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Can creativity, responsibility and skills guarantee better job performance of pharmacists? a cross–sectional study from Pakistan

Abstract

Job performance is considered as a multi–dimensional concept describing the extent to which employees fulfill their responsibilities, by using their creativity, productivity and problem solving skills. The present study was designed to assess the job performance of pharmacists working in different fields in twin cities of Pakistan. A descriptive cross–sectional study design was to assess the job performance of pharmacists working in different fields in twin cities i.e. Islamabad (Federal Capital) and Rawalpindi (Twin City) of Pakistan. Sample size was calculated to be 382 pharmacists to achieve 95% confidence level with 5% margin of error. The performance of these 382 selected respondents was evaluated by using Performance Evaluation Questionnaire (PEQ) requested to be filled by their respective reporting managers. After data collection, data was cleaned, coded and analyzed using SPSS version 21. Results showed that creativity was found above average among pharmacists with mean score (15.6±4.32), job responsibility (14.6±4.35) and management skills (20.8±5.63) were also above average. The overall job performance (51.1±13.21) of pharmacists was also found adequate. The results of the present study concluded that of pharmacists was above average. Although, the pharmacists were creative, responsible and possessed managerial skills but still these expertise's needs to be further enhanced through extensive training and continuous professional development programs.

Keywords: creativity, managerial skills, job responsibility, job performance, pharmacists, pakistan

Madeeha Malik,[1] Anina Qureshi,[1] Azhar Hussain[2]

[1]Hamdard Institute of Pharmaceutical Sciences, Hamdard University Islamabad, Pakistan

[2]Faculty of Pharmacy, Hamdard University, Pakistan

Correspondence: Madeeha Malik, Hamdard Institute of Pharmaceutical Sciences, Hamdard University Islamabad, Pakistan, Email madeehamalik15@gmail.com

Introduction

Job performance is considered as a multi–dimensional concept describing the extent to which employees fulfill their responsibilities, by using their creativity, productivity and problem solving skills.[1] However, individual differences in effort, efficacy that associates the charge to performance and enhances the value of disposition measures is important for predicting occupational outcomes. Socio–analytic concept is entrenched in interpersonal mindset and is proposed to clarify distinct variances in professional achievement.[2] Job performance is affected by numerous factors including personal, psychological, social and situational factors. It is highly associated with nature of job, peers or co–workers and the organization.[3] Furthermore, it is linked with job satisfaction but the connection between job performance and job satisfaction is still not well acknowledged.[4] A meta–analysis conducted in USA yields two other related words in this context, the contextual performance and task performance. Task performance has been explained as individual work and moving forward at one's own. Contextual performance was described as working in a team and synchronizing with others.[2] A study conducted in United States revealed that job performance depends on the exact match between the individual and job nature. A synchronization between needs of the individual and the autonomy of job is necessary to make job performance up to the mark.[5] A Study conducted in China that organizational support play an important role for job satisfaction which ultimately improves the performance at work.[6] Specific job characteristics and job demands put physical and psychosocial stress on individuals. The psychological stress significantly effects the job demands and job performance.[7] Organizational commitment highly affects the job performance. However, job satisfaction play a very minor role to relate the job performance with organizational commitment.[8] Health is the most vulnerable area which has never been a priority in Pakistan. The budget spent on healthcare is 0.6% of the total budget, the workforce and healthcare facilities available for patients are inadequate.[9] There is an acute shortage of pharmacists to perform their role effectively in country. Moreover, their role is still not well acknowledged by other healthcare professionals in Pakistan and lack of training in pharmacy profession is also a major reason for low productivity in their respective field.[10] Employment of pharmacist according to their capacity is still an unexplored area of research which can contribute in the achievement of maximum output and improvement of overall health performance. Thus, the present study was designed to assess the job performance of pharmacists working in different fields in twin cities of Pakistan.

Method

A descriptive cross–sectional study design was to assess the job performance of pharmacists working in different fields in twin cities i.e. Islamabad (Federal Capital) and Rawalpindi (Twin City) of Pakistan. The sampling frame was comprised of professionally qualified pharmacists working in both public and private sector including academic institutions, healthcare facilities, non–profit organizations, community pharmacies, pharmaceutical industries, pharmaceutical companies and regulatory authority. Sample size was calculated using Raosoft® sample size calculator. Sample size was calculated to be 382 pharmacists to achieve 95% confidence level with 5% margin of error. As there is unavailability of updated list of pharmacists in Pakistan compiled by Pharmacy Council of Pakistan due to which convenient sampling technique was used to select the respondents. According to convenient sampling technique all the available respondents that were present at the time of data collection and were ready to participate in the study were included in study. The performance of these 382 selected respondents was evaluated by

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using Performance Evaluation Questionnaire (PEQ) requested to be filled by their respective reporting managers.

The Performance Evaluation Questionnaire (PEQ) was developed after extensive literature review and content and face validity were performed through focus group discussions with experts. Two focus group discussions were conducted with different experts including pharmacists and human resource professionals from all related pharmacy fields at different time intervals. Beside this pilot testing was conducted on 10 % of the sample to test the reliability of the tool. The value of Cronbach's alpha was 0.71. The performance evaluation questionnaire included four sections, including demographics, creativity, job responsibility and management skills. The creativity and job responsibility sections included six questions each while management section included eight questions which makes a total of twenty questions in the three sections, respectively. A five point liker scale used for these questions ranged from 1–5 with "excellent" with a code of 1 and "poor" with 5. The composite score was computed for each section depending on the number of questions in the respective section. The composite score range for creativity was (6–30) and average of 18 score, score range for job responsibility was (6–30) and average of 18 score while the score range for management skills was (8–40) and average of 24 score. The composite score of overall job performance was calculated as (20–100). Lower scores represent better performance and vice versa. Data was collected by the principal investigator. The questionnaire was hand delivered to the respondents and collected back on the same day to avoid biasness. After data collection, data was cleaned, coded and entered in SPSS version–21 for analysis.

Results

Out of 382 respondents, 48.7% (n=186) were males while 51.3% (n=196) were females. Of the total respondents, 16.2% (n =62) were working in public sector while 83.8% (n=320) were working in private sector. Results showed that 14.7% (n=56) were from industry, 38.7% (n=148) were from hospital, 5.8% (n=22) were from community pharmacies, 1.6% (n=6) were from regulatory authority, 11.3% (n=43) were from sales and marketing and 22.0% (n=84) were from academia and 6% were from NGO (n=23). Regarding the experience of respondents, 30.9% (n=118) had working experience of less than one year, 51.8% (n=198) had working experience of 1–5years, 13.6% (n=52) had an experience of 5–10years while 3.7% (n=14) had working experience of greater than 10years (Table 1). Results showed that, 54.1% (n=207) of the respondents could identify their problems more efficiently. Fifty percent (n=192) of the respondents can propose solution to their problems. Only 18.1% (n=69) respondents were not able to take appropriate actions on problem solving. Out of total respondents, only 42.7% (n=147) can manage information and data effectively. Eighteen percent (n= 69%) respondents were not able to deal appropriately with sensitive situations (Table 2). Out of total 382 respondents, 63.8% (n= 244) respondents arrive at work on time. Sixty–one (n=227) percent respondents arrive on meeting in time. Only 18.3% (n=70) respondents do not consult with their supervisors and co–workers effectively. Twenty–two percent (n=78) respondents do not respond appropriately to feedback on job performance. Nineteen percent respondents (n=74) can demonstrates effective skills as appropriate for their field (Table 3). Results highlighted that, 57.8% (n=221) of the respondents were able to meet work deadlines. Twenty percent respondents (n=78), do not set appropriate priorities for tasks. Out of total respondents 74.6% of the pharmacists (n=285) effectively collaborate with other department members as necessary.

Only 19% (n=74) of the pharmacists do not demonstrate effective communication skills with customer/patient/buyer/stakeholders. Less than half of the respondents (n=174, 45.2%) use time effectively (Table 4). Results showed that creativity was found above average among pharmacists with mean score (15.6±4.32), job responsibility (14.6±4.35) and management skills (20.8±5.63) were also above average. The overall job performance (51.1, ±13.21) of pharmacists was also found adequate. Detailed description is provided (Table 5). Out of 382 respondents, creativity (15.3±4.38), job responsibility (14.2±4.41), management skills (20.3, ±5.77) and overall job performance (49.83±1.36) was found comparatively more in females. Furthermore, creativity was found high in pharmacists working in community and retail pharmacists with mean score (12.6±3.83), job responsibility (9.0±3.0) and management skills (15.5±6.48) were reported more in pharmacists working in NGO's. The overall job performance was better in pharmacist working in NGO's with mean score (38.0±1.32). Moreover, creativity (15.3±4.08), job responsibility (14.5±4.37), management skills (20.5±5.58) and overall job performance (50.4±1.29) were comparatively high in pharmacists working in private sector (Table 6).

Table 1 Demographic characteristic of respondents

Indicator		Total n (%)
Age	20–30Y	276(72.3)
	31–40Y	97(25.3)
	40–50Y	9(2.4)
	>50Y	0
Gender	Male	186(48.7)
	Female	196(51.3)
Field of practice	Industry	56(14.7)
	Hospital	148(38.7)
	Community	22(5.8)
	Regulatory	6(1.6)
	Sales & Marketing	43(11.3)
	Academia	84(22.0)
	NGO's	23(6.0)
Sector of practice	Private	320(83.8)
	Public	62(16.2)
Level of experience	<1 year	118(30.9)
	1–5 years	198(51.8)
	5–10 years	52(13.6)
	>10 years	14(3.7)
Level of qualification	Pharm D	271(70.9)
	M Phil	105(27.5)
	PhD	6(1.6)

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Table 2 Assessment of creativity among pharmacists in Pakistan

Indicator	Excellent n (%)	Above average n (%)	Average n (%)	Below average n (%)	Poor n (%)
Identifies problems	67(17.5)	140(36.6)	107(28.0)	64(16.8)	4(1.0)
Proposes solution to problems	44(11.5)	148(38.7)	126(33.0)	55(14.4)	9(2.4)
Takes appropriate actions on problem solving	53(13.9)	121(31.7)	139(36.4)	61(16.0)	8(2.1)
Deals appropriately with sensitive situations.	52(13.6)	111(29.1)	150(39.3)	66(17.3)	3(0.8)
Manages information and data effectively.	52(13.6)	95(24.9)	166(43.5)	66(17.3)	3(0.8)
Demonstrate initiatives as appropriate.	43(11.3)	104(27.2)	163(42.7)	71(18.6)	1(0.3)

Table 3 Assessment of job responsibility among pharmacists in Pakistan

Indicator	Excellent n (%)	Above average n (%)	Average n (%)	Below average n (%)	Poor n (%)
Arrives at work on time	140(36.6)	104(27.2)	93(24.3)	38(9.9)	7(1.8)
Arrives on meetings on time	132(36.4)	95(24.9)	112(29.3)	41(10.7)	2(0.5)
Consults with supervisor and co–workers effectively	63(16.5)	121(31.7)	128(33.5)	66(17.3)	4(1.0)
Works without supervision as necessary	52(13.6)	122(31.9)	132(34.6)	74(19.4)	2(0.5)
Responds appropriately to feedback on job performance	53(13.9)	130(34.0)	116(30.4)	76(21.2)	2(0.5)
Demonstrates effective skills as appropriate for their field	50(13.1)	121(31.7)	137(35.9)	70(18.3)	4(1.0)

Table 4 Assessment of management skills among pharmacists in pakistan

Indicator	Excellent n (%)	Above average n (%)	Average n (%)	Below average n (%)	Poor n (%)
Meets work deadlines	99(25.9)	122(31.9)	107(28.0)	48(12.6)	6(1.6)
Sets appropriate priorities for tasks	51(13.4)	113(29.6)	140(36.6)	70(18.3)	8(2.1)
Uses time effectively	44(11.5)	130(34.5)	142(37.5)	56(14.7)	10(2.6)
Effectively collaborates with other department members as necessary	62(16.2)	107(28.0)	116(30.4)	97(25.4)	0(0)
Demonstrates appropriate interactions with students/interns/juniors	57(14.9)	115(30.1)	126(33.0)	76(19.9)	8(2.1)
Deals appropriately with confidential information.	54(14.1)	103(27.0)	141(36.9)	82(21.5)	2(0.5)
Deals professionally with employees in other areas.	61(16.0)	93(24.3)	153(40.1)	73(19.1)	2(0.5)
Demonstrate effective communication skills with customer/patient/buyer/stakeholders.	50(13.1)	121(31.7)	137(35.9)	70(18.3)	4(1.0)

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Table 5 Assessment of overall performance of pharmacists in Pakistan

Characteristics	Score Range	Average Score	Mean (±S.D)
Creativity	30–Jun	18	15.6(4.32)
Job responsibilities	30–Jun	18	14.6(4.35)
Management skills	Aug–40	24	20.8(5.63)
Overall performance	20–100	60	51.1(13.21)

Lower scores represent better performance

Table 6 Job performance of pharmacists according to different demographic characteristics

Indicator	Creativity mean (±S.D)	Job responsibilities mean (±S.D)	Management skills mean (±S.D)	Overall performance mean (±S.D)
Gender				
Male	15.9(4.04)	15.1(4.26)	21.3(5.44)	52.48(1.26)
Female	15.3(4.38)	14.2(4.41)	20.3(5.77)	49.83(1.36)
Age				
20–30	15.1(4.14)	14.0(4.22)	20.0(5.44)	49.2(1.26)
31–40	16.8(4.31)	16.2(4.26)	22.6(5.76)	55.8(1.35)
41–50	17.3(2.91)	16.8(4.62)	23.1(5.01)	57.3(1.23)
Field of practice				
Healthcare Facility	15.8(3.90)	15.2(3.95)	21.5(5.26)	52.6(1.19)
Industry	17.7(3.19)	17.3(3.86)	23.5(3.94)	58.6(9.85)
Academics	15.8(4.41)	14.6(4.27)	21.1(5.40)	51.6(1.34)
Pharmaceutical company	14.4(4.74)	13.8(4.36)	18.8(6.24)	47.1(1.44)
Community /Retail	12.6(3.83)	12.4(3.18)	17.3(4.67)	42.4(9.76)
NGO	13.5(4.48)	9.0(3.00)	15.5(6.47)	38.0(1.32)
Regulatory authority	14.3(3.98)	12.8(2.48)	18.6(4.50)	45.8(1.04)
Sector				
Government	17.0(4.77)	15.4(4.27)	22.4(5.66)	54.9(1.34)
Private	15.3(4.08)	14.5(4.37)	20.5(5.58)	50.4(1.29)
Qualification				
Pharm D	15.4(4.16)	14.3(4.36)	20.4(5.66)	50.3(1.31)
MPhil	16.0(4.43)	15.1(4.36)	21.5(5.53)	52.7(1.32)
PhD	17.3(3.44)	18.6(3.50)	24.0(4.33)	60.0(1.07)
Job experience				
< 1 year	15.3(3.80)	14.1(4.68)	20.4(5.63)	49.8(1.30)
1–5 years	15.5(4.41)	14.3(4.28)	20.4(5.61)	50.3(1.33)
5–10 years	16.9(4.48)	17.0(3.33)	23.1(5.39)	57.1(1.24)
>10 years	15.0(3.44)	14.7(3.19)	21.2(5.25)	51.0(1.12)

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Discussion

The concept of a pharmaceutical care has recently evolved accompanied by a number of significant changes. The most visible change is the relocation of the pharmacist and the practice away from dispensing of medicines to patient care.[11] The most important determinant of the quality of pharmacy services is the competence of the individual pharmacists involved in that practice. A baseline of competency is necessary for all pharmacists. The manager must be aware of the performance and skills of every pharmacist in order to make sound managerial decisions concerning human resource utilization.[12] The results of the present study revealed that most of the pharmacists were creative and were able to identify their problems along with proposing solutions. Females, pharmacists in age group 20–30years, working at community pharmacists and mostly in private sectors were found relatively more creative. Only few of the respondents were not able to take appropriate actions over problem solving and could not manage information and data effectively. Similar findings were reported from a study conducted in Saudi Arabia.[13] An individual can have all the required abilities to complete the required task, yet have poor performance due to lack of required management skills and inadequate training for the job.[14] The results of the current study showed that management skills of the pharmacists were also found to be above average. Females, pharmacists in age group 20–30years, working in NGO's and mostly in private sectors were found relatively more responsible. Most of the respondents meet work deadline, set appropriate priorities for tasks, demonstrate effective skills as appropriate for their field, use time effectively and can effectively collaborate with other department members as necessary. Furthermore, job responsibility among pharmacists was also found above average in the present study. Females, pharmacists in age group 20–30years, working in NGO's and mostly in private sectors were found relatively more creative. The job performance was observed relatively poor among senior pharmacists and those having higher degrees. This might be due to the fact that they think that they have achieved their targets and lack motivation to work. A study conducted in Malaysia reported that organizational commitment highly affects the job performance. However, job satisfaction play a very minor role to relate the job performance with organizational commitment.[8] The present study revealed that most of the respondents arrive at work and meeting in time. Moreover, a few respondents do not consult with their supervisors and co–workers effectively. Similarly a study conducted in South Africa reported that job performance is highly associated with nature of job, peers or co–workers and the organization.[3] The findings of the current study showed that few of the respondent do not respond appropriately to feedback on job performance. However, many of the respondents were able to demonstrates effective skills as appropriate for their field. The results are in line with several studies conducted in different countries.[15–17]

Conclusion

The results of the present study concluded that the overall job performance of pharmacists was above average. Although, the pharmacists were creative, responsible and possessed managerial skills but still these expertise's needs to be further enhanced through extensive training and continuous professional development programs. Females, pharmacists in age group 20–30years, working in NGO's & community pharmacies were relatively more creative, responsible and possessed better managerial skills. However, capacity building of pharmacists is required in order to get their role acknowledged by other healthcare professionals in provision of pharmaceutical care in Pakistan. Pharmacy Council of Pakistan must initiate continuous professional development program in the country and renewal of pharmacist license must be linked to it in order to improve the skills and performance of pharmacists in Pakistan.

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Conflict of interest

Author declares that there is no conflict of interest.

References

1. Noble C. Curriculum for uncertainty: certainty may not be the answer. *American journal of pharmaceutical education*. 2011;75(1):1–13.

2. Hogan J, Holland B. Using theory to evaluate personality and job–performance relations: A socioanalytic perspective. *Journal of applied psychology*. 2003;88(1):100–112.

3. Rothmann S, Coetzer EP. The big five personality dimensions and job performance. *SA Journal of Industrial Psychology*. 2003;29(1):68–74.

4. Bowling NA. Is the job satisfaction–job performance relationship spurious? A meta–analytic examination. *Journal of Vocational Behavior*. 2007;71(2):167–185.

5. Goris JR, Vaught BC, Pettit JJD. Effects of Trust in Superiors and Influence of Superiors on the Association Between Individual–Job Congruence and Job Performance/Satisfaction. *Journal of Business and Psychology*. 2003;17(3):327–343.

6. Miao RT. Perceived Organizational Support, Job Satisfaction, Task Performance and Organizational Citizenship Behavior in China. *Journal of Behavioral & Applied Management*. 2011;12(2):105–127.

7. Lang J. Job demands and job performance: the mediating effect of psychological and physical strain and the moderating effect of role clarity. *Journal of occupational health psychology*. 2007;12(2):116–124.

8. Samad S. The effects of job satisfaction on organizational commitment and job performance relationship: A case of managers in Malaysia's manufacturing companies. *European Journal of Social Sciences*. 2011;18(4):602–611.

9. Ahmed J, Shaikh BT. An all time low budget for healthcare in Pakistan. *Journal of the College of Physicians and Surgeons Pakistan*. 2008;18(6):388–391.

10. Khan T. Challenges to pharmacy and pharmacy practice in Pakistan. *The Australasian medical journal*. 2011;4(4):230–235.

11. Remington JP. *Remington: the science and practice of pharmacy*. 21th edn. USA; 2006.

12. Kälvemark Sporrong S. Developing ethical competence in health care organizations. *Nursing Ethics*. 2007;14(6):825–837.

13. Al–Ahmadi H. Factors affecting performance of hospital nurses in Riyadh Region, Saudi Arabia. *International journal of health care quality assurance*. 2009;22(1):40–54.

14. Judge TA, Bono JE. Relationship of core self–evaluations traits–self–esteem, generalized self–efficacy, locus of control, and emotional stability–with job satisfaction and job performance: A meta–analysis. *Journal of applied Psychology*. 2001;86(1):80–92.

15. Mohammad Mosadegh RA, Hossein Yarmohammadian M. A study of relationship between managers' leadership style and employees' job satisfaction. *Leadership in Health Services*. 2006;19(2):11–28.

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16. Apker J. Collaboration, credibility, compassion, and coordination: professional nurse communication skill sets in health care team interactions. *Journal of professional nursing*. 2006;22(3):180–189.

17. Stefl ME. Common competencies for all healthcare managers: the Healthcare Leadership Alliance model. *Journal of healthcare management*. 2008;53(6):360–374.