Gender Influence on Pre-service Teachers’ Emotional Intelligence at Selected Colleges of Education in Ghana

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Abstract This paper examined the postulations propounded by Gender and Emotional Intelligence (EI) theories regarding the relationship between gender and EI. It interrogated the veracity of the postulations advanced by these theories, considering the fact that there are other factors such as age, marital status, and many more that may account for individuals’ EI. The study was conducted among pre-service teachers in two selected colleges of education in the Central Region of Ghana. Using purposive and convenient sampling techniques, a total of 539 second-year pre-service teachers were selected from the two colleges. Questionnaires were administered to all the respondents, which were designed taking into cognisance the “Mayer, Salovey, and Caruso (1999) Emotional Intelligence Test-MSCIT and Baron-On’s (2004) EI Inventory.” A Quasi-Experimental Design was adopted for the study. Findings from the study’s analysis revealed that gender, in particular, age and marital status in no way influenced the pre-service teachers’ EI. Rather, other elements such as individuals’ personalities and moods, adequate rest, limited stress, and the individual building of personal and social competences could influence pre-service teachers’ EI.

Keywords: colleges of education, emotional intelligence, gender, pre-service teachers

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1. Introduction

Reference [1] posits that within a given culture, gender denotes the social and cultural roles of each sex. In view of this, the researcher notes that in reaction to their environment, family relationships, the media, peers, and schooling, people frequently establish sociocultural roles. Reference [2] remarks that gender roles and gender norms are incredibly unpredictable and can change with time significantly. The researcher states, for example, that high-heeled shoes, currently deemed feminine in most of the world, were originally meant to be used by upper-class males while hunting on horseback. Reference [1] also notes that whereas boys are dressed in blue, pink is considered as an appropriate colour for females to wear in many countries. Reference [3] claims that one's self-perception or gender identity is another meaning of gender, for example, one's internal personal sense of being a man or woman [3]. Gender can also be articulated through the attributes of one's name, pronouns, clothes, haircuts, behaviour, voice, or body [4]. The researcher remarks that, while what is considered male and female shifts over time and differs by culture, society recognises these signs as male and female. Reference [5] remarks that some gender theorists have established that the psychological make-up of males and females are different. They argue that women are weaker than men and are, therefore, more emotional than their male counterparts. This view has influenced lots of societal and cultural perceptions about women as much more tender sex than men, hence, perceiving them to be emotionally less intelligent and weaker than men [5].

By virtue of emerging social factors and other factors, an individual’s emotional stability and intelligence cannot be completely influenced or strictly restricted to one’s psychological make-up, age, or marital status [6]. Reference [7] explains that emotional intelligence is a comprehensive term that incorporates the intricate aspects of both emotion and intelligence. Reference [8] furthermore explains that emotions are the most significant and influential component of personality because they play a sacrosanct role in one's well-being. This is because emotions help individuals to make important decisions. Emotions also enable individuals to facilitate their attitudes and behaviours towards the attainment of their goals. Therefore, healthy emotions give...
clarity in perception, thinking, and analysing everyday life situations [8]. Conversely, [9] argues that emotions can also negatively impact one’s behaviour if they are not appropriately dealt with or fulfilled. Unfulfilled emotions can adversely affect an individual psychologically, personally, and socially [9].

In order to overcome emotional issues and control behaviour, [10] notes that Emotional Intelligence (EI) refers to the mechanisms involved in the identification, usage, comprehension, and management of one's emotional situations and the emotional states of others. Reference [11] identifies four main EI constructs: self-awareness, self-control, self-consciousness, and control of relationships. The ability to understand one’s feelings and their influences on oneself and other individuals is self-awareness. In order to control them and empower oneself, it includes using what one knows about their feelings. Emotional self-management refers to the capabilities to evade emotional state or reframe appraisals in order to encourage oneself or attain equanimity. Social awareness expands the feelings of one to include understanding the feelings of other individuals. Relationship management is about sustaining strong, effective, and lasting relationships by managing one's and other emotions such that it does not generate conflicts, or even if it does, the ability to manage conflicts that might ensue relationships is equally relationship management [11].

In addition to the components of EI, there are basically three models that underpinned EI namely: the Trait, Ability, and Mixed EI Models. The Trait EI Model postulates that through preparation, programming, and therapy, emotional intelligence can be acquired and established over a period of time [12]. The Ability EI Model observes emotions as a source of information about the world, the self, and others used by the mind to establish adaptive emotional responses, thinking, and behaviour [8]. EI is considered by the Mixed EI Model as an array of non-cognitive abilities, skill sets, and expertise that affect one's ability to cope with external demands [13].

2. Statement of the Problem

Though theoretical postulations suggest that gender plays a role in EI, nevertheless, this raises queries as to whether or not it holds true for all cases, especially in situations as discovered by [9] and [14], where age and marital status have been found to influence EI. What about cases where people's personal life experiences explain or account for their EI? These are questions that need to be tackled. Generally, there have been a number of studies regarding EI. However, most of these studies have been conducted in the high schools [15,16,17,18] and universities [19,20].

Even in Ghana, these researches have been conducted in the universities [21,22] and the senior high schools [23,24]. Little or no research has been done on pre-service teachers in the colleges of education in Ghana who are being prepared to teach at elementary (primary) and middle (junior high school) levels in Ghana. It is against this backdrop that this study seeks to discover whether gender actually plays a role in pre-service teachers’ EI as advanced by other researchers or whether other factors such as age or personal life experiences and marital status rather influence EI. Consequently, this study was conducted using pre-service teachers from two colleges of education in the Central Region of Ghana.

3. Purpose of the Study

The purpose of the study was to examine gender influence on pre-service teachers’ emotional intelligence at selected colleges of education in Ghana. This was explored by using the two hypotheses formulated to guide the study.

4. Hypotheses

Two hypotheses were formulated to guide this study. They are as illustrated below:

1. H01: There are no statistically significant differences in the mean scores on EI among males and females respondents; single and married respondents; and various age groups of respondents.

2. H02: There is no statistically significant difference between the control and experimental groups on the various components of EI.

5. Theoretical Framework on Gender and Emotional Intelligence

The Psychoanalytic and Sociological Theories of Gender are the two gender theories guiding this research. The Psychoanalytic Gender Theory highlights the cognitive development within the familial transmission model of gender conceptions and behavioural types [2], while the Sociological Theory discusses the social construction of gender roles predominantly at the organisational level [25].

In order to understand socio-demographic factors in boys and girls, the Psychoanalytic Theory posits various mechanisms. It is assumed that both boys and girls initially associate with their mothers [2]. These shifts, however, between the ages of three and five years, and children associate with parents of the same sex. As a consequence of erotic attachment to the opposite-sex parent and envy towards the same-sex parent, identifying with the same-sex parent is believed to overcome the conflict children encounter. This connection creates a lot of stress for children, as they fear the same-sex parent's revenge [2].

Reference [26] adds that in females, for example, the lack of noticeable genitalia fuels the castration concerns of boys. Girls face a more complicated situation because they feel anger at being robbed of a penis, inferiority, and fear of the mother's revenge for their designs on their father [26]. Nevertheless, [27] noted that contradictory interaction is overcome by the association of children with parents of the same sex. Reference [28] clarify that the identification process is represented as one in which children adopt the same-sex parent's qualities and attributes wholesale. Children become sex-typed through this identity process, as identified with the parent of the same sex is greater for boys than for
girls. Boys are thus predicted to be sex-typed more strongly than their female counterparts [28].

Reference [26] state that there is no empirical evidence to support it, although the Psychoanalytic Theory has had a widespread early impact on gender and developmental psychology. There has never been an empirically confirmed consistent association between identifying with same-sex parents and embrace of gender roles [26]. Instead, children are more likely to model their actions after nurturing on socially influential models than after mimicking models in which they have a competing association [26].

A number of reformulations of it have contributed to the lack of empirical evidence for the classic Psychoanalytic Theory. Reference [29] delivers a noteworthy recast in the gender domain. Gender identity starts in infancy rather than during the later phallic period, in the opinion of the authors. Initially, both male and female babies associate with their mother. However, it is expected that identification between mothers and their daughters is greater than between mothers and their sons since the mother is of the same sex as her daughter. Girls continue to bond with their mothers throughout the course of growth and they often merge with them mentally. As a result, the self-concept of the daughter is characterized by mutuality and a sense of attachment that orientates her towards interpersonal relationships. The primary explanation of why women engage in mothering is this interpersonal orientation. They attempt to restore a sense of interpersonal interaction that recalls their relationship with their mother but is absent from their relationships with men in adulthood. This development trend is in contrast to that of boys who are gradually separating themselves from their mothers and identifying themselves as distinct from women. In an effort to create their own separateness and individuation, they begin to disparage femaleness [29].

In comparison to the Psychoanalytic Theory that emphasizes the parent-child same-sex type relationship, the Sociological Theory treats gender as a social construction [25]. In theory, the origins of gender differences lie more in social and institutional practices than in defined features of the parent-child relationship between the person and the same sex [25]. The theory indicates that many gender disparities in social actions are seen as results of labour division between the sexes, which are replicated by socio-structural behaviours regulated by disparate gender status and power [30]. The theory also believes that the parallels between men and women greatly outweigh the variations between them in how they think and act [30]. Reference [31] comments that gender disparities have diminished over time with social shifts in incentive systems and limiting institutional arrangements [31].

Depending on their social status, schooling, race, and occupation, the Sociological Theory neglects the substantial disparities between women and men [32]. The theory argues that the tradition of lumping both men and women into dichotomous categories of gender with men pre-ordained for agentic functions and women for expressive and communion functions actually deepens prejudice and discrimination of gender [32]. The authors advocate that the exaggeration by assumptions of the existence and scale of gender disparities facilitates the social ordering of gender relations rather than serves to explain gender disparity, occupational stratification and segregation, and the placement of women in positions of disproportionately lower status. The theory, seen from this sociological viewpoint, propels the pattern of incentive systems as well as formal and informal constraints and not gender inequalities, but shaping gendered behavioural types and channelling men and women into separate paths of life [32]. Reference [33] add that social controls, families, educational and community resources, as well as the normative environment, do not all people with the same socioeconomic status and who live under the same opportunity systems, act in the same way. Therefore, the challenge is to clarify the socio-structural commonality of adaptational diversity [33].

The Trait EI Model is more process-oriented than outcome-oriented and focuses on the potential for success rather than success itself. Via preparation, programming, and therapy, EI can be taught and developed over a period of time by the key proponent of the model [12]. El is often regarded as a composition of behavioural cross-situational consistencies that are part of personality and measured with inventories of self-report that assess standard behaviour [12]. In addition to the model, [8] add that EI is a constellation of behavioural dispositions and self-perceptions regarding one's ability to perceive, process, and use knowledge filled with emotions. Therefore, Trait EI blends personality elements such as empathy, impulsivity, and assertiveness, as well as social intelligence and personal intelligence elements [8]. Trait EI concerns the self-perceptions of people about their emotional capacities and abilities, characteristics of personality and behavioural arrangements that impair their ability to cope with environmental demands and pressures effectively [34]. Reference [34] reveal that the model can be placed at the lower levels of hierarchies of personalities and calculated by self-reports.

6. Study Design

The Quasi-Experimental Design was employed to structure or design the study. Quasi-Experimental Design is a quantitative research design that does not include the use of random assignment [35]. The Quasi-Experimental design engages two groups in research namely: the experimental and control groups [36]. The experimental group is exposed to a treatment or an intervention, while the control group does not undergo any treatment or even if it does, not as much as the experimental group. Group differences with respect to the dependent variable are noted before the exposure of the experimental group to the treatment. If after the application of the treatment to the experimental group and participants in the group have experienced no changes in the dependent variable, it connotes that there are no observed differences in the dependent variable between participants in the experimental and control groups. Nonetheless, if there are changes in the dependent variable, after the exposure of the treatment group to the experiment, it implies the treatment or intervention has had an effect on the dependent variable [36].
7. Population, Sampling Techniques, and Sample Size

The study population constituted second-year pre-service teachers from the two colleges of education conveniently and purposively selected for the study. The Central Region was conveniently selected through the convenient sampling method. This was because the region was part of the population that was close to hand. The two colleges of education were purposively selected because they are the only co-educational colleges of education in the region. One was earmarked as the experimental group because, conveniently it was closer to the University, where the researchers could have access to resource people to help with the EI intervention, while the other was selected as the control group, which is equally a bit closer to the university and has similar characteristics to the experimental group, geographically and academically.

Second-year students were purposively selected from the colleges as they have more experience in the college of education environment than the first-year students [37]. They were also not graduating students like their counterparts in the third year. Thus, there was easier access to them than third-year students who were on external practice teaching. In view of these, the 299 second-year students in Experimental Group (EG) and the 240 second-year students from Control Group (CG) were purposively selected. This gave a sum total sample of 539 respondents. All second-year students in the EG were purposively selected. This gave a total sample of 539 respondents. The second-year students in the CG were also exposed to the intervention, but not as much as their counterparts in EG.

8. Instrumentation

A questionnaire was employed to elicit primary data. This instrument was developed taking into cognisance the “[38] Emotional Intelligence Test-MSCEIT and [12] EI Inventory”. Whereas, the MSCEIT engages participants in the types of tasks that are thought to employ the four abilities (perceiving, using, understanding, and managing emotions) of EI, [12] proposes that over time, EI and emotional skills grow, evolve over life, relate to one’s performance capacity, are process-oriented, and can be strengthened through preparation.

The adapted questionnaire for the study was developed under the four main components of EI namely; “emotional self-awareness, emotional self-management, emotional social awareness, and emotional relationship management” with 37 items. The scoring guide had five ranks namely: Never (representing 1); Rarely (representing 2); Some of the times (representing 3); Most of the times (representing 4); All of the times (representing 5). Participants indicated how much each statement applied to them by circling the numbers of their choices. The questions were designed as close-ended, in order to employ quantitative analyses.

9. Empirical Evidence and Discussions

Prior to the actual empirical pieces of evidence and discussions, the respondents' demographic variables were presented using descriptive statistics. The Analysis of Variance (ANOVA) statistical tool was employed to ascertain whether or not, there were significant differences among the EI test mean scores for the different categories of demographic variables. The Multivariate Analysis of Variance (MANOVA) was also adopted to compare the various components of EI between the experimental and control group participants. Also, all the assumptions regarding ANOVA and MANOVA usage in analysing data were satisfied.

10. Prior Differences and EI

Section one comprises the results of the demographic characteristics of pre-service teachers and their mean scores derived from the EI Test that was administered to them. Table 1 presents the descriptive statistics of the EI test scores between male and female pre-service teachers.

Table 1. Descriptive statistics on respondents' gender and EI scores

| Gender   | N   | %    | Mean  | Std. Error | 95% Confidence Interval |
|----------|-----|------|-------|------------|-------------------------|
|          |     |      |       |            |                         |
| Male     | 50  | 9.3  | 58.275 | 4.808      | [48.829, 67.721]         |
| Female   | 489 | 90.7 | 57.174 | 2.778      | [51.715, 62.633]         |
| Total    | 539 | 100  |       |            |                         |

Source: Field data, 2017.

The EI for males (58.28, SE = 4.81) and females (57.17, SE = 2.78) seemed to be quite similar, and both were very low. The score range for the EI scale range from 37 to 185, with a mid-point being 111. This, therefore, suggests that the mean scores for both male and female respondents were really low.

In terms of age, Table 2 illustrates that the EI for respondents who were between 15 to 20 years (60.75, SE = 1.94); 21 to 25 years (62.81, SE = 3.12); 26 to 30 years (55.94, SE = 5.21); 31 to 35 years (50.67, SE = 7.44). The results obtained are equally very low.

Table 2. Descriptive statistics on respondents’ age groups and EI scores

| Age Groups | N    | %    | Mean  | Std. Error | 95% Confidence Interval |
|------------|------|------|-------|------------|-------------------------|
|            |      |      |       |            |                         |
| 15-20      | 354  | 65.7 | 60.750 | 1.935      | [56.949, 64.552]         |
| 21-25      | 159  | 28.9 | 62.805 | 3.124      | [56.667, 68.944]         |
| 26-30      | 25   | 4.6  | 55.941 | 5.209      | [45.707, 66.175]         |
| 31-35      | 4    | 0.8  | 50.667 | 7.440      | [36.050, 65.284]         |
| Total      | 539  | 100  |       |            |                         |

Source: Field data, 2017.

The mean EI for married and single respondents are presented in Table 3. Both are again very low, considering the score range on the EI scale. However, single
respondents had a slightly higher score (60.46, SE = 2.81) than the married (54.63, SE = 4.01).

Table 3. Descriptive statistics on respondents’ marital statuses and EI scores

| Marital Status | N   | %   | Mean | Std. Error | 95% Confidence Interval Lower Bound | 95% Confidence Interval Upper Bound |
|---------------|-----|-----|------|------------|------------------------------------|------------------------------------|
| Single        | 50  | 95  | 60.455 | 2.809      | 54.936                             | 65.975                             |
| Married       | 489 | 5   | 54.626 | 4.013      | 46.742                             | 62.511                             |
| Total         | 539 | 100 |       |            |                                    |                                    |

Source: Field data, 2017.

As a mechanism to ascertain the relationship between respondents’ demographic variables and their EI test scores, the one-way Between-Groups ANOVA was used in Section Two to examine if there were significant differences between the mean EI scores for the different categories of demographic variables. After testing for the assumptions, the two null hypotheses (H₀) that were formulated for the study were analysed as follows:

H₀₁: There are no statistically significant differences in the mean scores on EI among males and females respondents; single and married respondents; various age groups of respondents.

Findings from the Levene’s Test shows that there was equality of the Homogeneity of Variances for EI across the groups as illustrated in Table 4 by a p-value (.209) > .05.

Table 4. Levene's test of equality of error variances

|        | F    | df1 | df2 | Sig. |
|--------|------|-----|-----|------|
|        | 1.321| 11  | 497 | .209 |

Source: Field data, 2017, Dependent Variable: EI SCORE.

One of the assumptions underlying Analysis of Variance is that the Homogeneity of Variances (the variance of the dependent variable across the various groups of independent variables) must not be violated. This must be depicted by an alpha value greater than .05. Thus, an alpha value less than .05 suggests that the test for Homogeneity of Variances is not equal, which presupposes that it has been violated [39].

Tests between subjects’ effects of age, gender and marital status are presented in Table 5.

Table 5 depicts that the mean EI scores did not differ significantly across categories of any of the demographic variables as evident with main effect for age groups (F (3, 497)= .91, P= .437 > .05); gender (F (1, 497)= .09, P=.767 > .05); marital status (F (1, 497)=.51, P=.475 > .05). Hence, the EI scores were the same for males and females; all age groups of pre-service teachers; as well as single and married trainees. Implicitly, the pre-service teachers’ demographic characteristics (gender, age group, and marital status) played no role in or did not contribute to their EI. The results on gender and EI thus disregard [29] psychoanalytic assumptions that females are much more sensitive in identifying their emotions and the emotions of others than their male colleagues.

The results rather confirm [32]’s sociological assumption that men and women are similar in the way they think and behave, owing to the social changes that have prevailed over the years in structures and institutions. Hence, social changes have caused gender differences to decline over time [32]. Reference [32] argues that the psychoanalytic postulation that stratifies and assigns differences between men and women rather entrenches gender stereotyping and polarization; gender inequality; occupational stratification and segregation; as well as relegates women to the background. The findings on gender and EI further nullify [40] and [41] posit that women have greater emotional knowledge than men because, they tend to express positive and negative emotions more fluently and more frequently; have more interpersonal competencies, and are more socially adept than men. The results do not also corroborate the researchers’ view that women are more emotional than men from very early ages and that females get meaningfully higher scores than males in emotional intelligence [41].

A close look at the interaction effect (*) between age * gender portrays that (P=.124 > .05), which meant the effect was insignificant. Implicitly, there was no significant difference in the effect of pre-service teachers’ age groups on their EI mean scores for male and female trainees. Likewise, the interaction effect between age * marital status showed no significant effect (P= .974 > .05) between the two variables (Table 5). This also meant there was no significant difference in the effect of age groups on EI scores between single and married pre-service teachers. Significant values greater than .05 depicts no significant relationship or difference between independent and dependent variables, while significant values less than .05 depicts a relationship or difference between variables [39]. Thus, there was no relationship between pre-service teachers’ demographic factors and their levels of EI.

Table 5. Tests of Between Subjects Effects of Age, Gender and Marital Status

| Tests of Between-Subjects Effects | Dependent Variable: PRETEST EI SCORE |
|----------------------------------|-----------------------------------|
| Source                           | Type III Sum of Squares | Df | Mean Square | F    | Sig. | Partial Eta Squared |
| Corrected Model                  | 1820.608*                | 11 | 165.510     | .831 | .609 | .018                |
| Intercept                        | 84539.434                | 1  | 84539.434   | 424.280 | .000 | .461                |
| Age groups                       | 543.023                 | 3  | 181.008     | .908 | .437 | .005                |
| Gender                           | 17.511                  | 1  | 17.511      | .088 | .765 | .000                |
| Marital status                   | 101.659                 | 1  | 101.659     | 510  | .475 | .001                |
| Age * Gender                     | 835.750                 | 2  | 417.875     | 2.097 | .124 | .008                |
| Age * Marital status             | 43.815                  | 3  | 14.605      | .073 | .974 | .000                |
| Gender * Marital status          | .000                    | 0  | .          | .    | .    | .000                |
| Error                            | 99029.235               | 497| 199.254     | .    | .    | .000                |
| Total                            | 2051746.000             | 509|             | .    | .    | .000                |
| Corrected Total                  | 100849.843              | 508|             | .    | .    | .000                |

Source: Field data, 2017.
Since the findings in Table 5 also unearthed that age and marital status played no role in the EI of respondents, they further contradict [9]’s observation that age influences EI. The researcher observes that older people are more aware, wise, and restrained than younger people, which makes them emotionally more intelligent and mature than their young counterparts. In terms of marital status and EI, the findings were also at odds with [14] opinion that married persons have the tendency to be more emotionally intelligent than persons who are single because, married persons are often times involved in moderating conflicts, listening, and sympathising with their partners in order to resolve disagreements over issues such as child training, sexual relationships, financial problems, and other home issues. These issues are often not the major concerns of single persons.

Owing to the quasi-experimental nature of the study, other factors, not necessarily gender, age, and marital status may explain EI. Since respondents’ gender, age and marital status in no way influence their EI, other factors can be considered in explaining the evolution of their EI. For instance, [42] also found that sleep affects emotions. The researcher, for example, reports that undergraduates and adult workers in America who are sleep-deprived bemoan greater feelings of fatigue, anger, and hostility. Less sleep or poor sleep quality can put one in a bad mood because it impairs decision making and makes it difficult to control emotions.

Section Three employs Multivariate Analysis of Variance (MANOVA) to test whether or not there were differences between the control and experimental groups on the various components of EI. It was therefore hypothesized that:

**H3**: There is no statistically significant difference between the control and experimental groups on the various components of EI.  

In order to find the equality of variance, the Levene Test of Equality of Variances was used. Table 6 illustrates the findings on the Levene Test of Equality of Variances.

The Levene’s test indicated that there was equality of variance for all the dimensions, as well as the composite emotional intelligence scores, with the exception of self-awareness that registered ($P=.015 < .05$).

**Table 6. Levene’s test of equality of error variances**

| Components          | F     | df1 | df2 | Sig. |
|---------------------|-------|-----|-----|------|
| Self-awareness      | 5.942 | 1   | 537 | .015 |
| Self-management     | 3.166 | 1   | 537 | .076 |
| Social awareness    | .923  | 1   | 537 | .337 |
| Relationship management | .040 | 1   | 537 | .842 |
| EI Total            | .333  | 1   | 537 | .564 |

Source: Field data, 2017

**Table 7 displays findings of the Multivariate Tests on the difference between the experimental and control groups on the constituents of EI.**

The multivariate test indicated that there was a main multivariate effect of the experimental treatment, on the various elements of EI. Table 7 presents the results of the Multivariate Tests. The Wilk’s Lambda statistic obtained $F(4, 534) = 3.74, P = .005 < .05$, Partial Eta Square = .027. The p-value portrays a significant difference between the experimental and control group schools on the diverse elements of EI. The Partial Eta Square reveals that 2.7 percent is the variance of the diverse constituents of EI explained by the experimental and control EI interventions between the schools.

The Between-Subjects Effect showed that there were significant differences between the experimental and control groups on all the dimensions and the composite emotional intelligence, except relationship management (Table 8). The Bonferroni Adjustment suggests that relationship management was ($F(1, 537) = 3.268; P=0.071 > .0125$, Partial Eta Square = .006). This meant no significant difference existed between the experimental and control groups on relationship management. Nonetheless, significant differences existed between the experimental and control groups for the other dimensions of EI.

The result suggests that Relationship Management doesn’t necessarily depend on EI. In this case, the adjustment prescribes (.05/4=0.0125), where four represents the dependent variables (self-awareness, self-management, social awareness, and relationship management).
Table 8. Test of between-subjects effects

| Source          | Dependent Variable | Type III Sum of Squares | df  | Mean Square | F      | Sig. | Partial Eta Squared |
|-----------------|--------------------|-------------------------|-----|-------------|--------|------|---------------------|
| Corrected Model |                    |                         |     |             |        |      |                     |
| Self-awareness  |                    | 189.048                 | 1   | 189.048     | 10.087 | .002 | .018                |
| Self-management |                    | 277.089                 | 1   | 277.089     | 9.093  | .003 | .017                |
| Social awareness |                  | 496.598                 | 1   | 496.598     | 9.675  | .002 | .018                |
| Relationship management |      | 103.617                 | 1   | 103.617     | 3.268  | .071 | .006                |
| Total           |                    | 3951.281                | 1   | 3951.281    | 11.931 | .001 | .022                |
| School          |                    |                         |     |             |        |      |                     |
| Self-awareness  |                    | 189.048                 | 1   | 189.048     | 10.087 | .002 | .018                |
| Self-management |                    | 277.089                 | 1   | 277.089     | 9.093  | .003 | .017                |
| Social awareness |                  | 496.598                 | 1   | 496.598     | 9.675  | .002 | .018                |
| Relationship Management |      | 103.617                 | 1   | 103.617     | 3.268  | .071 | .006                |
| Total           |                    | 3951.281                | 1   | 3951.281    | 11.931 | .001 | .022                |
| Error           |                    |                         |     |             |        |      |                     |
| Self-awareness  |                    | 10064.636               | 537 | 18.742      |        |      |                     |
| Self-management |                    | 16364.740               | 537 | 30.474      |        |      |                     |
| Social awareness |                  | 27563.372               | 537 | 51.328      |        |      |                     |
| Relationship management |      | 17026.197               | 537 | 31.706      |        |      |                     |
| Total           |                    | 177838.274              | 537 | 331.170     |        |      |                     |
| Total           |                    |                         |     |             |        |      |                     |
| Self-awareness  |                    | 394699.000              | 539 |            |        |      |                     |
| Self-management |                    | 548225.000              | 539 |            |        |      |                     |
| Social awareness |                  | 1003372.000             | 539 |            |        |      |                     |
| Relationship management |      | 678105.000              | 539 |            |        |      |                     |
| EI Total        |                    | 1010250.500             | 539 |            |        |      |                     |

Source: Field data, 2017.

11. Conclusions and Policy Implications

11.1. Conclusions

The evidence suggests that pre-service teachers' gender, age, and marital status in no way, influenced their EI. This, therefore, negates conceptual and theoretical literature arguing that age and marital status as well as gender, in particular, play a role in an individual's EI. Rather, factors such as an individual’s personality and moods, limited stress, engaging in more social activities, adequate sleep, organisational influences, and personal and social competences could have played a role in the evolution of pre-service teachers' EI. The evidence also suggests that there were significant differences in the EI component scores between the experimental and control school groups. This meant the experimental school group obtained higher EI scores compared to their counterparts in the control school group because they had witnessed more exposure to the EI training or intervention than their counterparts who had limited exposure to this training.

11.2. Policy Implications

As a measure to incorporate EI skills in the pre-service teachers, the administrative and teaching staff of the colleges of education is encouraged to:

- Incorporate EI into the curriculum of the colleges. This will enable Pre-service teachers to be trained and acquire some fundamentals on EI that will have a positive bearing on their general academic performance and outlook of life or attitude towards life as a whole.

- Incorporate seminar presentations and more fieldwork into the curriculum of the colleges. This measure will enable the trainees to build their writing, reading, and presentation skills, as well as self-confidence. The fieldwork or teaching practice will give room for the external supervisors of the trainees to assess trainees, how well they conduct themselves emotionally during their fieldwork or practice. All these mechanisms will go a long way to boost their EI.

- Counsel students to: work on their personalities and moods positively; build their personal and social competences; avoid stress by getting enough rest, eating balanced diets, and engaging in more social activities, as measures to evolve their EI.

- Pre-service teachers on their part are also to be exhorted to:

  Read (newspapers, journals, educative books) widely and listen to news, to broaden their horizon and boost their EI and not to be limited to their subject areas as this will encourage them to be myopic. Interact extensively with people from all walks of life and other cultures within Ghana and out of Ghana to learn more about cultures and broaden their minds and scope of EI. Take initiatives to personally work on their personalities and moods by avoiding stress, getting enough rest, eating balanced diets, and engaging in more social activities.

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