

**FACTORS OR REASONS INFLUENCING THE CHOICE OF PSYCHIATRY AS  
MEDICAL SPECIALTY AMONG POSTGRADUATE PSYCHIATRY TRAINEES**

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## ***Introduction***

The following research has aimed to evaluate the influential factors that affect the decision of opting for psychiatry as a medical specialty. The research underpinned the case of post-graduate trainees residing in Scotland and to serve the purpose, the questionnaire was sent to 278 participants, however, only 83 responded in assertion. Hence, the response rate has been calculated to be 30%. Considering these aspect, the following section is dedicated to a meticulous analysis of the factors. The analysis includes assessment of the reliability of the variables using Cronbach Alpha. It also includes descriptive statistics for the comprehension of the general characteristics along with demographic variables. In furtherance, to evaluate the most influential factors in each category including financial, family, psychiatry as an interesting subject, rewarding aspects of working in psychiatry, societal factors and personality factors, factor analysis has been used. To further substantiate the analysis, a comparative analysis has been conducted to explore the differences in the factors based on gender, MRCP, training stage and psychiatry placement.

## ***Reliability Testing***

Since the questions related to all the factors were based on Likert scale, therefore, Cronbach Alpha has been used to determine the reliability of the 5-point Likert scale. The result of all the factors except for personality factors has been mentioned as follows:

*Table 1: Reliability Analysis- 1*

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.765	38

With respect to the results in Table 1, it has been found that the Cronbach Alpha statistics is computed to be 0.765. The study carried out by Leech, Barrett and Morgan (2016) asserted that the minimum acceptable value is 0.7. Therefore, the results in Table 1 are acceptable as they are above the threshold. Considering the personality factors, the Cronbach Alpha is computed to be

0.907 which is presented in Table 2. It depicts extreme reliability of the factors based on 5-point Likert scale.

*Table 2: Reliability Testing-2*

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.907	11

### ***Demographic Characteristics***

In this section, the general characteristics have been analysed, for instance, gender, age, place of medical qualification and others. In terms of Table 3, most of the respondents fall in the age group ranging from 20 to 34 years with 53% concentration. With regard to gender, the results of Table 4 illustrate that 62.2% females participated in this study. Moreover, Table 5 is illustrating that 91.6% of the participants acquired their primary medical qualification from UK while 3.6% acquired from Asia. In addition, Table 7 illustrates that 62.7% of the respondents hold MRCP while 37.3% did not. Moreover, according to Table 8, 74.7% of the respondents work full time. Table 9 depicts that 55.4% are at core psychiatry training stage. According to Table 10, 71.7% had psychiatry training in the first foundation year. However, in terms of decision-making stage, 43.4% decided in foundation stage to opt for psychiatry as a medical specialty and the results are depicted in Table 11.

*Table 3: Age of the Respondents***1. What age category (in years) do you belong to?**

	Frequency	Percent	Valid Percent	Cumulative Percent
50-54	2	2.4	2.4	2.4
40-44	3	3.6	3.6	6.0
35-39	9	10.8	10.8	16.9
30-34	44	53.0	53.0	69.9
25-29	25	30.1	30.1	100.0
Total	83	100.0	100.0	

*Table 4: Gender of the Respondents***2. What is your gender?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	31	37.3	37.8	37.8
Female	51	61.4	62.2	100.0
Total	82	98.8	100.0	

*Table 5: Place of Primary Medical Education***4. Place of primary medical qualification?**

	Frequency	Percent	Valid Percent	Cumulative Percent
UK	76	91.6	91.6	91.6
South Asia	1	1.2	1.2	92.8
EU	1	1.2	1.2	94.0
Asia	3	3.6	3.6	97.6
Africa	2	2.4	2.4	100.0

*Table 6: Membership of MRCP*

**7. Do you hold Membership of the Royal College of Psychiatrists UK, i.e. MRCPsych?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	52	62.7	62.7	62.7
	No	31	37.3	37.3	100.0

*Table 7: Work Type*

**8. You work**

	Frequency	Percent	Valid Percent	Cumulative Percent
Part-time	21	25.3	25.3	25.3
Full-time	62	74.7	74.7	100.0

*Table 8: Training Stage*

**9. Your training stage/ grade**

	Frequency	Percent	Valid Percent	Cumulative Percent
Higher Psychiatry Training	37	44.6	44.6	44.6
Core Psychiatry Training	46	55.4	55.4	100.0

*Table 9: Psychiatry Placement*

**11. Did you have psychiatry placement in your foundation training/ internship?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	64	77.1	78.0	78.0
	No	18	21.7	22.0	100.0
	Total	82	98.8	100.0	

Table 10: Decision Stage

**12. At what stage did you make the decision to choose psychiatry as your future training/ career speciality?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Work/ training post-foundation training/ internship	21	25.3	25.3	25.3
	Pre-medical school student	6	7.2	7.2	32.5
	During or after psychiatry placement as medical student	11	13.3	13.3	45.8
	During Foundation training	36	43.4	43.4	89.2
	Before completing psychiatry placement as medical student	9	10.8	10.8	100.0

### *Descriptive Statistics*

In descriptive statistics, mean and standard deviation has been computed with respect to each factor. In terms of financial or personal factors, the results have been depicted in Table 11. Most of the responses are inclined towards quite important to quite unimportant because the values are near 3 and approaching 4 while the standard deviation is minimal.

Table 11: Financial Factors

	Mean	Std. Deviation
13.1. Expenses or costs associated with psychiatry training (being reasonably manageable)	3.65	1.184
13.2. Psychiatry offers satisfactory opportunities regarding research, teaching and medical education	2.76	1.054
13.3. After the completion of training securing a post is easier due to low competition in psychiatry than in other medical specialties	3.22	1.389
13.4. Psychiatry offers a smooth and less complex career progression	3.19	1.366
13.5. Recruitment to a training post in Psychiatry (being less challenging than in other medical or surgical specialties)	3.46	1.459
13.6. Psychiatry offers a structured training with satisfactory (clinical and educational) supervision and support	2.12	1.07
13.7. Psychiatry offers training of comparatively shorter duration than certain other medical specialties before obtaining CCT	3.71	1.634
13.8. Psychiatry offers a variety of specialty and sub-specialty training/ work opportunities including dual CCT	2.7	1.112
13.9. Progression within psychiatry training is easily manageable (e.g. passing examinations and ARCP, absence of an exit examination at the end of higher training)	3.61	1.378
13.10. Positive and supportive supervisors, mentors or role models in previous posts or rotations (e.g. as FY2) changed your mind towards choosing psychiatry	2.25	1.497

With respect to the results obtained in Table 12, it has been found that mean values near 4 and 5 are indicating neutral response to unimportant responses, the values near 3 are indication quite important in the case of family or personal factors.

Table 12: Family/ Personal Factors

	Mean	Std. Deviation
14.1. Psychiatry training posts being available near family or preferred geographical area/ location	2.6	1.315
14.2. Peer pressure, influence or advice	4.11	1.653
14.3. Parent/ family pressure, influence or advice	4.53	1.699
14.4. Parents/ family members in the same medical field (in Psychiatry/ mental health)	5.33	1.279
14.5. Opportunities/ availability of Flexible working hours in psychiatry	2.83	1.395
14.6. A medical disorder or disability meant that you could manage working in psychiatry better than when you had to train/ work in other medical specialties	5.3	1.386
14.7. A mental disorder affecting yourself, your family or people in your close circle led you to develop interest in Psychiatry	4.43	1.669



Table 13 illustrates that most of the responses are near 2 which is indicating that they are quite important. Even in the case of factors associated with psychiatry as a subject, the standard deviation is minimal.

*Table 13: Factors associated with Psychiatry Subject*

	Mean	Std. Deviation
15.1. The opportunity of long-term therapeutic relationship with patients in psychiatric practice	1.99	1.132
15.2. Personal and innate interest in psychiatry and psychiatric disorders	1.25	0.56
15.3. Appraisal of own aptitude and skills (being more suitable for psychiatry)	1.98	1.137
15.4. An overlap between psychiatry, neuroscience and neurological medicine (makes psychiatry favorable specialty)	2.55	1.242
15.5. A desire to contribute to psychiatry (e.g. via therapeutic interventions or involvement in research) as mental health has not been given due attention	2.41	1.298
15.6. A (unique) person centered approach focusing on the patient as a person in psychiatry	1.67	1.049
15.7. You developed interest in psychiatry after having a good experience of assessment techniques and therapeutic models used in this specialty (in your previous training/ work, e.g. medical school placement, and placement or foundation year rotation in psychiatry)	2.7	1.629
15.8. Psychiatric practice utilizes bio-psycho-social model focusing on holistic approach to determine the biological, psychological and social factors in disease causation and care planning	1.96	1.12

Table 14 illustrates that most of the responses are near 2 which is indicating that they are quite important. Even in the case of factors associated with rewarding, the standard deviation is computed to be lower.

*Table 14: Factors associated with Rewarding*

	Mean	Std. Deviation
16.1. Assessment and care provision involves multidisciplinary teamwork in psychiatry	1.99	1.099
16.2. Psychiatry offers a sense of satisfaction and achievement when people with chronic mental health conditions report improvement or recovery	1.59	0.606
16.3. The utilization of evidence-based approaches regarding treatment and care in psychiatry	2.89	1.093
16.4. Absence of regular onsite on-call work as higher trainee or consultant in psychiatry	2.61	1.324
16.5. On-call work as psychiatry trainee or psychiatry consultant is easier to handle than in other medical or surgical specialties	2.98	1.498
16.6. Psychiatry is a financially rewarding specialty	4.07	1.404
16.7. Day to day work in psychiatry is considerably less demanding (e.g. workload pressure) than in certain other medical or surgical specialties	3.53	1.408
16.8. Good work-life balance in psychiatry	1.71	0.904
16.9. Less emergency work and an absence of complex procedural work in psychiatry	3	1.361

The social factors are found to be seemingly less important than other factors on the basis of mean values as depicted in Table 15.

*Table 15: Social Factors*

	Mean	Std. Deviation
17.1. Psychiatry is a medical specialty of high public repute	2.81	1.418
17.2. Opportunities to work abroad after the completion of psychiatry training	3.9	1.511
17.3. Influence of media, such as a film, TV program, or a book (on your decision to choose psychiatry)	4.27	1.733
17.4. Psychiatry involves an interest in people and their unique life stories	1.72	1.063

In terms of Table 16, most of the respondents inclined to state that personality factors are important. In this case, the deviation is minimal as found in other cases as well.

Table 16: Personality Factors

	Mean	Std. Deviation
18.1. I carry out a thorough analysis while investigating and interpreting patients' physical or mental health problems/ symptoms	2.05	0.961
18.2. I like utilizing my intellectual skills to solve complex problems	2.44	1.432
18.3. I consider myself as friendly	1.89	0.988
18.4. I have good communication skills	1.99	1
18.5. I have good interpersonal and social skills	1.93	0.973
18.6. I feel sympathy for and express empathy towards my patients while diagnosing and managing their health problems	2	0.988
18.7. I understand patient's feelings and emotions in the context of their difficulties and health problems	2.19	0.981
18.8. I listen to and pay attention to my patients' viewpoints	1.89	0.988
18.9. Colleagues and patients describe me as cooperative person	2.37	1.487
18.10. I have reasonable imaginative and creative skills to interpret patients and their unique ideas (e.g. their belief system) in the context of their personality and health problems	2.54	1.425
18.11. I spend time on reflecting on events in my personal and professional life	3.2	1.438

### ***Factor Analysis***

In order to determine which of the factors are significantly important that affect the decision to opt for psychiatry in the case of Scotland, factor analysis has been used. This section presents the key results with respect to each main factor. The analysis has been conducted on the basis of financial, family, psychiatry as an interesting subject, rewarding aspects of working in psychiatry, societal factors and personality factors based on KMO and Bartlett's test and component matrix.

#### ***Financial / employment / training factors***

In factor analysis, to assert whether or not the sample considered is adequate, KMO and Bartlett's test is used. Moreover, a component matrix has been further presented to determine which factors are retained on the basis of factor loadings where 0.6 has been taken as a threshold value. This threshold is also supported by the study of Yong and Pearce (2013). In terms of financial factors or training factors, the results have been presented in Table 17 and Table 18. The KMO and Bartlett's table is illustrating that the sample is adequate because the asymptotic significance is below 5% (0.05). Therefore, the sampling adequacy can be verified with this. Moreover, the sampling adequacy is computed to be moderate accurate as the value is 0.704. With

respect to Table 18, it has been found that four factors are retained. These factors include securing a post after completion of training, recruitment to training post, shorter duration of trainings in psychiatry than other medical fields and the easily manageable aspect of psychiatry.

*Table 17: KMO Bartlett's Test- Financial Factors/ Training*

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.704
Bartlett's Test of Sphericity	Approx. Chi-Square	164.371
	df	45
	Sig.	.000

*Table 18: Retained Components*

	Component
13.3. After the completion of training securing a post is easier due to low competition in psychiatry than in other medical specialties	0.686
13.5. Recruitment to a training post in Psychiatry (being less challenging than in other medical or surgical specialties)	0.811
13.7. Psychiatry offers training of comparatively shorter duration than certain other medical specialties before obtaining CCT	0.68
13.9. Progression within psychiatry training is easily manageable (e.g. passing examinations and ARCP, absence of an exit examination at the end of higher training)	0.738

#### *Family or personal life factors/ preferences*

In accordance with family factors or personal factors, the results have been presented in Table 19 and Table 20. The KMO and Bartlett's table is illustrating that the sample is adequate because the asymptotic significance is below 5% (0.05) ( $p\text{-value} = 0.000 < 0.05$ ). Therefore, the sampling adequacy can be confirmed with this. Also, the sampling adequacy is computed to be satisfactory as the value is 0.426. With respect to Table 20, it has been found that two factors are retained. Those two retained factors comprise of proximity of training facility which is near family and pressure, advice or influence of parents/ family.

Table 19: KMO Bartlett's Test (Family Factors)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.426
Bartlett's Test of Sphericity	Approx. Chi-Square	76.337
	df	21
	Sig.	.000

Table 20: Retained Components

	Component
14.1. Psychiatry training posts being available near family or preferred geographical area/ location	0.739
14.3. Parent/ family pressure, influence or advice	0.691

#### *Factors Associated with Psychiatry as an interesting subject*

In relation to the factors associated with psychiatry as an interesting subject, the results have been presented in Table 21 and Table 22. The KMO and Bartlett's table is illustrating that the sample is adequate because the asymptotic significance is below 5% (0.05). Therefore, the sampling adequacy can be confirmed with this. In furtherance, the sampling adequacy is computed to be moderate accurate as the value is 0.757. According to Table 22, it has been found that four factors are retained. The retained factors include opportunity in the field of psychiatry, personal interest, person centered approach, and an approach to determine the disease based on bio-psycho-social model.

Table 21: KMO Bartlett's Test (Psychiatric Subject Factors)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.757
Bartlett's Test of Sphericity	Approx. Chi-Square	123.068
	df	28
	Sig.	.000

Table 22: Retained Components

	Component
15.1. The opportunity of long-term therapeutic relationship with patients in psychiatric practice	0.736
15.2. Personal and innate interest in psychiatry and psychiatric disorders	0.776
15.6. A (unique) person centered approach focusing on the patient as a person in psychiatry	0.684
15.8. Psychiatric practice utilizes bio-psycho-social model focusing on holistic approach to determine the biological, psychological and social factors in disease causation and care planning	0.624

*Factors associated with Rewarding aspects of the working in psychiatry*

In accordance with the factors associated with rewarding aspects of the working in psychiatry, the results have been presented in Table 23 and Table 24 of KMO and Bartlett's test and component matrix respectively. The KMO and Bartlett's table is illustrating that the sample is adequate because the asymptotic significance is below 5% (0.05) ( $p\text{-value} = 0.000 < 0.05$ ). Hence, the sampling adequacy can be established with this. Moreover, the sampling adequacy is computed to be moderate accurate as the value is 0.711. According to Table 24, it has been found that five factors are retained. The retained factors include absence of regular on-site call, on-call work in psychiatry is easy to handle as compared to other medical fields, less work pressure, more work-life balance, and less complex work leading to less emergency cases in comparison to other medical fields.

Table 23: KMO and Bartlett's Test (Rewarding Factors)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.711
Bartlett's Test of Sphericity	Approx. Chi-Square	177.386
	df	36
	Sig.	.000

*Table 24: Retained Components*

	Component
16.4. Absence of regular onsite on-call work as higher trainee or consultant in psychiatry	0.664
16.5. On-call work as psychiatry trainee or psychiatry consultant is easier to handle than in other medical or surgical specialties	0.703
16.7. Day to day work in psychiatry is considerably less demanding (e.g. workload pressure) than in certain other medical or surgical specialties	0.693
16.8. Good work-life balance in psychiatry	0.757
16.9. Less emergency work and an absence of complex procedural work in psychiatry	0.788

*Social or societal factors*

In light of the social or societal factors, the results have been presented in Table 25 and Table 26 of KMO and Bartlett's test and component matrix respectively. The KMO and Bartlett's table is demonstrating that the sample is adequate because the asymptotic significance is below 5% (0.05) ( $p\text{-value} = 0.001 < 0.05$ ). Henceforth, the sampling adequacy can be validated with this. Besides, the sampling adequacy is computed to be moderate as the value is 0.500. In accordance with Table 26, it has been found that only two factors are retained. The retained factors include opportunities to work abroad following the completion of training and another factor is the influence of external factors like media, television and books that affect the decision to opt for psychiatry in future.

*Table 25: KMO and Bartlett's Test (Social Factors)*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500
Bartlett's Test of Sphericity	Approx. Chi-Square	22.845
	df	6
	Sig.	.001

*Table 26: Retained Factors*

	Component
17.2. Opportunities to work abroad after the completion of psychiatry training	0.802
17.3. Influence of media, such as a film, TV program, or a book (on your decision to choose psychiatry)	0.74

### *Personality factors*

Concerning the personality factors, the results have been presented in Table 27 and Table 28 of KMO and Bartlett's test and component matrix respectively. The KMO and Bartlett's table is showing that the sample is adequate because the asymptotic significance is below 5% (0.05) ( $p\text{-value} = 0.000 < 0.05$ ). Hence, the sampling adequacy can be recognized with this. In furtherance, the sampling adequacy is computed to be highly accurate as the value is 0.865 and is approaching 1. According to Table 28, it has been found that nine factors are retained. The retained factors include thorough analysis skills to investigate a patient, interest in solving complex problems with intellectual skills, friendly nature, and good communication skills. Some other factors include satisfactory social and interpersonal skills, sentiments of sympathy and empathy, comprehension of emotion, attentive listening, and cooperative nature.

*Table 27: KMO and Bartlett's Test (Personality Factors)*

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.865
Bartlett's Test of Sphericity	Approx. Chi-Square	528.220
	df	55
	Sig.	.000

*Table 28: Retained Components*

	Component
18.1. I carry out a thorough analysis while investigating and interpreting patients' physical or mental health problems/ symptoms	0.675
18.2. I like utilizing my intellectual skills to solve complex problems	0.824
18.3. I consider myself as friendly	0.736
18.4. I have good communication skills	0.787
18.5. I have good interpersonal and social skills	0.783
18.6. I feel sympathy for and express empathy towards my patients while diagnosing and managing their health problems	0.737
18.7. I understand patient's feelings and emotions in the context of their difficulties and health problems	0.77
18.8. I listen to and pay attention to my patients' viewpoints	0.803
18.9. Colleagues and patients describe me as cooperative person	0.794



### *Comparative Analysis*

To evaluate the differences in perception on the basis of gender and psychiatry placement, independent sample t-test has been used.

#### *Differences in Factors based on Gender*

Firstly, a descriptive statistics table has been computed with respect to gender as depicted in Table 29. Secondly, t-test has been conducted with respect to Levene's test to confirm the homogeneity of variances. Following the confirmation, t-statistics has been evaluated and presented in Table 30. It has been found there exists no difference in the perception of male participants and female participants. However, at 10% significance level, the difference is only found in the social factors. According to group statistics, males prefer social factors more than females as their total score is found to be inclined towards importance.

*Table 29: Group Statistics*

<b>Group Statistics</b>					
	2. What is your gender?	N	Mean	Std. Deviation	Std. Error Mean
Financial Factors	Male	31	30.9032	7.01120	1.25925
	Female	51	30.5882	6.59750	.92384
Family Factors	Male	31	29.5484	4.62485	.83065
	Female	51	28.7059	5.22798	.73206
Psychiatry is an Interesting Subject	Male	31	16.8387	5.56834	1.00010
	Female	51	16.2745	5.13061	.71843
Rewarding Aspects	Male	31	25.2903	5.68151	1.02043
	Female	51	23.7843	5.98436	.83798
Social Factors	Male	31	11.8065	2.90309	.52141
	Female	51	13.2157	3.80165	.53234
Personality Factors	Male	31	26.4839	9.64320	1.73197
	Female	51	23.4118	8.94467	1.25250

*Table 30: T-Test*

	t	Sig. (2-tailed)
Financial Factors	0.205	0.838
Family Factors	0.738	0.462
Psychiatry is an Interesting Subject	0.468	0.641
Rewarding Aspects	1.126	0.264
Social Factors	-1.891	0.062
Personality Factors	1.464	0.147

*Differences in Factors based on Psychiatry Placement*

In this case, the participants who have had psychiatry placement in the foundation year are compared with the one who have not had this opportunity. The results have been presented in table 31 and Table 32. It has been found that perception on family factors significantly differs on the basis of placement and group statistics revealed that who have not had the placement in foundation year prefer family factors to be more important ( $p\text{-value} = 0.006 < 0.05$ ). In addition, some other factors that can be found having differences in perception if the threshold for significance is considered to be 10% are financial factors and rewarding aspects of psychiatry. In both cases, those who have not had the placement in foundation years deem them more important than the ones who have had the placement.

*Table 31: Group Statistics*

<b>Group Statistics</b>					
11. Did you have psychiatry placement in your foundation training/ internship?		N	Mean	Std. Deviation	Std. Error Mean
Financial Factors	Yes	64	31.3594	6.27762	.78470
	No	18	28.1667	7.85344	1.85107
Family Factors	Yes	64	29.8438	4.51530	.56441
	No	18	26.2222	5.86671	1.38280
Psychiatry is an Interesting Subject	Yes	64	16.2656	5.03083	.62885
	No	18	17.5556	6.10903	1.43991
Rewarding Aspects	Yes	64	24.9219	5.74402	.71800
	No	18	22.2222	5.99564	1.41319
Social Factors	Yes	64	12.5313	3.53202	.44150
	No	18	13.1111	3.54615	.83584
Personality Factors	Yes	64	24.4375	9.02532	1.12816
	No	18	24.7222	10.65394	2.51116

*Table 32: T-Test*

	t	Sig. (2-tailed)
Financial Factors	1.801	0.075
Family Factors	2.808	0.006
Psychiatry is an Interesting Subject	-0.916	0.362
Rewarding Aspects	1.745	0.085
Social Factors	-0.615	0.540
Personality Factors	-0.114	0.910

### References

- Leech, N.L., Barrett, K.C. and Morgan, G.A., 2014. *IBM SPSS for intermediate statistics: Use and interpretation*. Routledge.
- Yong, A.G. and Pearce, S., 2013. A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in quantitative methods for psychology*, 9(2), pp.79-94.