

# PSYCHOLOGICAL WELL-BEING AND WORK MOTIVATION AMONGST MEDICAL PROFESSIONALS

Ghazala Rehman, Najma Iqbal Malik, Rizwan Taj

## ABSTRACTS

**Objective:** The study examines the relationship of psychological well-being and work motivation in a sample of Pakistani medical professionals.

**Design:** Cross sectional comparative study.

**Place and duration of the study:** The study was conducted in private (Alshifa International Hospital, Islamabad, and Islamabad Private Hospital) and public sector hospitals (Pakistan Institute of Medical Sciences and Rawalpindi General Hospital) in the twin-cities of Islamabad and Rawalpindi, Pakistan during 2002.

**Subjects and Methods:** A sample of 120 medical professionals belonging to the private and public sector hospitals (n=60 in each) participated in the study. They were selected on the basis of purposive convenient sampling technique. The data was collected with the help of Psychological Well-Being Scale (Wb) and Work Preference Inventory (WPI) and a separately devised demographic sheet containing information about age, experience and private and public sector affiliation.

**Results:** The age range of the sample was between 30-60 years (M=42.97, SD=7.96). The range of experience in service was 1-42 years (M=16.28, SD=8.43). Scores of psychological well being had a significant inverse co-relation with extrinsic motivation ( $r=-0.26$ ,  $p < .01$ ). Public and private sector doctors showed a highly significant difference in their motivational orientation ( $p < .01$ ). The relation of age with scores of well being and motivation showed a significant difference, ( $t=3.9$ ,  $p < .001$ ) and ( $t=2.41$ ,  $p < 0.05$ ) between those aged 53 and above and those 41 years of age or less respectively.

**Conclusion:** Compared to the private sector, the environment of public sector is perceived to be more challenging. Similarly, older medical professionals seem to be having higher psychological well-being and work motivation, compared to the younger medical professionals. However, these findings suggest the need for further exploration of some interrelated variables, which might give us insight for future policy implementation, suggesting ways for further improvement in the psychological facets of the work environment of this dynamic group of professionals.

**Key words:** Psychological well-being, Work Motivation, Intrinsic Motivation, Extrinsic Motivation, Multiple Occupational Roles (MOR).

## INTRODUCTION

Majority of the Pakistani medical professionals have to cope with Multiple Occupational Roles" (MORs). Along with their regular jobs, they are providing consultations

**Ghazala Rehman**, M.Phil, PhD Psychology  
Professor, National Institute of Psychology, Centre of Excellence,  
Quaid-i-Azam University, Islamabad.  
E-mail: drghazala\_2000@yahoo.com

**Najma Iqbal Malik**  
Lecturer, Dept of Psychology, Sargodha University.

**Rizwan Taj**  
Professor Department of Psychiatry,  
Pakistan Institute of Medical Sciences, Islamabad.

**Correspondence:**  
**Dr. Ghazala Rehman**

in two-to-three public/private hospitals or clinics in the afternoon and in the evening. These multiple occupational roles can help to add to the job enrichment and role enhancement facets of their jobs. "The Role Accumulation Theory" suggests that the multiple roles add meanings in the life and tend to buffer their inner sense of identity<sup>1</sup>. Studies have shown that more roles the individual occupies, the better his/her mental and physical health would be<sup>2-4</sup>. This can also be explained in terms of "Role Expansion" perspective<sup>5</sup> which focuses on the "rewards" associated with multiple roles. Given the fact that the MORs are generally found to be associated with lower rates of problems, however, there are some role combinations, which are associated with higher rates of psychological complaints including anxiety, somatic symptoms, or personal distress<sup>6</sup>.

Compared to other professions, the nature of a job of medical professionals is more demanding and challenging, which requires perfect time management, especially with reference to their multiple engagements and mobility. There is strong evidence in the literature generally that supports the impact of multiple occupational roles on professionals' psychological makeup including work motivators, and psychological well-being<sup>7</sup>.

Psychological Well-Being is considered as a balance between positive effect and negative effect. Positive well-being is an appraisal of the status of one's functioning and outcome along several distinct but interrelated dimensions including global, mental and physical healthfulness<sup>8</sup>. Psychological well-being is a "Positive state of physical, mental and social well-being, not merely the absence of disease or infirmity"<sup>9</sup>. Motivation at work is found to be closely linked with job satisfaction and psychological Well-Being. Work motivation is identified as (I) energizing (II) directing and (III) sustaining force<sup>10</sup>. Similarly, it is believed that individual has certain self-centered needs that govern his/her behavior and that the organization can, by satisfying these needs, motivate the individual to contribute towards the achievement of organizational goals<sup>11</sup>.

Work Motivation comprises of two important types of motivators, which could be classified as intrinsic or extrinsic<sup>7</sup>. Intrinsic motivators include achievement, recognition, challenging work, increased responsibility, advancement and enjoyment. "Intrinsic motivation is itself the "outcome," the result of a work situation that people enjoy, because they are in charge, because they have the opportunity to acquire new skills and abilities to match a different challenge, or because they are part of a successful team<sup>12,13</sup>. Whereas, extrinsic motivators include pay; fringe benefits, promotion, housing allowance, medical allowance, and status are the factors extrinsic to the job. In addition to concrete rewards, content of the job itself, recognition and feedback from coworkers, supervisors, and customers and accomplishing goals that are challenging and meaningful as more effective extrinsic motivators<sup>14</sup>.

There is also consensus that professionals who are performing multiple occupational roles report higher level of psychological well-being and work motivation<sup>2,15</sup>. Literature review also support the assumption that psychological well-being is a good predictor of job performance<sup>16</sup>. There is sufficient evidence suggesting that the medical professionals were more likely to suffer from stress, as they have added responsibility for taking care of people and organizations<sup>17,18</sup>.

Present research aims to study the relationship of work motivation with psychological well-being in medical professionals having multiple occupational roles. We also wanted to see the differences in the private and public sector medical professionals on these variables as earlier research<sup>19</sup> showed that the nature of organization such as public sector (task oriented organizations

whose mission are non profit motivated, including government agencies, public service groups, etc.) and private sector (corporations and business firms whose mission are oriented around profit making as the return for competitive risk taking) also makes difference in the relationship of psychological well-being and motivation. Present study also intends to explore that relationship of certain demographic variables such as age and experience level affects the psychological well-being and work motivation.

## **METHOD**

The study was conducted in private (Alshifa International Hospital, Islamabad, and Islamabad Private Hospital) and public sector hospitals (Pakistan Institute of medical Sciences and Rawalpindi General Hospital) in the twin-cities of Islamabad and Rawalpindi, Pakistan. The sample was taken on the basis of purposive convenient sampling technique. The sample consisted of 140 medical professionals. Twenty professionals who returned incomplete questionnaire were dropped. A sample of 60 medical professionals of private sector was taken from Al-Shifa International Hospital and Islamabad Private Hospital. Another sample of 60 professionals was taken from two public sector hospitals including Pakistan Institute of Medical Sciences Islamabad and Rawalpindi General Hospital, Rawalpindi. The criterion for selection of sample was that only those medical consultants were approached for the study (a) who were performing multiple occupational roles (employed in the hospital, working in private clinics, and providing consultancy in various private hospitals and nursing homes, and were also involved in teaching in different colleges etc) and (9) who were willing to participate in the study.

### **Instruments**

Data was collected with the help of Well-being Scale (Wb scale of CPI) and Work Preference Inventory (WPI). Following is the description of these scales:

#### ***Psychological Well-Being Scale of California Psychological Inventory (CPI)***

Well-Being (Wb) scale of California Psychological Inventory<sup>20</sup> comprises of 38 dichotomous items having the score range of 0-38. High scores of Wb suggest high sense of psychological well-being and vice versa.

#### ***Work Preference Inventory (WPI)***

For the assessment of Work Motivation, Work Preference Inventory WPI<sup>21</sup> was used. WPI consists of 30 items designed to assess the working adult's overall intrinsic and extrinsic motivational orientations towards his work. It also gives information on the factors, which motivate employees. In addition to these two primary scales of intrinsic and extrinsic orientation, scores of WPI are also scored on four secondary scales. The intrinsic pri-

mary scale consists of fifteen items and is sub divided into, 'challenge' and 'enjoyment' secondary scales. Similarly, the primary scale of extrinsic motivation contains fifteen items and is sub divided into 'outward' and 'compensation' secondary scales.

**Procedure**

Prior to the data collection written permission for data collection was sought from the respective Human Resource Departments of all hospitals. All the sample of the study were volunteer participants and they were individually approached by the second author at their work places i.e., respective hospitals (public/ private sector). The researcher insured the participants about the confidentiality of the data and informed that all the information would only be used for research purposes. They were informed about the purpose of the study. The willing participants then filled out the informed consent form and their particulars (such as age, gender, experience and their respective designations at work place) on a separately devised information sheet. After that they were handed over the test booklets containing Wb & WPI scales.

The data were analyzed on the scores of Wb (CPI) and WPI scales by using SPSS package.

**RESULTS**

The age group of sample ranged between 30-64 years ( $M=42.97$ ,  $SD=7.96$ ). The range of experience in service was between 1-42 years ( $M=16.28$ ,  $SD= 8.43$ )

There was non-significant inverse correlation between work motivation and psychological well-being ( $r = -.092$ ).

The scores of psychological well-being were significantly inversely correlated with extrinsic motivation ( $r=-.26$ ,  $**p < .01$ ). It implies that those professionals who believe in outward rewards and compensations appear to be more dissatisfied in their general psychological well-being. Table further suggests inverse but a non-significant relationship between psychological well-being and intrinsic motivation.

The data of both private and public sector professionals was analyzed in order to see the difference in their scores on well-being and their possessed motivational orientation towards their roles regarding their medical profession.

Results in table 1 show that public and private sector medical professionals are not much different in their sense of psychological well-being. However, there is a highly significant difference in their motivational orientations ( $t=2.89$ ,  $**p < .01$ ).

The comparison of both sectors professional was done regarding their motivation towards their work.

**Table 1**

**Means, standard deviations and t-values on the scores of public and private sector professionals on Wb & WPI Scales**

	Pvt. Sector Professionals (n=60)		Public Sector Professionals (n=60)		
Scales	M	SD	M	SD	t
Wb	30.90	5.71	29.24	4.31	1.64
WPI	84.34	5.30	88.74	9.35	2.89**

$df = 118$ ,  $**p < .01$

Results in table 2 indicate a non-significant difference between scores of work motivation subscales of two groups except their consideration of taking their profession as challenging ( $t=2.36$ ,  $*p < .05$ ).

In order to see the impact of age on the scores of Wb and WPI, the within group comparison was made on the scores of older (age range 53 years and above) and younger professionals (age range equal to or lesser than 41 years).

**Table 2**

**Means, Standard deviations and t values on the scores of public & private professionals on primary and secondary scales of WPI**

	Private Sector Professionals (n=60)		Public Sector Professionals (n=60)		
WPI Scales	M	SD	M	SD	t
<b>Intrinsic Motivation</b>	45.52	4.35	48.02	9.34	1.72
Enjoyment	32.74	4.05	32.50	4.83	.269
Challenge	12.78	2.15	15.52	7.9	2.36*
<b>Extrinsic Motivation</b>	36.78	4.1	38.60	5.48	1.88
Outward	23.72	2.21	24.92	3.97	1.86
Compensation	13.06	2.40	13.7	2.52	1.25

$df = 118$ ,  $* p < .05$

Note: Intrinsic and Extrinsic primary scales have two sub scales each.

Results in table 3 indicate that there exists significant difference in the scores of professionals on psychological well-being ( $t=3.9$ ,  $**p < .001$ ) and work motivation ( $t=2.41$ ,  $*p < .05$ ). These findings further suggest that compared to the younger group, the older group

**Table 3**

**Mean, standard deviation and t values of different age groups (Older & Younger) on Wb & WPI Scores**

Older Group (n=14)			Younger Group (n=54)		
Scales	M	SD	M	SD	t
Wb	34.79	2.15	28.94	5.5	3.9**
WPI	89.00	3.78	84.41	6.85	2.41*

df = 66, \*\*p < .01, \*p < .05

professionals report high level of psychological well-being and work motivation.

The scores of both age groups on primary and secondary scale of WPI was also analyzed.

Results in the table 4 show that older and younger medical professionals differed significantly, in their intrinsic and extrinsic motivation at work. Older professionals scored significantly high on intrinsic motivation ( $t=4.8$ ,  $***p < .0001$ ), seeking more enjoyment in their work ( $t=3.33$ ,  $**p < .01$ ) and by reporting taking more challenging tasks ( $t=3.58$ ,  $***p < .001$ ). Whereas, the younger medical professionals scored significantly high on extrinsic motivation ( $t=2.08$ ,  $*p < .05$ ) and compensation ( $t=4.3$ ,  $***p < .0001$ ) subscale. Outward rewards are, however, neutral for both groups.

In order to understand the relationship of experience on the scores of Wb and WPI the following analysis was performed.

**Table 4**

**Means, Standard deviations and t values of scores by age groups (Older & Younger) on primary and secondary scales of WPI**

Older Group (n=14)			Younger Group (n=54)		
WPI Sub-Scales	M	SD	M	SD	t
<b>Intrinsic Motivation</b>	50.64	3.25	44.22	4.72	4.8****
Enjoyment	35.9	1.88	31.8	4.60	3.33**
Challenge	14.8	2.9	12.44	1.93	2.58***
<b>Extrinsic Motivation</b>	35.43	4.30	38.24	4.55	2.08*
Outward	24.50	2.41	24.40	2.62	.143
Compensation	10.93	2.02	13.9	2.33	4.3****

df = 66, \*\*\*\*p < .0001, \*\*\*p < .001, \*\*p < .01, \*p < .05

Results in table 5 indicate that more experienced medical professionals had significantly higher level of psychological well-being ( $t=4.12$ ,  $***p < .0001$ ), however, the two groups do not differ much on their scores of work motivation.

**Table 5**

**Means, Standard deviations and t values by More & Less experienced professionals on Wb & WPI Scales**

More Experienced Group (n=13)			Less Experienced Group (n=40)		
Scales	M	SD	M	SD	t
Wb	34.85	2.34	28.33	5.5	4.12****
WPI	88.08	4.54	84.40	7.53	1.7

df = 51, \*\*\*\*p < .0001

Comparison of scores by experience is given as below:

Results in table 6 suggest that the two groups differed significantly in intrinsic motivation ( $t=3.12$ ,  $**p < .01$ ), and on its sub scale of challenge ( $t=2.9$ ,  $**p < .01$ ). However, the scores on sub scale of enjoyment do not seem to be different for the two groups. Similarly, the groups differed significantly on the sub scale of compensation ( $t=2.95$ ,  $**p < .01$ ), whereas, outward rewards are neutral for both. The table also suggests that the more experienced group of professionals scored high on intrinsic motivation, enjoyment and challenge, whereas, less experienced group scored high on compensation sub-scale.

**Table 6**

**Means, standard deviation and t values of More and Less experienced groups on sub-scales of WPI**

More Experienced Group (n=13)			Less experienced Group (n=40)		
WPI Sub-Scales	M	SD	M	Sd	t
Intrinsic Motivation	49.00	5.7	44.05	4.8	3.12**
Enjoyment	34.31	2.81	31.62	4.5	1.9
Challenge	14.7	3.40	12.42	2.11	2.9**
Extrinsic Motivation	36.53	5.04	38.20	4.3	1.16
Outward	25.00	2.64	24.5	2.6	.631
Compensation	11.54	2.60	13.73	2.23	2.95**

df = 51, \*\*p < .01

## DISCUSSION

Our findings showed a significant inverse relationship between the scores of work motivation and psychological well-being. These are in line with earlier studies<sup>22,23</sup> which suggest that higher the motivation to work, lesser will be the over all psychological well being, as recognition in work place is found to be effective in determining one's well-being. Our findings also showed that the motivational orientation of private and public sector medical professionals were significantly different. However, both groups did not differ significantly on their scores of psychological well-being. These findings are contrary to some earlier studies which suggest that over all mental and psychological health of public sector professionals is higher than its counter parts in the private sector<sup>24</sup>. Our findings suggest that "enjoyment" in the work is a key motivator, which is perceived significantly different by private and public sector professionals. We may infer that public sector medical professionals prefer work that stretches their abilities by perceiving work load and "stress" as an energizing force or "Eustress", which in turn results in satisfaction in task accomplishment, and which is good for their well-being and professional growth.

Our findings also suggests that younger and older medical professionals differ significantly in their scores of psychological well-being and work motivation. These findings do not support our hypothesis that young professionals will be high in their motivational forces and well being. These findings are, however, supported by some earlier studies<sup>19</sup>. Our findings indicate that the older medical professionals are more intrinsically motivated compared to the younger group. They value their work and seek "enjoyment" and "challenge" in their work. Whereas ,the younger medical professionals are significantly high in "compensation" need of extrinsic motivation. One possible explanation could be that the older professionals are at that stage of their career path where they are well established; both economically and in terms of their job status. These findings are in accordance with earlier findings<sup>25-27</sup>. Whereas, the younger group of professionals have a long way to go to achieve at optimum level, hence, this sounds a forceful justification for their high need of extrinsic motivators in the form of "compensations". Our findings are also well supported by Edward's<sup>28</sup> "Control Model Theory" and Adam's<sup>29</sup> "Equity Theory", which assume that younger professionals generally perceive effort- reward imbalance in their occupational roles, thus, they give more value to compensation and due to which they report low psychological well-being.

The significantly higher scores of more experienced group of professionals on psychological well-being and "challenge" as intrinsic motivation, is consistent with our earlier findings about age-wise comparison of scores. Some earlier findings<sup>30</sup> also reported that the medical practitioners with fewer years of experience tend to re-

port greater stress and less job satisfaction and lower level of well-being.

Although our study has given some important directions of research about a particular professional group, however, we believe that this study should be replicated on a larger sample. Many associated variables and personal attributes such as, socialization; creativity, autonomy, control & tough mindedness along with their specific nature of jobs (e.g. surgery, cardiology, etc) may also be included in the study. There is a need to carry out this research on different samples of professionals e.g., Law, Police, Armed Forces, IT professionals, mental health professionals etc. Considering the utility of research we recommend to have a nationwide norms of these measures for the sample of medical professionals. From Human Resource perspective, availability of such criteria will be more beneficial as these norms can be utilized as a reference for assessing any single medical professional's scores on these measures.

## REFERENCES

1. Seiber S D. Towards a theory of role accumulation. *Am Sociol Rev* 1974; 39: 567-78.
2. Barnett R C, Baruch G K. Women's involvement in multiple roles and psychological distress. *J Personal Social Psychol* 1985; 49: 135-45.
3. Gore S, Mangione T W. Social Roles, sex roles, and psychological distress: Additive and interactive models of sex differences. *J Health Soc Beh* 1983; 24: 300-12.
4. Verbrugge L. Multiple roles and physical health for women and men. *J Health Soc Beh* 1983; 24: 16-30.
5. Marks S R. Multiple roles and role strain: some notes on human energy, time and commitment. *Am Sociol Rev* 1997; 42: 921-36.
6. Ericsson SN. Gender, social roles, and mental health: An epidemiological perspective. *Sex Roles: A Journal of Research*. [Online]2000. Available from:URL://<http://www.findarticles.com>.
7. Accel-Team. Personal and Self Motivation. [Online] 2001. Available from: URL:// <http://www.Accel-Team.com>.
8. Myers DG, Diener E. Who is happy? *Psychol Sci* 1995; 6: 10-9.
9. World Health Organization. Definition of Health. [Online] 1998. Available from: URL:// <http://www.who.ch/aboutwho/definition.htm>.
10. Steers RM, Porter LW. Motivation and work behavior. 2<sup>nd</sup> ed. New York: McGraw Hill 1983.
11. Muchinsky MP. Psychology Applied to Work: An Introduction to Industrial and Organizational Psychology. Pacific Grove, CA: Brooks/ Cole 1993.
12. Haasen A, Gordon F S. A Better Place to Work: A New Sense of Motivation Leading to High Productiv-

- ity. AMA Management Briefing, American Management Association, New York 1997.
13. Nairne SJ. *Psychology: The adaptive mind*. 2<sup>nd</sup> ed. Oxford: Thomson Learning 2000.
  14. Schneider B, David EB. *Winning the Service Game*, Harvard Business School Press 1995.
  15. Gjerdingen D, McGovern P, Bekker M, Lundberg U, Willemsen T. Women's work roles and their impact on health, well-being and career: Comparisons between the United States, Sweden, and the Netherlands. *Women and Health*, 31, 1-20. [Online] 2002. Available from: URL:// [http://www.findarticles.com/cf\\_o/m1175/1\\_33/58616818/print.jhtml](http://www.findarticles.com/cf_o/m1175/1_33/58616818/print.jhtml).
  16. PsychINFO Database Record. *J Occupat Health Psychol* 2000; 5: 84-94.
  17. Belkic SP, Ugljestic M. Cardiovascular evaluation of the work and workplace: A practical guide for clinicians. *The Workplace and Cardiovascular Disease. Occupat Med* 2000; 15: 213-22.
  18. Fisher I, Belkic K. A public health approach in clinical practice. *The Workplace and Cardiovascular Disease. Occupat Med* 2000; 1: 245-53.
  19. Kaur R, Shah AA, Haque A. Organizational role stress and job satisfaction in the public and private sector industry. *Pak J Psychol Res* 1993; 8: 43-52.
  20. Gough H. *Manual for the California Psychological Inventory*. Palo Alto: Consulting Psychologists. 1957.
  21. Amabile TM. *Brief scoring guide for Work Preference Inventory (WPI)*. Boston: Harvard Business School 1965.
  22. Davidson MJ, Cooper CL, Baldini V. Occupational stress in female and male graduate managers. *Stress Med* 1995; 11: 157-75.
  23. Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychol* 2000; 55: 68-78.
  24. Singh A. Mental health in profit and loss making public-private sector industries. *Indian J Social Work*. 1992; 1: 637-45.
  25. Guttman D. Life events and decision making by older adults. *Gerontologist* 1978; 18: 462-67.
  26. Ryff CD. Happiness is every thing or is it? Explorations on the meaning of psychological well being. *J Personal Social Psychol* 1989; 57: 1069-81.
  27. Ryff CD, Keys CLM. The structure of psychological well-being revisited. *J Personal Social Psychol* 1995; 69: 719-27.
  28. Edwards JR. Cybernetic theory of stress, coping, and well being. In Cooper CL (editor). *Theories of organizational stress*. New York: Oxford University Press 1998: 122-52 .
  29. Adams JS. Toward an understanding of equity. *J Abnormal Social Psychol* 1963; 1: 422-36.
  30. Richardsen AM, Burke RJ. Occupational stress and job satisfaction among Canadian physicians. *J Work Stress* 1991; 5: 301-13.