[8]

4- Yaman H, Ozen M , they surveyed 135 family medicine residents in 5 teaching hospitals in Ankara region , 2002 , the results was 70% of respondents found the order

of rotation important. Most residents were satisfied with the duration of rotation. 82% of residents basic skills taught during the course of the training to be insufficient. 55% of the participants felt that training in teaching hospitals was not sufficient, and majority desired training in family practice settings. 99% respondents suggested establishing a coordinating center for family medicine training and training of clinical teachers in topics relevant to family practice.[9]

## **6. RESULTS:**

155 out 174 of the residents completed the questionnaire.

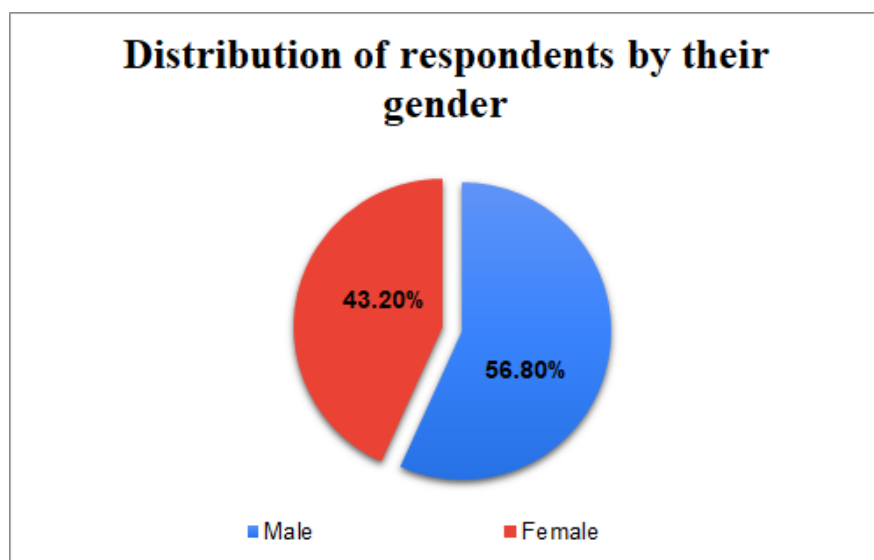
### **Descriptive Statistics:**

#### **1. Distribution of respondents by gender**

According to the following table, analysis of the sample profile shows that 56.8% of respondents are males, while 43.2% of them are females.

**Table 6: Distribution of respondents by their gender**

Gender	Frequency	Percent
Male	88	56.8%
Female	67	43.2%
Total	155	100.0%



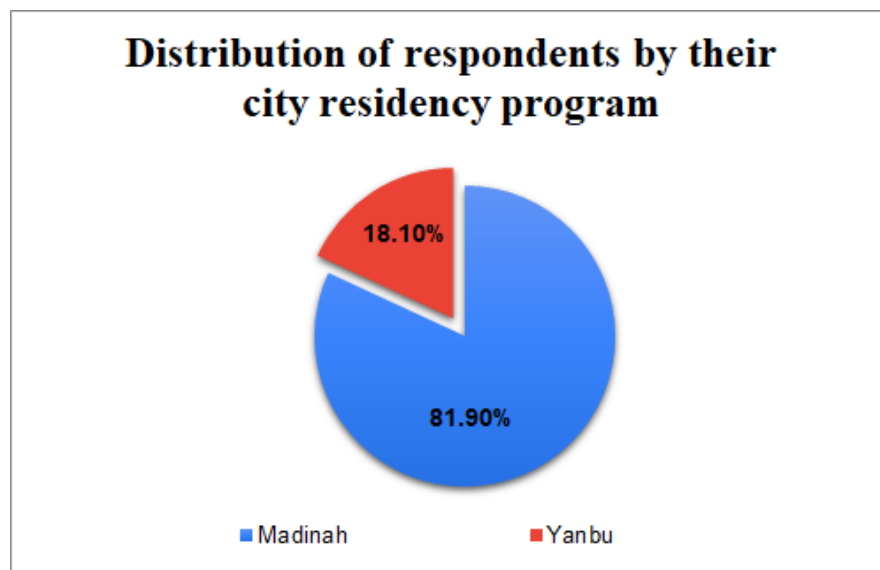
**Figure 1: Distribution of respondents by their gender**

## 2. Distribution of respondents by city residency program

According to the following table, analysis of the sample profile shows that 81.9% of respondents are from Madinah, while 18.1% of them are from Yanbu.

**Table 7: Distribution of respondents by their city residency program**

City residency program	Frequency	Percent
Madinah	127	81.9%
Yanbu	28	18.1%
Total	155	100.0%



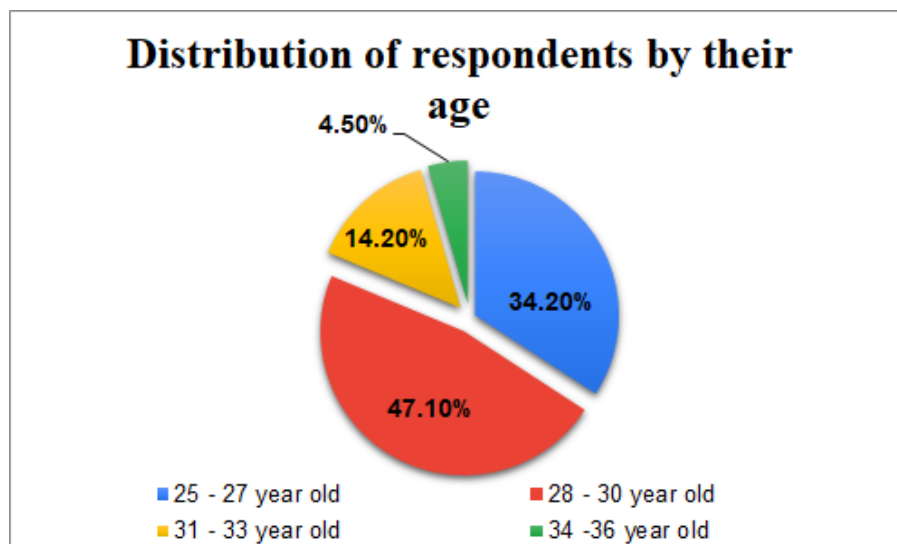
**Figure 2: Distribution of respondents by their city residency program**

## 3. Distribution of respondents by age

According to the following table, analysis of the sample profile shows that 47.1% of respondents are between (28 – 30) years old, while 4.5% of them are between (34-36) years old.

**Table 8: Distribution of respondents by their age**

Age	Frequency	Percent
25 - 27 year old	53	34.2%
28 - 30 year old	73	47.1%
31 - 33 year old	22	14.2%
34 -36 year old	7	4.5%
Total	155	100.0%



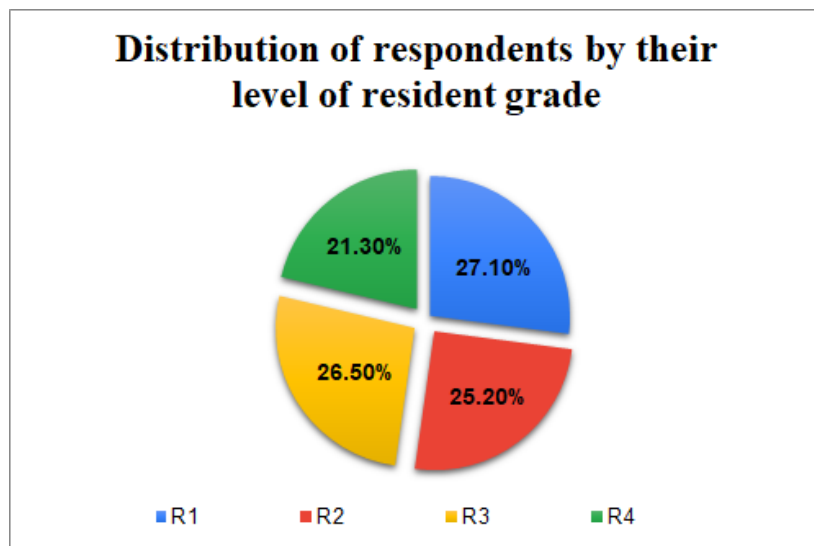
**Figure 3: Distribution of respondents by their age**

#### **4. Distribution of respondents by level of resident grade**

According to the following table, analysis of the sample profile shows that 27.1% of respondents are at R1 as level of resident grade, while 21.3% of them are at R4 as level of resident grade.

**Table 9: Distribution of respondents by their level of resident grade**

Level of resident grade	Frequency	Percent
R1	42	27.1%
R2	39	25.2%
R3	41	26.5%
R4	33	21.3%
Total	155	100.0%



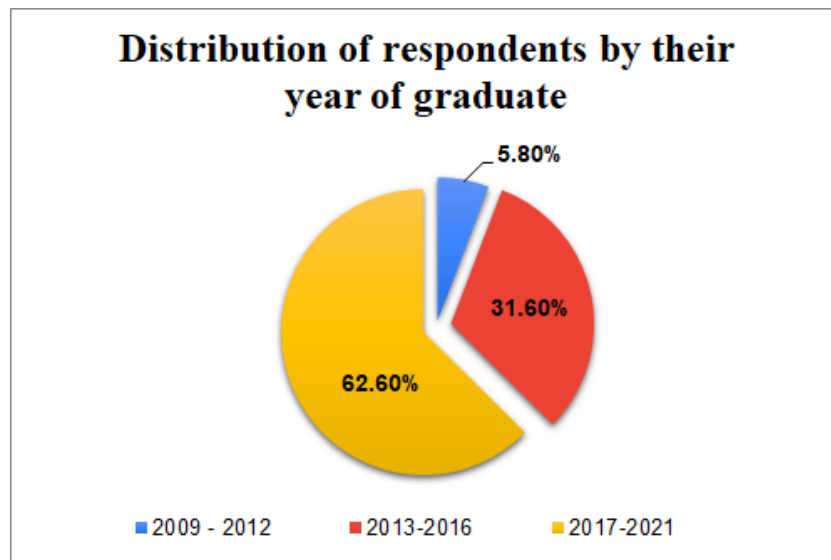
**Figure 4: Distribution of respondents by their level of resident grade**

## 5. Distribution of respondents by their year of graduate

According to the following table, analysis of the sample profile shows that 62.6% of respondents have been graduated between 2017-2021, while 5.8% of them have been graduated between 2009-2012.

**Table 10: Distribution of respondents by their year of graduate**

Year of graduate	Frequency	Percent
2009 - 2012	9	5.8%
2013-2016	49	31.6%
2017-2021	97	62.6%
Total	155	100.0%



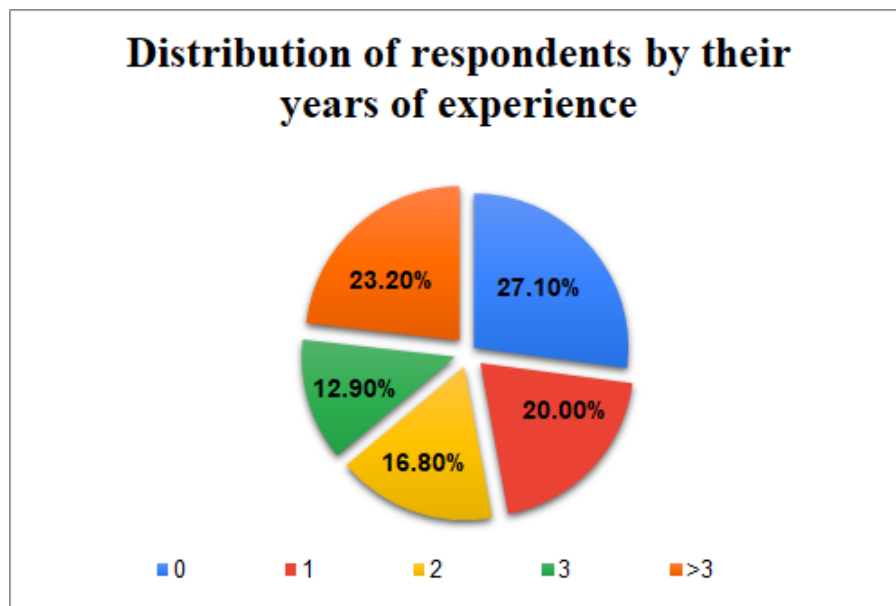
**Figure 5: Distribution of respondents by their year of graduate**

## 6. Distribution of respondents by their years of experience

According to the following table, analysis of the sample profile shows that 27.1% of respondents has no experience, while 12.9% of them has 3 years of experience.

**Table 11: Distribution of respondents by their years of experience**

Years of experience	Frequency	Percent
0	42	27.1%
1	31	20.0%
2	26	16.8%
3	20	12.9%
>3	36	23.2%
Total	155	100.0%



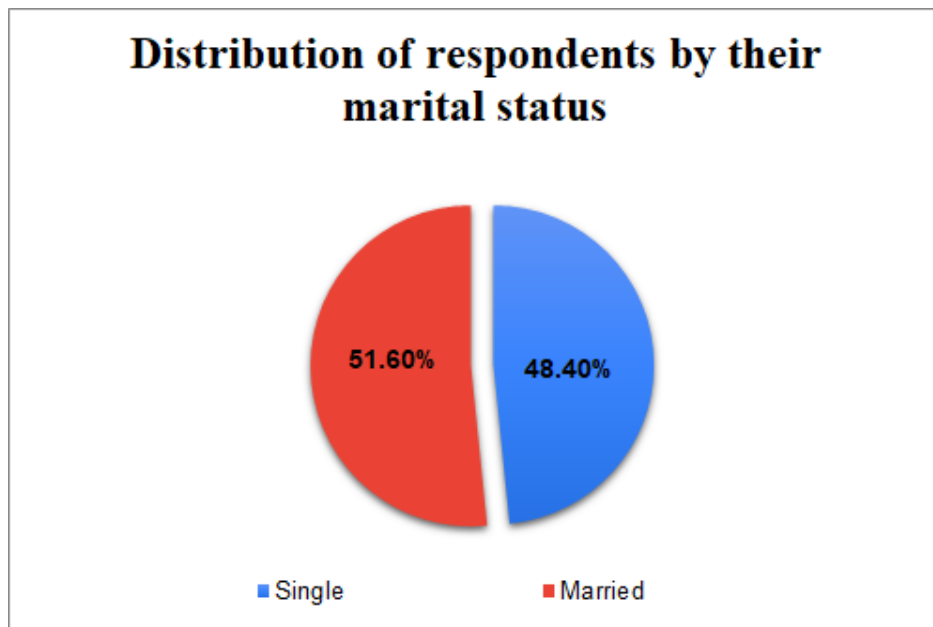
**Figure 6: Distribution of respondents by their years of experience**

## 7. Distribution of respondents by their marital status

According to the following table, analysis of the sample profile shows that 51.6% of respondents are married, while 48.4% of them are single.

**Table 12: Distribution of respondents by their marital status**

Marital status	Frequency	Percent
Single	75	48.4%
Married	80	51.6%
Total	155	100.0%



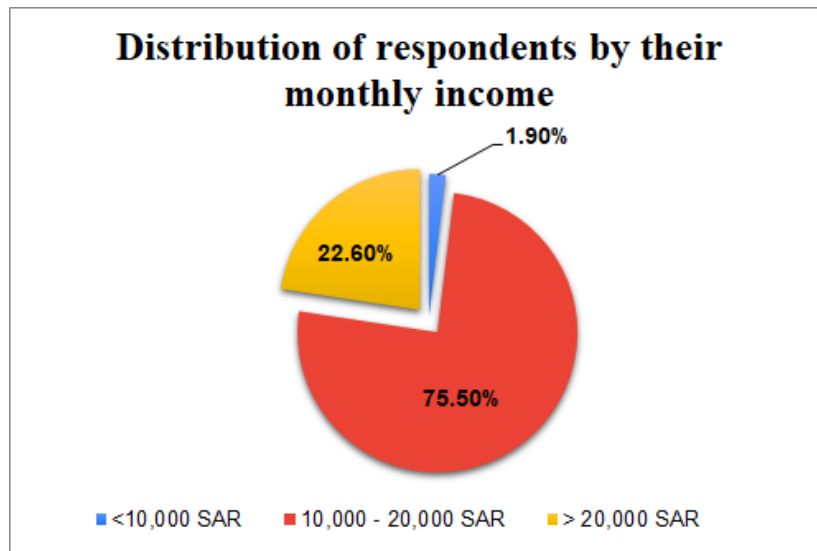
**Figure 7: Distribution of respondents by their marital Status**

### **8. Distribution of respondents by their monthly income**

According to the following table, analysis of the sample profile shows that 75.5% of respondents have monthly income between (10,000 and 20,000) SAR, while 1.9% of them have monthly income more than 20,000 SAR.

**Table 13: Distribution of respondents by their monthly income**

Monthly income	Frequency	Percent
<10,000 SAR	3	1.9%
10,000 - 20,000 SAR	117	75.5%
> 20,000 SAR	35	22.6%
Total	155	100.0%



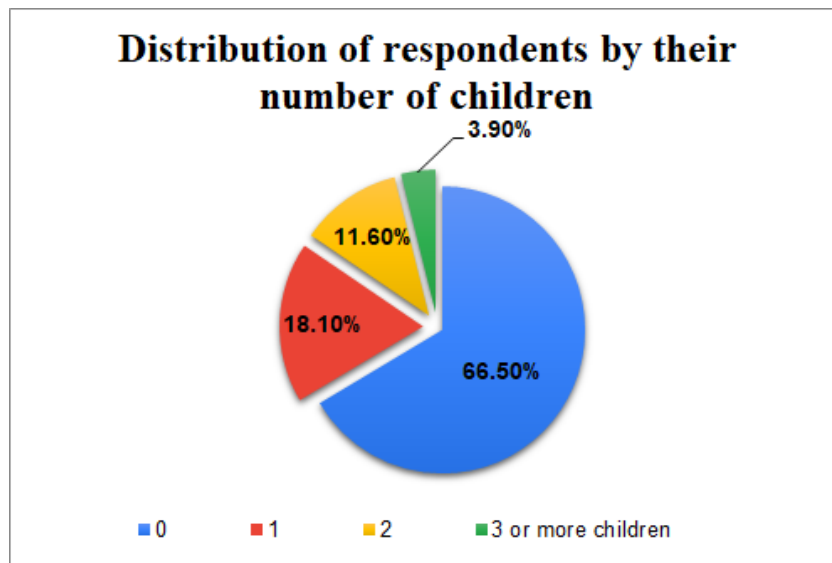
**Figure 8: Distribution of respondents by their monthly income**

## 9. Distribution of respondents by their number of children

According to the following table, analysis of the sample profile shows that 66.5% of respondents have no children, while 3.9% of them have 3 or more children.

**Table 14: Distribution of respondents by their number of children**

Number of children	Frequency	Percent
0	103	66.5%
1	28	18.1%
2	18	11.6%
3 or more children	6	3.9%
Total	155	100.0%



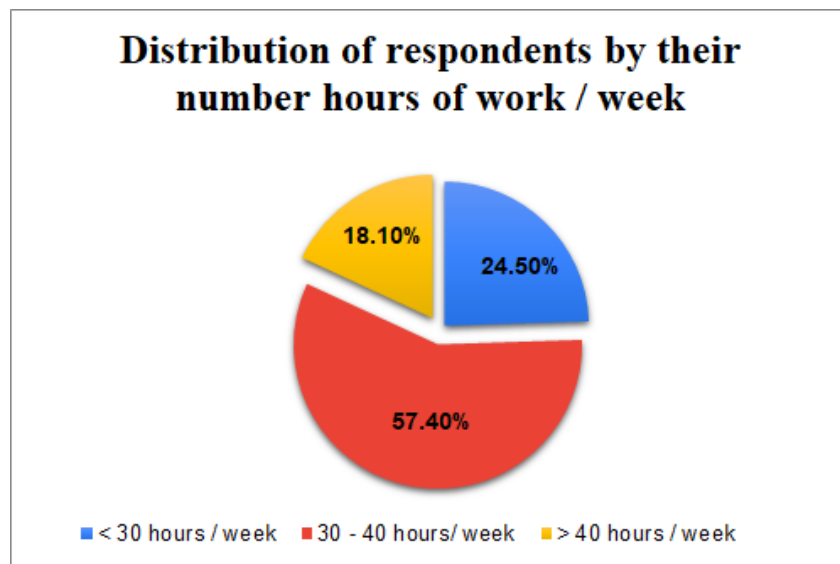
**Figure 9: Distribution of respondents by their number of children**

#### **10. Distribution of respondents by their number hours of work / week**

According to the following table, analysis of the sample profile shows that 57.4% of respondents works for 30-40 hours ber week, while 18.1% of them works for mor than 40 hours ber week.

**Table 15: Distribution of respondents by their number hours of work / week**

Number hours of work / week	Frequency	Percent
< 30 hours / week	38	24.5%
30 - 40 hours/ week	89	57.4%
> 40 hours / week	28	18.1%
Total	155	100.0%



**Figure 10: Distribution of respondents by their number hours of work / week**

### **Analyzing and discussing study question:**

#### **1. What is perception of role autonomy toward training program by family medicine residents in madinah region?**

The researcher calculated the arithmetic averages and the standard deviation in order to find out whether the average degree of approval of the study sample on the paragraphs of the first axis (Perceptions of role

autonomy), has reached a higher degree than Neutrality. The following table illustrates these results.

**Table 16 :Arithmetic averages, the standard deviation and the relative weight of the responses of the study sample individuals on the paragraphs related to the first axis**

No	Paragraph	Mean	Percentage	Std. Deviation	Agreement Level	Rank
1.	I have a contract of employment that provides information about hours of work	2.21	55.3%	1.069	Uncertain	11
2.	My clinical teachers set clear expectations	2.57	64.3%	0.838	Agree	5
3.	I have protected educational time in this post	2.85	71.3%	0.788	Agree	1
4.	I had an informative induction programme	1.64	41.0%	1.086	Uncertain	14
5.	I have the appropriate level of responsibility in this post	2.08	52.0%	1.023	Uncertain	12
6.	I have good clinical supervision at all time	1.65	41.3%	0.944	Uncertain	13
7.	There is racism in this post	2.29	57.3%	0.953	Uncertain	8
8.	I have to perform inappropriate tasks	2.45	61.3%	0.722	Agree	6
9.	There is an informative Junior Doctors handbook	2.59	64.8%	0.910	Agree	4
10.	My clinical teachers have good communication skills	2.37	59.3%	0.981	Uncertain	7
11.	I am bleeped inappropriately	2.29	57.3%	1.051	Uncertain	8 rep.
12.	I am able to participate actively in educational events	2.63	65.8%	0.891	Agree	3
13.	There is sex discrimination in this post	2.29	57.3%	0.974	Uncertain	8 rep.
14.	There is clear clinical protocols in this post	2.70	67.5%	0.848	Agree	2

Previous table shows the level of agreement on (Perceptions of role autonomy), where the means of the items ranged between 1.46 (41.0%) out of 4 to 2.85 (71.3%) out of 4.

In the first order comes paragraph (1) which states that " I have protected educational time in this post." with an arithmetic average of (2.85) and a relative weight (71.3%).

While the last order was paragraph (4) which states that " I had an informative induction programme.", with an arithmetic average of (1.61) and a relative weight of (41.0%).

## 2. What is preceptions of teaching toward training program by family medicine residents in madinah region?

The researcher calculated the arithmetic averages and the standard deviation in order to find out whether the average degree of approval of the study sample on the paragraphs of the second axis (preceptions of teaching), has reached a higher degree than Neutrality. The following table illustrates these results.

**Table 17 :Arithmetic averages, the standard deviation and the relative weight of the responses of the study sample individuals on the paragraphs related to the second axis**

No	Paragraph	Mean	Percentage	Std. Deviation	Agreement Level	Rank
1.	My clinical teachers are enthusiastic	2.39	59.8%	0.901	Uncertain	10
2.	I have good collaboration with other Doctors in my grade	2.56	64.0%	0.831	Agree	5
3.	My hours conform to the new deal	2.04	51.0%	1.173	Uncertain	14
4.	I have the opportunity to provide continuity of care	2.76	69.0%	0.898	Agree	3
5.	I have suitability access to careers advice	2.81	70.3%	0.844	Agree	2
6.	This hospital has good quality accommodation for junior doctors , especially when on call	2.40	60.0%	0.916	Uncertain	9

No	Paragraph	Mean	Percentage	Std. Deviation	Agreement Level	Rank
7.	There is access in a educational programme relevant to my needs	2.42	60.5%	0.918	Agree	7
8.	I get regular feedback from seniors	2.04	51.0%	1.080	Uncertain	14 rep.
9.	My clinical teachers are well organised	2.32	58.0%	0.980	Uncertain	11
10.	I feel physically safe within the hospital environment	2.27	56.8%	0.989	Uncertain	12
11.	There is a no-blame culture in this post	2.52	63.0%	0.907	Agree	6
12.	There is adequate catering facilities when I am on call	2.85	71.3%	0.746	Agree	1
13.	I have enough clinical learning opportunities for my needs	2.41	60.3%	0.945	Agree	8
14.	My clinical teachers have good teaching skills	2.67	66.8%	1.007	Agree	4
15.	I feel part of a team working here	2.25	56.3%	1.040	Uncertain	13

Previous table shows the level of agreement on (preceptions of teaching), where the means of the items ranged between 2.04 (51.0%) out of 4 to 2.85 (71.3%) out of 4.

In the first order comes paragraph (12) which states that " There is adequate catering facilities when I am on call." with an arithmetic average of (2.85) and a relative weight (71.3%).

While the last order was paragraph (3) which states that " My hours conform to the new deal.", and paragraph (8) which states that " I get regular feedback from seniors."with an arithmetic average of (2.04) and a relative weight of (51.0%) for each.

### 3. What is preceptions of of social support toward training program by family medicine residents in madinah region?

The researcher calculated the arithmetic averages and the standard deviation in order to find out whether the average degree of approval of the study sample on the paragraphs of the second axis (preceptions of of social support), has reached a higher degree than Neutrality. The following table illustrates these results.

**Table 18 :Arithmetic averages, the standard deviation and the relative weight of the responses of the study sample individuals on the paragraphs related to the third axis**

No	Paragraph	Mean	Percentage	Std. Deviation	Agreement Level	Rank
1.	I have opportunities to acquire the appropriate practical procedure for my grade	1.41	35.3%	1.005	Disagree	10
2.	My clinical teachers are accessible	1.39	34.8%	1.041	Disagree	11
3.	My workload in this job is fine	3.01	75.3%	0.734	Agree	1
4.	Senior staff utilize learning opportunities effectively	2.47	61.8%	0.885	Agree	3
5.	The training in this post makes me feel to be ready to SpR/consultant	1.84	46.0%	1.041	Uncertain	9
6.	My clinical teachers have good mentoring skills	2.40	60.0%	1.018	Uncertain	5
7.	I get a lot enjoyment out of my present job	2.38	59.5%	0.792	Uncertain	6
8.	My clinical teachers encourage me to be an independent learner	1.86	46.5%	1.072	Uncertain	8
9.	There are good counselling opportunities for junior doctors who fail to complete their training satisfactorily	2.41	60.3%	0.978	Agree	4
10.	The clinical teachers provide me with good feedback on my strengths and weaknesses	2.48	62.0%	0.949	Agree	2
11.	My clinical teachers promote an atmosphere of mutual respect	2.24	56.0%	0.869	Uncertain	7

Previous table shows the level of agreement on (preceptions of of social support), where the means of the items ranged between 1.39 (34.8%) out of 4 to 3.01 (75.3%) out of 4.

In the first order comes paragraph (3) which states that " My workload in this job is fine." with an arithmetic average of (3.01) and a relative weight (75.3%).

While the last order was paragraph (2) which states that " My clinical teachers are accessible ", with an arithmetic average of (1.39) and a relative weight of (34.8%).

The following table shows scores of the interpreting for the three PHEEMS sub-scales:

**Table 19 :scores of the interpreting for the three PHEEMS sub-scales and total scores.**  
**Scores of the interpreting for the three PHEEMS sub-scales and total scores**

Perceptions of role autonomy	
0-14	Very poor
15-28	A negative view of one's role
29-42	A more positive perception of one's role
43-56	Excellent perception of one's job
Perceptions of teaching	
0-15	Very poor quality
16-30	In need of some retraining
31-45	Moving in the right direction
46-60	Model teachers
Perception of social support	
0-11	Non-existent
11-22	Not a pleasant place
23-33	More pros than cons
34-44	A good supportive environment
Overall score	
0-40	Very poor
41-80	Plenty of problems
81-120	More positive than negative
121-160	Excellent

As a result of our study, the following table shows the study sample resulted scores of the interpreting for the three PHEEMS sub-scales and total scores:

**Table 20 :study sample resulted scores of the interpreting for the three PHEEMS sub-scales and total scores.**

Sub-scales	Score	Result
Perceptions of role autonomy	32.61	A more positive perception of one's role
Perceptions of teaching	36.71	Moving in the right direction
Perception of social support	23.89	More pros than cons
Overall score	93.21	More positive than negative

## 7.Conclusion and Recommendations:

This study aims to assess educational environment and family medicine residents perception toward training program in Al-Madinah region , Saudi Arabia , for all residents (males and females ) in Al-Madinah region (Al-Madinah and Yanbu city ).

Analysis of the survey data obtained in this study shows that perceptions of role autonomy is more positive perception of one's role from the study sample point of view, and perceptions of teaching is moving in the right direction, the results also shows that perception of social support has more pros than cons. As overall conclusion, the results shows that the three PHEEMS have more positive than negative from the study sample point of view.

The researcher comes out with a set of recommendation, which include providing an informative induction programme to all residents (males and females ) in Al-Madinah region (Al-Madinah and Yanbu city , and a good clinical supervision at all time to them, also making contracts of employment that provides information about hours of work, providing a physically safety within the hospital environment to the employees, providing a suitable opportunities to acquire the appropriate practical procedure for employees' grade.

The researcher also recommend to promote an atmosphere of mutual respect from the clinical teachers and the spirit of team work between employees.

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