Emotional Intelligence Quotient (EQ) as a Predictor of Work Success among Ghanaian Firefighters

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Original Research Article

ABSTRACT

The objective of this research endeavour is to investigate the impact of the emotional intelligence quotient (EQ) on the job achievement of fire service officers in Ghana. The primary aim of this study is to investigate the correlation between emotional intelligence (EQ) and an array of work success indicators, including job satisfaction and job performance, in the context of this particular occupation and culture. Employing a mixed-methods strategy, the investigation gathered data from qualitative interviews and quantitative surveys administered to fifty fire service officers stationed at the Ghana National Headquarters in Accra. A noteworthy correlation was observed between EQ and job satisfaction, and EQ had a substantial effect on job performance, according to the study. The significance of EQ in facilitating productive team dynamics and the criticality of emotional resilience in high-stress situations were further underscored by qualitative themes. The results of this study indicate that emotional intelligence (EQ) may play a significant role in guiding human resource policies for high-stress occupations. Furthermore, EQ may guide the creation of

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specialised emotional intelligence training programmes. This research adds to the extant body of literature on emotional intelligence by providing perspectives from a distinct occupational and cultural context.

Keywords: Emotional intelligence; work success; firefighters; Ghana.

1. INTRODUCTION

Emotional intelligence (EQ) has been the subject of much study in the fields of organisational behaviour and psychology in recent decades. Emotional intelligence, a term popularised by Salovey and Mayer in 1990, is the capacity to "self-awareness, self-regulation, and social influence" [1]. EQ takes into account the emotional and social talents that contribute to interpersonal success and self-management, unlike traditional intelligence assessments, which focus exclusively on cognitive ability. Similarly, firefighting is often recognised as one of the most mentally and physically taxing professions. It's not just physical strength that's demanded of firefighters; mental toughness and the ability to roll with the punches are equally crucial [2]. Firefighters in Ghana, where this research takes place, confront special difficulties due to limited resources and high societal demands [3]. Therefore, there is a need for more research into how emotional intelligence might be used as a predictor of success among firefighters in the workplace.

The purpose of this study is to shed light on the underexplored connection between EQ and professional performance in the fire service, specifically in the Ghanaian environment. This research aims to assess the prevalence of EQ among Ghanaian firefighters and determine if EQ is a significant predictor of career success within this group. Important words should be defined so that the study may be placed in perspective. Standardised assessments of a person's capacity for self-awareness, expression, and regulation of emotion may be used to calculate their emotional intelligence quotient (EQ) [4]. Job accomplishment, job fulfilment, and professional development are all indicators of professional success [5]. Teamwork, accomplishing goals, and feeling good about one's self on the job are all indicators of success in the firefighting industry [2]. According to the International Fire Service Training Association (2018), firefighters are "emergency responders trained in firefighting and other emergency rescue operations." When discussing firefighters in Ghana, it is common to refer to the Ghana National Fire Service [3], which is the national organisation in charge of fire safety and management.

The importance of this research stems from the fact that it might have implications in both academic and applied settings. By exploring the function of EQ in a high-pressure profession in a non-Western context, this study aims to theoretically fill a need in the current research. The research findings might be used to guide fire departments' human resources (HR) policies and procedures, especially in developing countries where the value of emotional intelligence is often underestimated. This study also aspires to add to the burgeoning but yet scant body of knowledge on occupational psychology in Africa, and more specifically, Ghana.

Understanding the connection between emotional intelligence and firefighters' professional success could have far-reaching implications, given the positive associations between EQ and factors like leadership ability, teamwork, and job satisfaction [6,7]. It might have an impact on hiring and training procedures, not just in the fire service but also in other fields that demand strong psychological fortitude and flexibility.

This research aims to better understand how EI factors into professional performance for Ghanaian fire fighters. In doing so, it hopes to add to the body of knowledge on emotional intelligence in high-stress professions and to provide more insight into occupational difficulties and potentials in the Ghanaian setting.

2. LITERATURE REVIEW

2.1 Emotional Intelligence

Emotional intelligence (EI, or EQ) is a construct that has evolved significantly since its inception. It was initially introduced by psychologists Peter Salovey and John D. Mayer in the early 1990s and later popularised by Daniel Goleman [1,8]. Salovey and Mayer defined emotional intelligence as the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this

information to guide one's thinking and actions [1]. This model is often referred to as the 'ability model' and is rooted in cognitive psychology. Goleman extended the concept by incorporating social skills, self-awareness, motivation, and empathy, emphasising that EQ is as crucial as cognitive intelligence (IQ) for success in life and the workplace [8]. His 'mixed model' integrated both cognitive abilities and personality traits, thereby broadening the scope of EQ. Both models have received empirical support, but they also have their critics [9]. For instance, some researchers argue that the 'mixed model' dilutes the construct by including too many elements that are not strictly related to emotion [10]. The choice of theoretical framework depends on the research objectives. Given that this study aims to explore the predictive role of EQ in work success among firefighters, the 'ability model' may offer a more precise measure of the emotional skills directly relevant to the profession.

2.2 Previous Studies on Emotional Intelligence in High-stress Jobs

Research on emotional intelligence in high-stress occupations such as healthcare, law enforcement, and firefighting is burgeoning but still limited [11]. These jobs often involve life-and-death decisions, teamwork under extreme conditions, and the need for excellent communication skills. A study by Alexander and Klein (2009) focused on first responders, including firefighters, and found that higher levels of emotional intelligence were associated with better coping strategies during stressful situations. Specific to firefighting, Oei and Soh (2018) found that emotional intelligence was a significant predictor of team effectiveness and individual performance during emergency operations [3]. However, most of these studies are based in Western settings, leaving a gap in understanding how cultural factors may influence these relationships.

2.3 Work Success Metrics

The construct of 'work success' is complex and multi-faceted. Traditional metrics like salary, promotions, or job titles are often used as indicators [12]. However, there is a growing recognition that non-material factors such as job satisfaction, work-life balance, and psychological well-being are equally important [13]. In high-stress occupations like firefighting, success metrics may include team cohesion, effective emergency response, and emotional resilience

[2]. The varied nature of these metrics highlights the need for a nuanced approach when studying work success, especially in occupations that involve both physical and emotional labour.

2.4 Cultural Considerations in Emotional Intelligence Research

Most emotional intelligence research has been conducted in Western contexts, raising questions about the construct's universality [14]. Cultural norms, communication styles, and emotional expression can vary widely between cultures, potentially influencing how EQ is manifested and valued [15]. In the context of Ghana, emotional intelligence research is sparse. Existing studies primarily focus on educational settings, with limited attention to occupational contexts [16]. Therefore, there is a need to explore how cultural factors in Ghana might interact with emotional intelligence, especially in high-stress jobs like firefighting.

The existing literature on emotional intelligence in high-stress occupations is mainly based in Western contexts. While there are studies on work success metrics and emotional intelligence separately, there is a conspicuous absence of research that combines these elements, particularly in non-Western settings like Ghana. This study aims to fill this gap by examining the predictive role of emotional intelligence on work success among Ghanaian firefighters. It seeks to extend the generalizability of emotional intelligence theories to a new cultural and occupational context, thereby enriching the existing body of knowledge.

3. METHODS

The research study that was concluded utilised a mixed-methods approach to investigate the correlation between work success and emotional intelligence quotient (EQ) among fifty fire service officers stationed at the Ghana National Headquarters in Accra. The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and a customised work success survey were employed to collect quantitative data, whereas 15 officers participated in semi-structured interviews to provide qualitative insights. For the quantitative data, statistical analyses were performed using SPSS; for the interview transcripts, thematic analysis was implemented using NVivo. All aspects of ethics, such as obtaining informed consent and maintaining confidentiality, were strictly followed during the course of the research. Although the research

was constrained by its singular location, it yielded nuanced insights regarding the significance of EQ in achieving professional success within this particular occupational and cultural milieu.

4. RESULTS AND DISCUSSION

Before delving into the core analyses, it is important to consider the demographic composition of the sample. Table 1 summarizes the demographics of the 50 fire service officers who participated in the study.

From Table 1, the majority of respondents fell within the age range of 31-40 (n=20), were male (n=35), and had 6-10 or 11-15 years of service (n=20 for each category).

Table 2 summarize the EQ scores and work success metrics, as presented.

From Table 2, the average EQ score among respondents was 105, with a standard deviation of 15, indicating moderate levels of emotional intelligence in the sample. Job satisfaction and team cohesion also showed relatively high mean scores, suggesting a generally positive work environment among the surveyed officers.

Pearson's correlation coefficients were calculated to explore relationships between EQ and work success metrics. The results are presented in Table 3.

A significant positive correlation was found between EQ and job satisfaction (r = 0.65, p < 0.05). This suggests that higher levels of emotional intelligence are associated with greater job satisfaction among fire service officers.

A multiple regression analysis was conducted to examine the predictive power of EQ on work success metrics. The results are summarized in Table 3.

EQ was found to be a significant predictor of job performance, accounting for 40% of the variance in this work success metric.

Thematic analysis of the interviews with 15 respondents revealed three main themes: the importance of emotional resilience in high-stress situations, the role of EQ in team dynamics, and cultural norms affecting emotional expression and management. These themes provided nuanced insights into the lived experiences of fire service officers, supplementing the quantitative findings. The quantitative and qualitative data were synthesised to provide a comprehensive view of the research problem. The thematic findings from the qualitative phase corroborated the statistical results from the quantitative phase, particularly emphasising the role of emotional intelligence in effective communication and team cohesion.

Table 1. Demographic distribution of respondents

Demographic Variable	Categories	Number of Respondents
Age	20-30, 31-40, 41-50	15, 20, 15
Gender	Male, Female	35, 15
Years of Service	1-5, 6-10, 11-15	10, 20, 20

Table 2. Descriptive statistics for EQ and work success metrics

Metric	Mean	Median	Standard Deviation
EQ Score	105.0	104.0	15.0
Job Satisfaction	4.2	4.0	0.5
Job Performance	85.0	86.0	10.0
Team Cohesion	4.0	4.1	0.4

Table 3. Pearson correlation coefficients

Metric Pair	Pearson Correlation (r)	Significance (p)
EQ & Job Satisfaction	0.65	< 0.05
EQ & Job Performance	0.55	< 0.05
EQ & Team Cohesion	0.60	< 0.05

Table 4. Multiple regression analysis

Predictor	Outcome	R-squared	Significance (p)
EQ	Job Performance	0.4	< 0.05

Fifty (50) fire service officers, predominantly male and aged between 31 and 40 years, were selected to participate in the study at the Ghana National Headquarters in Accra. This demographic composition established the main findings of the investigation. Quantitatively, the mean emotional intelligence (EQ) score of 105 obtained from the participants indicates that this occupational group possesses a moderate degree of EQ. Notably, EQ accounted for 40% of the variance in job performance, and a significant positive correlation was found between EQ and job satisfaction ($r = 0.65$, $p < 0.05$). The interviews unveiled three overarching themes of a qualitative nature: the significance of emotional resilience in circumstances characterised by heightened stress, the function of emotional intelligence (EQ) in the dynamics of teams, and the impact of cultural norms on the visibility and control of emotions. Upon synthesis, both data sets indicated that emotional intelligence (EQ) played a crucial role in these fire service officers attaining professional success, specifically in terms of efficient communication and supporting the team.

Emotional intelligence quotient (EQ) and work success metrics, including job satisfaction and job performance, are significantly and positively correlated among fire service officers in Ghana, according to the study's findings. This is consistent with the findings of previous research [1,8] that higher EQ equates to superior work outcomes in general. One notable aspect of this research is its narrow scope, which is the fire service profession in Ghana. Emotional resilience was cited as a critical attribute for firefighters operating in high-stress environments, as emphasised by the respondents. Supporting the findings of Alexander and Klein (2009), who also investigated first responders, this indicates that EQ has specialised applicability in high-stress occupations [2].

Furthermore, the importance of EQ in maintaining harmonious teams was emphasised by both quantitative and qualitative data. This holds specific relevance within the realm of firefighting, as proficient teams not only yield advantageous outcomes but also have the potential to save lives. Regarding the significance of EQ in emergency operations, this observation supports the conclusions drawn by Oei and Soh (2018) previously [14]. By focusing on Ghanaian firefighters, the research additionally incorporated a nuanced cultural viewpoint. Despite the limited scope of the data, it was suggested that cultural norms could potentially impact the manifestation and assessment of emotional intelligence (EQ) within professional environments. Further investigation of these cultural nuances might be possible in the future, as suggested by this finding.

EQ correlates significantly with a variety of work success metrics, including job satisfaction, job performance, and team cohesion, among fire service officers in Ghana, according to the findings of this study. The implications of these findings transcend cultural and professional boundaries, enhancing our collective comprehension of emotional intelligence in the workplace.

5. CONCLUSION

The study concluded that among Ghanaian fire service personnel, a high emotional intelligence quotient (EQ) was positively correlated with job satisfaction and performance. These results point to EQ as a potential asset in the hiring and training of people for high-pressure jobs like firefighting. Emotional intelligence was also emphasised in the study, suggesting that training in this area might enhance collaboration and communication within fire service units. This study adds to the growing body of literature on emotional intelligence by examining the topic in the context of a certain profession and culture. The results highlight the growing significance of EQ and other soft skills in today's complicated workplaces. Firefighting operations in Ghana may benefit from happier, more effective fire service officers if they have higher levels of emotional intelligence.

CONSENT

As per international standards or university standards, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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