Original Article

Moderating roles of age, gender and ranks in the relationship between emotional intelligence and burnout among medical professionals

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Objective: To explore the mediating role of age, gender and ranks in the association between emotional intelligence and professionalburnout among medical professionals.

Methodology: The study recruited 80 (38.75% female) medical professionals on purposive sampling technique from military Hospital Rawalpindi. We used Schutte emotional intelligence scale and Shirom and Melamed Burnout Scale. Statistical analysisused were Pearson correlation coefficient, normality, t-test, ANOVA, and process for moderation effect.

Results: There was a significant negative association between emotional intelligence with burnout. There is no significant relation between age with emotional intelligence and burnout, although moderating effects of age was found.

Conclusion: Male medical professionals had higher energy and strength to cope with stressors than females. However, experiences and age affect the burnout level of both genders.

Keywords: Emotional intelligence; burnout syndrome, healthcare professionals, moderation.

INTRODUCTION

Individual achievement in healthcare is connected to emotional intelligence (EI) and improving emotional awareness via the healthcare system.[1] EI is the ability to adjust and promote personal growth. Individuals with a higher level of EI have an enhanced ability to cope with the impacts of stress.[2] It is stated that less motivated professionals cannot better cope with difficulties and achieve their objectives.[3] An unacceptable activity (e.g., extra responsibility) among the medical specialists might transform into a source of discontent over time, e.g., Burnout disorder.[4] There is association between enthusiastic knowledge and profession.[5,6v]The profession needs professionals to detect and control their emotions. The experts manage themselves and the whole team, leading the human services to emerge as credible specialists.[7,8]

Burnout may be unhealthy to professionals' success.[9] Professionals who deal with the public or clients are more likely to develop burnout disorder due to physical, emotional, and psychological conditional responses to responsibilities than other professionals at the end of the day.[10] The distressing factors cause the physician to exhaust at work, affecting their physical and emotional well-being and work quality.[10,11] Burnout's negative repercussions affect the medical system, either directly by harming professionals' well-being or indirectly by changing the nature of therapeutic care.[12] Individuals prone to burnout early in their medical professions are more likely to experience the negative impacts of occupational burnout later in their careers.[13,14] Medical experts are underpaid and financially unstable.[15]

Intervention studies have shown that stress plays a mediation function in relationship between EI and burnout syndrome.[16] Medical professionals and physiotherapists scored better in EI than all other consultants.[17,18] In comparison to other professions, doctors exhaust rapidly while dealing with their infection, the severity of the infection, the duration of the infection, and subjective factors, i.e., age, gender, length of services, marital status, and ranks/position.[19] On the other hand, doctors are exhausted from continuously working time, examination loads, and other accountabilities.[20-22] Male medical professionals have a higher level of well-being than female medical professionals.[19] The aim of this study was to explore the mediating role of age, gender and ranks in association between EI and burnout among medical professionals.

METHODOLOGY

This cross-sectional study was conducted at military hospital, Rawalpindi to explore a moderating effect of age, gender, and military ranks, between EI and burnout among medical professionals including doctor/ physicians, medical staff and nurses. The study recruited 80 participants (40 General Duty Medical Officers (GDMO) and 40 specialists) on the purposive sample technique.

The demographic information was collected on the demographic sheet and have used composite scores of the Schutte emotional intelligence scale[23]and Shirom and Melamed Burnout Scale.[24]

Statistical Analysis: SPSS 22 was used to analyze the data. Pearson correlation coefficient, normality, t-test, ANOVA, and process for moderation effect were used.

RESULTS

Out of 80 professionals, 40 (50%) were GDMOs and 40 (50%) specialists. GDMO had completed Bachelor of Medicine and Bachelor of Surgery (MBBS), and specialists had completed Fellowship of College of Physicians and Surgeons (FCPS).It was found that all scales had acceptable reliabilities coefficient (i.e., $\alpha > .7$), the data were normally distributed.EIwas negatively correlated with BO. The age did not significantly correlate with EI and BO ($r = .219$ & $r = .069$).

Table 1: Relation of gender, marriage and highest qualification on burn out.

Variable	M	S.D	M	S.D	p
	Married (n = 62)		Unmarried (n = 18)		
EI	129.2	10.7	131.2	14.1	.50
BO	33.1	10.2	28.1	11.1	.07
	Men (n = 49)		**Women (n = 31)**		
EI	132.4	10.6	125.3	11.6	.007
BO	29.6	10.4	35.6	10.2	.01
	Joint (n = 42)		**Nuclear (n =38)**		
EI	129.1	10.9	129.3	12.2	.85
BO	31.0	9.2	32.9	12.1	.437
	MBBS (n = 40)		**FCPS (n =40)**		
EI	128.0	12.3	131.2	10.5	.21
BO	31.9	9.7	32.0	11.1	.975

Note.$*p > .05$, $**p < .01$M = Mean, S.D = Standard deviation, EI = Emotional Intelligence, Burnout = BO

Married participants were significantly different from unmarried on BO variables ($t = 1.82$, $p = .07$). However, EI did not reach to statistical significant level ($t = -.66$, $p = .5$). Table 1shows that male participants had a higher EI level than female participants ($t = 2.78$, $p = .007$). On the other hand, female participants scored higher than male participants on BO ($t = -2.55$, $p = .01$). No

Table 2: The moderating effect of age, gender, and rank between the relationship of emotional intelligence and burnout(N=80).

Burn Out					
	β		***β***		***B***
Constant	31.42**		32.0**		31.53**
Age	.40*	Gender	3.58	Rank	1.98
EI	-.41**	EI	-.37**	EI	-.42**
Age x EI	.03*	Gender x EI	.08	Rank x EI	.18
R^2	.26		.22		.46
F	8.94**		7.11**		6.69
ΔR^2	.23		.21		.45
ΔF	3.9		.17		.45

Note. ***p < .01, *p < .05 β = standardized beta

Table 3: One–way ANOVA showing mean differences in EI and BO across ranks the categories, and the categories of service year.

Ranks				
Variables		**SS**	**M.Sq**	**Sig.**
EI	Between Group	1652.748	826.374	.001
	Within-group	8745.739	113.581	
BO	Between Group	326.276	163.138	.240
	Within-group	8648.111	112.313	
Experience of Services				
EI	Between Group	1148.551	574.275	.011
	Within-group	9249.937	120.129	
BO	Between Group	307.877	153.939	.261
	Within-group	8666.510	112.552	

Note. Significance level *p > .05, **p > .001

difference was found in specialization and family structure. Table 2 indicates that age had a significant moderating effect (β = .40, $p < .05$, CI = .02 to .78) and interaction effect (age*EI) significantly predict BO among medical professionals (β = .03, $p = .05$, CI = -.59 to -.22).

Table 3 shows that EI between the groups on military ranks had a significant difference F (2, 77) = 7.276, p < .001, especially on the rank of Captain and Major ranks ($M_{difference}$ = 10.05392, $p < .001$). Similar results were found El on experiences of service years between the groups F (2, 77) = 4.780, $p < .01$). The service years had significantly different, e.g., equal to 5 years and greater than 5 years ($M_{difference}$ = -11.07143, p < .035). This indicates that those participants who have 5 years or greater than 5 years of service had higher EI levels than other categories. Although, BO did not significantly differ in any categories (rank and service years).

DISCUSSION

Male medical professionals had a higher level of EI than female medical professionals. The current study findings are in-line with the previous study that males have a lower level of BO because of males' physical strength, energy, and tolerance to greater pressure.[19] It might be why both genders have different responsibilities at the workplace, with various kinds of stressors and tolerance ability.

The age and interaction term (age and EI) play moderating role. Li et al[19] reported that younger medical professionals than 38 years and older than 29 years could be better understood that they are newer to the career, independent, and have little work experience under authoritative figures, which act as a buffer to BO.[19]

Our results showed that the medical professionals who had 5-years or more than 5-years of work experience had higher EI and coped better with workplace stressors. The current study findings are consistent with the Li et al,[19] who stated that higher ranks had more advantages than lower ranks and services.

It can be explained that higher experienced medical professionals, free from authority, work technically or only supervise the subordinate medical professionals; therefore, they have lower BO compared to less than 5-years of work experience. Self-report questionnaires were used for only one hospital, limiting generalization to other medical professionals.

CONCLUSION

Males who had higher EI had lower BO, especially the male medical professionals who had equal or/and more excellent work experience. These included captain and major rank of medical professionals, by moderating the effect of the age.

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