



Research Paper

A Study into the Effect of Demographics on Emotional Intelligence in Ghana

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ABSTRACT

The study assesses the nature of emotional intelligence (EI) and the effect of demographic features on emotional intelligence among respondents in public and private institutions in Sunyani, Ghana. The research is a quantitative, descriptive, and cross-sectional study. A sample size of 140, selected using the convenience sampling method was used. A self-designed questionnaire was used to collect data for the research on four main scales of EI. The IBM SPSS Statistics 26 was used to analyse the data. The reliability and the dimensionality of the scales were examined using reliability, and factor analysis tests respectively. The responses were reliable and the scales were also unidimensional for the EI scale, and multidimensional for the demographics, according to the test results. The four key scales identified were awareness of own emotions; management of own emotions; awareness of others' emotions; and management of others' emotions and they are affected by demographic features differently. The organisational strategies of institutions should incorporate the findings of the study to ensure the optimisation of the institutional goes. The role of demographic features in emotional intelligence, in structural modelling, is worth doing in future studies to assess the causal effect since the current study did not deal with that.

KEYWORDS: Demographic characteristics; Emotional Intelligence scale; Awareness of Own Emotions; Awareness of Others' Emotions; Management of Others' Emotions

Received 20 September, 2021; Revised: 03 October, 2021; Accepted 05 October, 2021 © The author(s) 2021. Published with open access at www.questjournals.org

I. INTRODUCTION

Theoretical and empirical research on the role of demographics in emotional intelligence (EI) continues to receive research interest in following the works of researchers such as Salovey and Mayer (1990) and Thordike (1920). Emotional intelligence is considered to influence various aspects of the work-life of labour, and this has sustained the research interest. Among the areas identified in the literature are job performance, motivation, satisfaction, leadership, stress management, and burnout (Schmidt & Hunter, 1981; Boyatzis, 1982; Sternberg, 1997; Spencer & Spencer, 1993; Goleman, 1998, Goleman, 2000; 2001, Goleman et al., 2002; Emmerling & Goleman, 2003).

In the knowledge of the authors, very few empirical works exist on the association between demographic factors and emotional intelligence in the current study area though there are considerable empirical works in the literature with mixed findings, hence the current paper fills in the literature gap by embarking on this research on the current area, and also extending what exist in literature by including culture and belief as demographic factors. Today's work environment is not the same as before since there is improved technology

that is expected to enhance worker effort. The present study examines to determine whether demographic factors significantly influence emotional intelligence scales and various subscales. In addressing the literature gap, employees and management of institutions will be afforded information on the nature of emotional intelligence and how demographic factors affect them. This will aid policy formulation by human resources personnel.

The global research objective was to examine the association between the nature of emotional intelligence scales and demographic factors among respondents in the survey. The investigation specifically explores (a) the nature of emotional intelligence; (b) identified the effect of demographic effect on emotional intelligence. The work is based on the research questions such as what are the scales of subscales of emotional intelligence? and what the effect of demographic factors on emotional intelligence subscales among the respondents in the survey? The study propositions are that (a) there are various emotional intelligence scales and subscales among respondents in the study; (b) demographic factors affect subscales of emotional intelligence.

The research challenges are that some respondents might have under-reported or over-reported their responses. The non-probability sampling method was used and as such, the research findings might not have external validity. The effect on leadership, motivation, satisfaction, job performance, stress management, and burnout by emotional intelligence was not investigated. The rest of the paper looks at the survey of the literature (section 2); research methodology (section 3); results and discussions (section 4); and conclusions (section 5).

II. LITERATURE SURVEY

The emotions of an individual according to researchers such as Thordike (1920); Steiner (1984); Salovey and Mayer (1990), Mayer et al. (1999); George (2000); and Gardner (2013) is the potential to manage own feelings and emotions, as well as other peoples' feelings and emotions. Individuals stable in emotions can provide appropriate judgment for a given situation, and those individuals show different emotional scales and use various strategies to deal with emotions. Wasielewski (1985); and Salovey and Mayer (1990); Law et al. (2004); Van Rooy and Viswesvaran (2004); and Cote and Miners (2006) explain that individuals high on the emotional intelligence scale are more productive, and sociable than individuals lower on the emotional intelligence scale.

Priori research effort on the effect of demographic variables on emotional intelligence is found in the works of various researchers (Bissessar, 2011; Jorfi et al., 2011; Kumar & Muniandy, 2012; Gunkel et al., 2013; Chen et al., 2015; Frank et al., 2015; Sergio et al., 2015; Pooja & Kumar, 2016; Shukla & Srivastava, 2016).

For examples, Kafetsios (2004) conducted research into the effect of age on emotional effect and concluded that emotional intelligence positively and significantly is influenced by the age of respondents, with more age respondents having higher emotional scores than less aged respondents. Srivastava and Bharamanikar (2004) in their study conducted on 291 Indian army officers as respondents reported that EI had increased with age. In a study using secondary school teachers as respondents, Tyagi (2004) examined the role of age in emotional intelligence and concluded that age has no significant influence on emotional intelligence scale scores among the respondents in the study.

Wong, Wong and Law (2005) explored the influence of age on the scores of emotional intelligence in reported that there was a significant positive association between emotional intelligence and age level of the respondents. Van Rooy, Alanso and Viswehvaran (2005) in a survey study on the effect on emotional intelligence score and age level of respondents indicated that emotional intelligence is significantly and positively influenced by age.

In an empirical study by Chapman and Hayslip Jr. (2006), their research finding show that emotional intelligence is influenced significantly by age as well as the usage of emotional intelligence scales in managing emotional issues such as moods.

Adeyemo (2008) assessed the impact of demographic factors on emotional intelligence among respondents who were workers and reported that work experience, gender, and age significantly affect emotional intelligence scores, with females having higher scores than males.

Gowdhaman and Murugan (2009) explored the influence of emotional intelligence by demographic factors using teacher trainees as respondents. They indicated that age positively influences emotional intelligence significantly. In an empirical study by Jacques (2009) using college students as respondents, the research findings show that age as a demographic factor significantly did not influence the emotional intelligence scale scores of the respondents in the study.

In a similar study on emotional intelligence, Mishra and Mohapatra (2010) reported that work experience positively influences emotional intelligence significantly with less experienced respondents having lower emotional score than respondents who were more experienced

Ang et al. (2015); Maduramente (2015); Sergio et al. (2015) in a study examined the effect on emotional intelligence of ethnicity and culture and concluded that emotional intelligence is significantly

influenced by the ethnicity and culture of respondents in the study. However, in the study of Hossein (2015), he concluded that ethnicity insignificantly influences emotional intelligence among the respondents in the study.

In Pooja and Kumar (2016) Indian study, the perspective of respondents from the service sector, their study findings indicated that the work experience level of respondents significantly influences emotional intelligence scale scores, with more experienced respondents reporting higher values than less experienced respondents. Shukla and Srivastava (2016) in a study on the influence on emotional intelligence of demographic factors reported that work experience, age, annual income level, and educational status significantly and positively influence emotional intelligence.

Yogun and Miman (2016) assessed the influence on emotional intelligence of demographic factors and reported that educational level, gender, and work position significantly affect emotional intelligence whereas age insignificantly influences emotional intelligence. They indicated that females have higher scores than males in the study.

Dewi et al. (2018) investigated the association between emotional intelligence and ethnicity and concluded that ethnicity significantly influences emotional intelligence in their study among the respondents in the study. Nagar (2017) examined the effect of work experience on emotional intelligence and reported that emotional intelligence is positively and significantly influenced by the work experience status of the respondents.

Marembo and Chinyamurindi (2018) determined the association between demographic factors and emotional intelligence and reported that only ethnic variable affects emotional intelligence in their study and concluded that work experience, age and gender have no significant effect on emotional intelligence.

Gautam and Khurana (2019) investigated the association between demographics (age, gender, education and total working experience) and emotional intelligence. Their research findings indicate age, gender and working experiences significantly influence emotional intelligence scales of the respondents, whereas the educational level variable does not influence the scales of emotional intelligence.

The review has indicated that the demographics effect on emotional intelligence scales is mixed and further empirical study is worth embarking on such as the current study.

III. METHODOLOGY

3.1 Research Strategy/Type/Design

The research is a quantitative design that aimed at quantifying the responses on the effect of demographic features on the nature of emotional intelligence in the present study area. The research type is a descriptive study with the research time domain of cross-sectional research, in which data is taken from the respondents once and analysed.

3.2 Research Population/Sample size/Sampling Method

The study population consist of the staff of the private and public institutions in Sunyani municipality. A sample size of 140 respondents was used. Table 1 in section 4 shows the respondents demographic features of respondents. The convenience sampling method was employed in the sample selection. In the sampling, a respondent is selected for the reason that the respondent is easily accessible and available for the survey.

3.3 Data collection Instruments

Questionnaire in the format of the five-point (5-point) Likert scale (Strongly Agreed, Agreed, Neutral, disagree, strongly disagree) which was designed by the researchers based on the previous study reviewed was used to collect data. The questionnaires were administered during the working period of the respondents. The items were not open-ended, but closed-ended. There were 27 items on the questionnaire, both demographics and subject items.

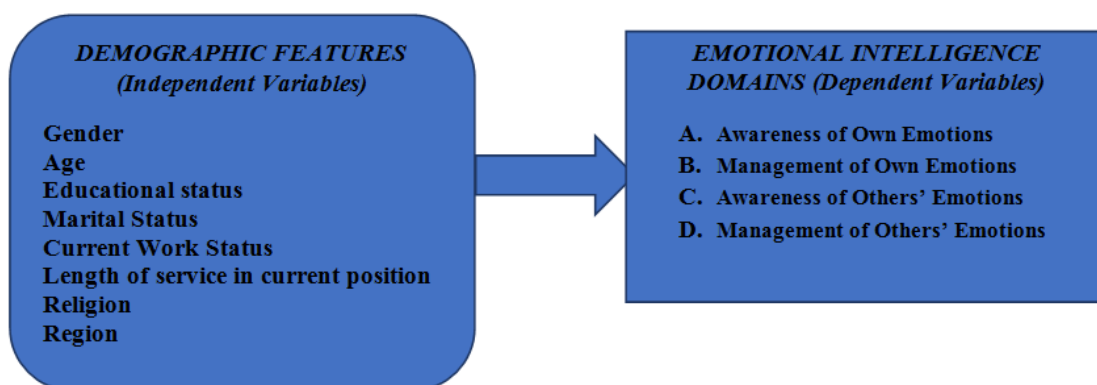
3.4 Data Analysis and Presentation of Empirical Results

Data collected were analysed using descriptive statistics such as frequencies, percentages, mean, and standard deviation of responses were used to analysed data collected after the dimensionality and reliability tests were performed to examine the scale dimensionality and reliability of the responses provided by the respondents respectively. The linear regression test was performed to examine the association between the demographic factors and the emotional intelligence scales. Tables were used to depicts the results in the next section of the manuscript

3.5 Model

The model for the research paper is shown in Figure 1. The model considers four key emotional intelligence scales based on models [Mayer-Salovey-Caruso Emotional Intelligence Test (2002) (MSCEIT); Interpersonal EQ, Adaptability EQ, Stress management EQ, Impulse Control EQ, and General mood EQ;

Emotional Competency Inventory (ECI); and The Trait Emotional Intelligence Questionnaire (TEIQue)] in the literature (Bar-On, 1997; Mayer and Salovey, 1997; Goleman, 2001; Petrides, et al., 2007; Ugoani et al., 2015). Goleman (1995) identified five subdomains (Know your emotions; Manage your emotions; Motivate yourself; Recognise and understand other people’s emotions; manage relationships (other people’s emotions)) of emotional intelligence from the main four domains and stated that emotional intelligence consists of (1) Self-Awareness; (2) Self-Management; (3) Social Awareness; and (Relationship Management). Some of these scales are incorporated into the present model. The independent variables are the demographic features and the dependent variables are the emotional intelligence scale. In the demographic variables, culture is proxied by region, and belief is also proxied by religion.



IV. EMPIRICAL RESULTS AND DISCUSSIONS

4.1 Background Information on Respondents

Table 1 depicts the demographic characteristics of the study respondents. The results indicate a majority (58%) of the respondents are males; most (39%) belong to the age group of 30-39 years; a majority (62%) have obtained a first degree/diploma certificates; most (51%) are married; most (44%) are in the senior member level; most (33%) have worked between 3-5 years; a majority (69%) are Christians, and a majority (60%) of the respondents are from Brong Ahafo.

Table 1 Distribution of Demographic Features of Respondents

Variables	Frequency	Percentage (%)
Gender		
Female	59	42.1
Male	81	57.9
Total	140	100.0
Age		
20-29	37	26.4
30-39	55	39.3
40-49	38	27.1
50-59	10	7.1
Total	140	100.0
Educational status		
First Degree/HND/Diploma	87	62.1
Masters	41	29.3
PhD	12	8.6
Total	140	100.0
Marital status		
Single	62	44.3
Married	71	50.7
Divorced	7	5.0
Total	140	100.0
Current work status		
Junior staff	48	34.3
Senior staff	61	43.6
Senior member	30	21.4
Missing response	1	0.7
Total	140	100.0
Length of service in the current position		
2 years and less		
3-5 years	40	28.6
6-8 years	46	32.9
9 years and above	26	18.6

Total	28	20.0
	140	100.0
Religion (Belief)		
Christian	97	69.3
Muslim	30	21.4
Traditional	6	4.3
Other religion	7	5.0
Total	140	100.0
Region (Ethnicity and Culture)		
Upper West	12	8.6
Upper East	9	6.4
Northern	10	7.1
Brong Ahafo	81	57.9
Ashanti	6	4.3
Western	7	5.0
Eastern	4	2.9
Central	7	5.0
Greater	1	0.7
Volta	3	2.1
Total	140	100.0

Sources: Author's field survey, May 2021

4. 2 Test of Reliability/Dimensionality

4.2.1 Test of Reliability

The reliability test results are shown in Table 2 for the responses to all the items on the questionnaire. The test results depict high internal consistency since the value of the Cronbach alpha coefficient is above 0.7. This means the questionnaire used to collect data is adequate and reliable as Cronbach (1951) explained.

Table 2 Results of Reliability analysis for Emotional Intelligence dimensions

Categories of Statements	Cronbach's alpha	No. of Items	Conclusion
Demographics and Emotional Intelligence scales	0.770	23	High reliability

Sources: Author's field survey, May 2021

4.2.2 Test for Dimensionality

After testing for the reliability of the set of items used, the set of items (demographics and emotional intelligence) were statistically examined to determine if they measure just one common using the dimensionality test. The results as shown in Table 4 to Table 6 indicate uni-dimensionality of the scales for EI, since, in all the test results, only the first component is larger and also explains significantly the variance in the components using the initial Eigenvalues. In Table 3, the first component explains about 77%; in Table 4, about 60%; in Table 5, about 73%; in Table 6, about 70%, in the variance. The results as shown in Table 7 show that the scale for the demographics is multidimensional since 3 components explain about 61% of the variance in the components using the initial Eigenvalues. In all, three (3) components were extracted.

Table 3 Test Results for Dimensionality

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Totals	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.096	77.402	77.402	3.096	77.402	77.402
2	0.496	12.399	89.800			
3	0.232	5.789	95.589			
4	0.176	4.411	100.000			

Sources: Author's field survey, May 2021: Extraction Method: Principal Component Analysis.

Table 4 Test Results for Dimensionality

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Totals	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.403	60.070	60.070	2.403	60.070	60.070
2	0.736	18.408	78.477			
3	0.538	13.445	91.922			
4	0.323	8.078	100.000			

Sources: Author's field survey, May 2021: Extraction Method: Principal Component Analysis.

Table 5 Test Results for Dimensionality

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Totals	% of Variance	Cumulative %	Total	% of Variance	Cumulative %

1	2.201	73.365	73.365	2.201	73.365	73.365
2	0.510	17.011	90.376			
3	0.289	9.624	100.000			

Sources: Author’s field survey, May 2021: Extraction Method: Principal Component Analysis.

Table 6 Test Results for Dimensionality

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Totals	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.793	69.816	69.816	2.793	69.816	69.816
2	0.576	14.391	84.207			
3	0.381	9.513	93.720			
4	0.251	6.280	100.000			

Sources: Author’s field survey, May 2021: Extraction Method: Principal Component Analysis.

Table 7 Test Results for Dimensionality for Demographic Features

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Totals	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.772	34.650	34.650	2.772	34.650	34.650
2	1.068	13.344	47.995	1.068	13.344	47.995
3	1.040	13.005	61.000	1.040	13.005	61.000
4	0.924	11.547	72.546			
5	0.748	9.355	81.902			
6	0.558	6.975	88.877			
7	0.530	6.621	95.497			
8	0.360	4.503	100.000			

Sources: Author’s field survey, May 2021: Extraction Method: Principal Component Analysis.

4.2.3 Normality Test

.....The nature of the normality of the data set was examined using the Kolmogorov-Smirnova and Shapiro-Wilk tests. Table 7 report the test results. The results in the Table indicate the data set is not normally distributed, since the Sig. values of the test are not greater than 0.05, the data set is not normal. This means the data significantly deviate from a normal distribution.

Table7

Scales	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
I can explain the emotions I feel to my colleagues.	0.290	140	0.000	0.799	140	0.000***
I can discuss the emotions I feel with other colleagues.	0.292	140	0.000	0.834	140	0.000***
If I feel down, I can tell my colleagues what will make me feel better.	0.251	140	0.000	0.846	140	0.000***
I can talk to other colleagues about the emotions I experience	0.286	140	0.000	0.845	140	0.000***
I respect the opinion of my colleagues, even if I think they are wrong.	0.267	140	0.000	0.859	140	0.000***
When I am frustrated with my colleagues, I can overcome my frustration.	0.242	140	0.000	0.832	140	0.000***
When deciding on a dispute, I try to see all sides of a disagreement before I conclude.	0.289	140	0.000	0.820	140	0.000***
I give a fair hearing to my colleagues’ ideas	0.289	140	0.000	0.825	140	0.000***
I can read my colleagues “true” feelings, even if they try to hide them.	0.228	140	0.000	0.882	140	0.000***
When I talk to my colleagues, I can gauge their true feelings from their body language.	0.245	140	0.000	0.867	140	0.000***
I can tell when my colleagues don’t mean what they say.	0.270	140	0.000	0.865	140	0.000***
My enthusiasm can be contagious for my colleagues.	0.266	140	0.000	0.862	140	0.000***
I am able to cheer my colleagues up when they are feeling down.	0.309	140	0.000	0.815	140	0.000***
I can get my colleagues to share my keenness for a project.	0.307	140	0.000	0.828	140	0.000***
I can provide the “spark” to get my colleagues enthusiastic.	0.257	140	0.000	0.850	140	0.000***

Sources: Author’s field survey, May 2021:

4.4 Analysis of Emotional Intelligence Domains

Results in Table 8 indicate the values of the mean and the standard deviations for the scales of emotional intelligence. Four scales were identified in the study as awareness of others' emotions; management of others' emotions; awareness of own emotions; and management of own emotions. There are subscales to measure the key scales of EI. The effect of the identified demographics on the identified emotional intelligence scales was investigated, the results are presented in section 4.5.

Table 8 Results on the Dimensions of Emotional Intelligence

Dimensions of Emotional Intelligence	N	Mean	Standard deviation
Awareness of others' emotions			
i. I can read my colleagues "true" feelings, even if they try to hide them.	140	3.7214	1.0254
i. When I talk to my colleagues, I can gauge their true feelings from their body language.	140	3.7214	1.0733
i. I can tell when my colleagues don't mean what they say.	140	3.6714	1.0139
Management of others' emotions			
i. My enthusiasm can be contagious for my colleagues.	140	3.7000	0.9574
i. I am able to cheer my colleagues up when they are feeling down.	140	3.8786	0.9404
i. I can get my colleagues to share my keenness/Zeal for a project.	140	3.7929	0.8855
v. I can provide the "spark" to get my colleagues enthusiastic.	140	3.9000	0.9237
Awareness of own emotions			
i. I can explain the emotions I feel to my colleagues.	140	3.9286	1.1165
ii. I can discuss the emotions I feel with other colleagues.	140	3.8357	1.0361
iii. If I feel down, I can tell my colleagues what will make me feel better.	140	3.8857	1.0394
iv. I can talk to other colleagues about the emotions I experience.	140	3.8286	0.9441
Management of own emotions			
i. I respect the opinion of my colleagues, even if I think they are wrong.	140	3.8571	0.9412
ii. When I am frustrated with my colleagues, I can overcome my frustration.	140	4.0500	0.8841
iii. When deciding on a dispute, I try to see all sides of a disagreement before I conclude.	140	4.0071	0.8439
iv. I give a fair hearing to my colleagues' ideas.	140	3.9929	0.8936

Sources: Author's field survey, May 2021

4.5 Regression Results on the association between Emotional Intelligence and demographic factors

4.5.1 Test Results on the Link between Own Emotion Awareness and Demographic Features

The association between demographic features and emotional intelligence was assessed using the multiple regression method. The results are shown in Table 9 to Table 12. The results indicate that in Table 9, only the age and marital status of respondents significantly are associated with own emotional intelligence scale examined at the 5% level of significance. Marital status is negatively related to emotional intelligence, whereas age is associated positively with emotional intelligence. The rest of the factors insignificant are associated with the emotional intelligence scale investigated. In Table 10, only the age of respondents significantly influence the emotional intelligence scale investigated positively at a 10% significance level. The rest of the factors insignificantly influence emotional intelligence scales. In Table 11, none of the factors significantly influence the emotional intelligence scale investigated. In Table 12, the results indicate only marital status, and age of respondents significantly negatively and positively influence the emotional intelligence scale examined respectively.

Table 9 Own Emotions Awareness (I can read my colleagues "true" feelings, even if they try to hide them) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	3.907	0.468	8.355	0.000***
gender of respondents	-0.189	0.188	-1.002	0.318
age of respondents	0.362	0.142	2.544	0.012**
educational status	-0.162	0.173	-0.938	0.350
marital status	-0.504	0.204	-2.470	0.015**
current work status	0.129	0.152	0.851	0.396

Experience	0.030	0.103	0.290	0.772
religion of respondents	-0.057	0.119	-0.477	0.634
region of respondents	0.080	0.052	1.545	0.125

Sources: Author's field survey, May 2021. Note: ** and *** denote 5% and 1% significance levels

Table 10 Own Emotions Awareness (I can discuss the emotions I feel with other colleagues) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	3.828	0.446	8.574	0.000***
gender of respondents	-0.027	0.180	-0.148	0.882
age of respondents	0.267	0.136	1.969	0.051*
educational status	-0.024	0.165	-0.148	0.882
marital status	-0.232	0.195	-1.193	0.235
current work status	-0.061	0.145	-0.419	0.676
experience	0.036	0.098	0.369	0.713
religion of respondents	-0.098	0.114	-0.865	0.389
region of respondents	0.013	0.049	0.261	0.795

Sources: Author's field survey, May 2021. Note: *** and * denote 1% and 10% significance levels

Table 11 Own Emotions Awareness (If I feel down, I can tell my colleagues what will make me feel better) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	3.508	0.445	7.883	0.000***
gender of respondents	0.240	0.179	1.341	0.182
age of respondents	0.207	0.135	1.532	0.128
educational status	0.049	0.164	0.297	0.767
marital status	-0.285	0.194	-1.468	0.144
current work status	0.078	0.144	0.538	0.591
experience	-0.098	0.098	-1.003	0.318
religion of respondents	-0.111	0.113	-0.981	0.328
region of respondents	0.052	0.049	1.070	0.287

Sources: Author's field survey, May 2021. Note: *** denotes 1% significance levels

Table 12 Own Emotions Awareness (I can talk to other colleagues about the emotions I experience) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.007	0.402	9.975	0.000***
gender of respondents	-0.076	0.162	-0.467	0.641
age of respondents	0.255	0.122	2.086	0.039*
educational status	0.042	0.148	0.286	0.775
marital status	-0.397	0.175	-2.264	0.025**
current work status	0.065	0.130	0.502	0.616
experience	-0.044	0.088	-0.497	0.620
religion of respondents	-0.098	0.102	-0.962	0.338
region of respondents	0.019	0.044	0.420	0.675

Sources: Author's field survey, May 2021. Note: **, ***, and * denote 5%; 1%; and 10% significance levels

4.5.2 Test Results on the Link between Own Emotion Management and Demographic Features

The association among own emotional management scale and demographic factors was analysed and Table 13 to Table 16 depicts the results. In Table 13, the results indicate an insignificant association among the demographic variables and emotional scale factors examined. In Table 14, only gender significantly influence the emotional intelligence scale investigated at a 5% level. The rest of the factors do not significantly influence the emotional intelligence scale examined. In Table 15, the experience and gender of respondents significantly positively and negatively influence the emotional intelligence scale at 5% and 1% levels respectively. In Table 16, marital status significantly negatively influences emotional intelligence at a 10% level. The rest of the factors do not significantly influence the emotional scale examined.

Table 13 Own Emotions Management (I respect the opinion of my colleagues, even if I think they are wrong) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.177	0.403	10.355	0.000***
gender of respondents	0.042	0.163	0.260	0.795
age of respondents	0.181	0.123	1.478	0.142
educational status	-0.051	0.149	-0.340	0.734
marital status	-0.276	0.176	-1.565	0.120
current work status	-0.096	0.131	-0.738	0.462
experience	0.019	0.089	0.213	0.832
religion of respondents	-0.148	0.103	-1.438	0.153
region of respondents	0.024	0.044	0.540	0.590

Sources: Author's field survey, May 2021. Note: *** denotes 1% significance level

Table 14 Own Emotions Management (When I am frustrated with my colleagues, I can overcome my frustration) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.540	0.377	12.035	0.000***
gender of respondents	-0.301	0.152	-1.978	0.050**
age of respondents	-0.022	0.115	-0.194	0.846
educational status	0.037	0.139	0.267	0.790
marital status	-0.123	0.165	-0.750	0.455
current work status	-0.043	0.122	-0.354	0.724
experience	0.066	0.083	0.794	0.428
religion of respondents	-0.105	0.096	-1.089	0.278
region of respondents	0.051	0.042	1.227	0.222

Sources: Author's field survey, May 2021. Note: ** and *** denote 5% and 1% significance levels

Table 15 Own Emotions Management (when deciding on a dispute, I try to see all sides of a disagreement before I come to a conclusion) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	5.037	0.350	14.409	0.000***
gender of respondents	-0.394	0.141	-2.798	0.006***
age of respondents	-0.031	0.106	-0.289	0.773
educational status	-0.010	0.129	-0.081	0.936
marital status	-0.176	0.153	-1.153	0.251
current work status	-0.136	0.113	-1.199	0.233
experience	0.178	0.077	2.318	0.022**
religion of respondents	-0.081	0.089	-0.913	0.363
region of respondents	-0.034	0.039	-0.892	0.374

Sources: Author's field survey, May 2021. Note: ** and *** denote 5% and 1% significance levels

Table 16 Own Emotions Management (I give a fair hearing to my colleagues' ideas) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.397	0.381	11.529	0.000***
gender of respondents	-0.166	0.154	-1.079	0.282
age of respondents	0.009	0.116	0.081	0.935
educational status	-0.078	0.141	-0.551	0.582
marital status	-0.304	0.166	-1.824	0.070*
current work status	0.094	0.124	0.764	0.446
experience	0.130	0.084	1.546	0.124
religion of respondents	-0.108	0.097	-1.110	0.269
region of respondents	0.022	0.042	0.528	0.598

Sources: Author's field survey, May 2021. Note: ** and * denote 5% and 10% significance levels

4.5.3 Test Results on the Link between Awareness of Others' Emotions and Demographic Features

The results on the link among demographic factors and emotional intelligence scales, examined are shown in Table 17 to Table 19 depicts the results. The results in Table 17 show that the age and marital status of respondents significantly influence the emotional intelligence scale studied positively and negatively at 10%, and 5% levels respectively. In Table 18 none of the demographic factors significantly influence emotional intelligence scales investigated. In Table 19, only current work status significantly influences the emotional intelligence scale at a 10% level.

Table 17 Own Emotions Management (I can read my colleagues ‘true’ feelings, even if they try to hide them) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	3.938	0.420	9.379	0.000***
gender of respondents	-0.166	0.169	-0.983	0.328
age of respondents	0.259	0.128	2.030	0.044*
educational status	0.111	0.155	0.713	0.477
marital status	-0.558	0.183	-3.044	0.003***
current work status	-0.208	0.136	-1.532	0.128
experience	0.147	0.092	1.592	0.114
religion of respondents	0.168	0.107	1.571	0.119
region of respondents	0.002	0.046	0.040	0.968

Sources: Author’s field survey, May 2021. Note: ***, **, and * denote 1%, 5%, and 10% significance levels

Table 18 Own Emotions Management (When I talk to my colleagues, I can gauge their true feelings from their body language) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	3.986	0.464	8.580	0.000***
gender of respondents	-0.125	0.187	-0.667	0.506
age of respondents	0.178	0.141	1.262	0.209
educational status	-0.061	0.172	-0.354	0.724
marital status	-0.318	0.203	-1.571	0.119
current work status	-0.068	0.151	-0.450	0.653
experience	0.031	0.102	0.307	0.759
religion of respondents	0.080	0.118	0.674	0.501
region of respondents	0.017	0.051	0.333	0.740

Sources: Author’s field survey, May 2021. Note: *** denote 1% significance level

Table 19 Own Emotions Management (I can tell when my colleagues don’t mean what they say) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.636	0.432	10.743	0.000***
gender of respondents	-0.229	0.174	-1.318	0.190
age of respondents	-0.001	0.131	-0.004	0.997
educational status	-0.104	0.159	-0.655	0.514
marital status	-0.042	0.188	-0.224	0.823
current work status	-0.245	0.140	-1.748	0.083*
experience	0.007	0.095	0.077	0.939
religion of respondents	0.069	0.110	0.630	0.530
region of respondents	-0.018	0.048	-0.374	0.709

Sources: Author’s field survey, May 2021. Note: *** and * denote 1% and 10% significance levels

4.5.4 Test Results on the Link between Management of Others’ Emotions and Demographic Features

The results of the effect of management of others emotion and demographic factors are shown in Table 20 to Table 23. In Table 20, only gender significantly negatively affect the emotional intelligence scale investigated at 5% level. In Table 21, only gender, and religion of respondents significantly negatively influence the emotional intelligence scale examined in the study at 5% and 10% levels. The rest of the factors do not affect the scales examined. The results in Table 22 indicate only gender (negatively), and educational status (positively) significantly affect emotional intelligence scales at 10% and 5% level of significance, respectively. In Table 23, the results indicate all the demographic factors significantly do not influence the emotional intelligence scale studied.

Table 20 Management of others’ Emotions(My enthusiasm can be contagious for my colleagues) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.622	0.412	11.230	0.000***
gender of respondents	-0.297	0.166	-1.792	0.075**
age of respondents	-0.092	0.125	-0.734	0.465
educational status	0.114	0.152	0.749	0.455
marital status	-0.079	0.180	-0.441	0.660
current work status	-0.100	0.133	-0.753	0.453
experience	0.041	0.091	0.455	0.650
religion of respondents	-0.046	0.105	-0.437	0.663
region of respondents	-0.044	0.045	-0.961	0.338

Sources: Author’s field survey, May 2021. Note: *** and ** denote 1% and 5% significance levels

Table 21 Management of Others’ Emotions (I am able to cheer my colleagues up when they are feeling down) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.791	0.394	12.164	0.000***
gender of respondents	-0.406	0.159	-2.560	0.012**
age of respondents	0.022	0.120	0.185	0.853
educational status	0.134	0.145	0.920	0.359
marital status	-0.206	0.172	-1.201	0.232
current work status	0.034	0.128	0.264	0.792
experience	0.029	0.087	0.333	0.740
religion of respondents	-0.190	0.100	-1.896	0.060*
region of respondents	-0.025	0.043	-0.566	0.572

Sources: Author’s field survey, May 2021. Note: ***, **, and * denote 1%; 5%; and 10% significance levels

Table 22 Management of Others’ Emotions (I can get my colleagues to share my keenness for a project) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.350	0.373	11.655	0.000***
gender of respondents	-0.275	0.150	-1.829	0.070*
age of respondents	-0.042	0.114	-0.372	0.711
educational status	0.294	0.138	2.133	0.035**
marital status	-0.192	0.163	-1.178	0.241
current work status	-0.046	0.121	-0.384	0.702
experience	0.096	0.082	1.168	0.245
religion of respondents	-0.127	0.095	-1.334	0.185
region of respondents	-0.036	0.041	-0.869	0.386

Sources: Author’s field survey, May 2021. Note: ***, **, and * denote 1%; 5%; and 10% significance levels

Table 23 Management of Others’ Emotions (I can provide the ‘spark’ to get my colleagues enthusiastic) and Demographic features

Variables	coefficients	Standard Errors	t-ratios	P-values
Constant	4.434	0.403	11.007	0.000***
gender of respondents	-0.119	0.162	-0.732	0.465
age of respondents	0.005	0.123	0.038	0.970
educational status	-0.001	0.149	-0.008	0.993
marital status	-0.054	0.176	-0.310	0.757
current work status	0.005	0.131	0.038	0.970
experience	0.007	0.089	0.082	0.934
religion of respondents	-0.044	0.102	-0.426	0.671
region of respondents	-0.060	0.044	-1.354	0.178

Sources: Author’s field survey, May 2021. Note: ***denotes 1% significance level

V. DISCUSSIONS

The paper uses data from public and private institutions to investigate the nature of the key emotional intelligence scales in Sunyani Township. Four main emotional **intelligencescaleswere** identified in the study. They are awareness of own emotions; management of own emotions; awareness of other’s emotions; and the management of other’s emotions.

The research findings on the effect of demographic variables on the emotional intelligence scale (own emotion awareness) and subscales indicate that, only age and marital status influence emotional intelligence. Also, the study findings on demographics and emotional intelligence scale (own emotion management) and subscales show that gender, work experience, and marital status are associated with the emotional intelligence **scale.Again**, the findings of the research on the demographics and emotional intelligence scale (awareness of others’ emotions), show revealed that age, marital status, and work experience influence the emotional intelligence scale **examined.The** research findings on demographic variables and emotional intelligence scales (management of others emotions) indicate that gender, belief (proxied by religion), and educational status affect emotional intelligence.

The research findings conclusion is that age, gender, educational level, work experience, marital status, and belief affect emotional intelligence scales, whereas ethnicity and current work status do not influence emotional intelligence significantly. The findings are in support of the study findings of previous research such as that of Jorfi et al. (2011), Kumar and Muniandy (2012), Shukla and Srivastava (2016) on work experience; Bissessar (2011), Jorfi et al. (2011), Kumar and Muniandy (2012), Frank et al., (2015), Chen et al. (2015), Sergio et al. (2015), on age; Jorfi et al. (2011), Pooja and Kumar (2016), Shukla and Srivastava (2016), on gender.

The findings are not in line with some previous studies such as the works of Gunkel et al. (2013), and Kumar and Muniandy (2012) on gender; Maduramente (2015), Ang et al. (2015), Sergio et al. (2015), Dewi et al. (2017), on ethnic groups. However, the current findings support that of Robertson (2010), and Hossein (2015) study result that showed no significant differences in ethnicity and emotional intelligence.

The findings imply that demographic factors that were significant in influencing emotional intelligence scales are key variables in predicting workers emotions and feelings. They are also important when management wants to assess the effect of emotional intelligence on constructs such as motivation, job performance, job satisfaction, and stress management.

VI. CONCLUSIONS

The purpose of the research has been attained in the study. Major emotional intelligence scales have been identified, and the effect of demographic factors on these emotional intelligence scales have been assessed. The results indicate some demographic factors significantly influence the emotional intelligence scale and are reliable in predicting the emotions and feelings of respondents by management of institutions. Management of institutions should consider the findings of the present study in their human resources management (HR) practices to ensure workers are stable on emotions and feelings to achieve higher worker productivity.

The research findings are in line with existing theories on emotional intelligence scales in the work environment among workers. The theories conclude that workers exhibit various emotional intelligence scales which are influenced by demographic factors, and need to be acknowledged by the managements of institutions.

Empirical studies, considering a comparative analysis of private and public universities in future studies should be considered to find out if the findings of the present study will be replicated. This should be done employing causal modelling such as structural modelling. The moderating role of demographic factors should be examined in further studies that consider the association between emotional intelligence and motivation, job performance, and job satisfaction.

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AUTHORS' CONTRIBUTIONS:

The research paper is a collaborated work involving all the authors. Author 1, conceptualized the research work and wrote the first draft of the topic and the introduction. Author3, wrote the first draft of the literature review. Author2, wrote the first draft of the methodology and the questionnaire. All the authors collected the research data using the questionnaire, analysed and interpreted the results. Author1, wrote the first draft of the results, discussions and conclusion. Author3, compiled the references. Author2, wrote the first draft of the full paper. All the authors critically revised the article. All the authors read and approved the final manuscript.

Acknowledgement

The authors ThankDr Samuel Asuamah Yeboah for his support in the data analysis of the paper.