

The Relationship Between Prosocial Behaviour and Emotional Intelligence in Teachers

Simona D. Cakirpaloglu^{1*}, Irena B. Cakirpaloglu², Soňa Lemrová³, Barbora Kvapilová⁴

¹⁻⁴Faculty of Education, University Palacky in Olomouc, 77900, Czech Republic

ABSTRACT

The aim of this survey was to determine whether there is a relationship between prosocial tendencies and the level of emotional intelligence in a sample of teachers. The partial goals were to determine whether there is a difference in the score of emotional intelligence and prosocial tendencies between male and female teachers. The research group consisted of 997 primary and secondary school teachers, of whom 109 were men (average age 44.9 years) and 889 women (average age 45.17 years). The Czech translation of the Trait Emotional Intelligence Questionnaire - Short form, TEIQue-SF was used to determine the emotional intelligence score. The second method applied in the research is the abbreviated form of the Prosocial Personality Battery (PSB). The correlation coefficient calculation shows a significant negative relationship between the level of emotional intelligence and age, and the length of work experience. This result was found both within the group as a whole and for the individual groups of men and women

Keywords: Emotional intelligence; Teacher; Emotional intelligence scale TEIQue-SF, Prosocial tendencies

INTRODUCTION

The construct of emotional intelligence has been dealt with from several different perspectives. Emotional intelligence may be conceived as the capacity to identify emotions, understand them and influence one's psychological state (Mayer & Salovey, 1997). Another eminent representative of the concept of emotional intelligence was Goleman (1997), who defined emotional intelligence as the ability to identify one's own emotions and the emotions of others, and to distinguish their motivational influence. Emotional intelligence can be viewed via the prism of two models. The first of these is the "ability model", represented by Mayer, Salovey, & Caruso (2000), which is based on an evolutionary perspective on the adaptive function of emotions in human life, as a means for comprehending the world. According to the authors, emotional intelligence is the ability to recognise emotional information, the ability to perceive, evaluate, express and express one's own emotions, to generate such feelings which enable the individual to think and act constructively, which assist in emotional and intellectual growth (Gázquez, Pérez-Fuentes, Díaz-Herrero, GarcíaFernández, & Inglés, 2015). The second "mixed" model, presented by Goleman (Boyatzis, Goleman, & Rhee, 2000) and Bar-On (2000), describes emotional intelligence as a set of stable personality traits, as socially emotional skills and motivational aspects, which assist in the processing of emotional information. The mixed model incorporates a number of abilities associated with prosocial behaviour (socially emotional competence and stable personality traits), e.g. the capacity for adaptability, interpersonal competence, in which positive emotions are a predisposition for prosocial behaviour (Ruvalcaba-Romero, Gallegos-Guajardo, & Fuerte, 2017; Ashton, Paunonen, Helmes, & Douglas, 1998; Bekkers & Wierking, 2011).

Interest in emotional intelligence is also linked to interest in the factors that support, develop and influence it. These factors include frequently observed variables such as sex, age and the duration of work experience. However, the results of the individual investigations that have incorporated the variables are not generally unequivocal. A common assumption is the association of a higher degree of emotional intelligence with the female sex. Women are attributed greater sensitivity to both positive and negative emotions (Grossman & Wood, 1993; Grewal & Salovey, 2005). A biologically superior capacity to assess their own emotions and those of others has been described in women. The parts of the brain that focus on managing emotions, including the processing of emotions, may be different in men and women (e.g. Baron-Cohen, 2005; Craig et al., 2009). If we focus on emotionality from a social perspective, the persisting different socialization of men and women may have an influence. In comparison with women, men are taught to control and hide their emotions, predominantly those emotions that are associated with distress, guilt and fear (Sánchez et al., 2008). These and similar

Corresponding Author: simona.dobesova@upol.cz

<https://orcid.org/0000-0003-4443-2035>

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considerations and observations have led to presuppositions concerning the greater capacity of women for expressing both positive and negative emotions naturally, and the attribution of greater social aptitude to women (e.g. Hall & Schmid Mast, 2008). Among the studies that have demonstrated a higher level of emotional intelligence in women as compared to men we may include for example the work of Mayer & Salovey (1997), the authors of the ability model of emotional intelligence, as well as the study by Schutte et al. (1998), which also demonstrated a substantial difference between the sexes in favor of women. A considerable superiority in the general emotional intelligence score and in the capacity for perception and regulation of emotions in women as compared to men was also confirmed in further research by the authors Ciarrochi, Chan & Caputi (2000). As indicated above, there have also been studies which did not demonstrate a difference in the emotional intelligence score between men and women, or in which only variations in certain aspects relating to emotional intelligence were found (Ardolino, 2013). Similar conclusions were reached by Saklofske, Austin & Minski (2003), who found only an insignificant difference in the average emotional intelligence score between the sexes. Nevertheless, they demonstrated significant differences in the understanding of emotions and in social aspects in women, and better utilization of emotions in specific problem-solving tasks in men. Similarly, no significant difference between the level of emotional intelligence in men and women was demonstrated by the study by Meskhat & Nejati (2017). However, what was demonstrated here was a higher score for women in interpersonal relationships, empathy and self-esteem.

LITERATURE REVIEW

Prosocial behaviour

Among professionals in the field there continues to be a large interest in studying the variables that could potentially explain prosocial behaviour. This constitutes behaviour that is presented not only in the form of helping others, solidarity, tolerance or willingness to co-operate, but also behaviour thanks to which it is possible to avert and limit undesirable, antisocial manifestations (Redondo et al., 2016). The term prosocial relates to behaviour that is viewed as positive, with the aim of benefitting other people (Batson et al., 2003). Prosocial behaviour is a complex phenomenon, which individuals manifest without it necessarily being their professional obligation (Bierhoff, 2006). Prosocial behaviour has been defined as voluntary behaviour aimed at helping others, regardless of the specific goal. It incorporates such behavioural acts as helping, comforting, sharing and co-operating. Other examples of prosocial behaviour include sharing toys, food, care of the sick and emotional support (Valor, 2006). A range of factors can be traced as backing up prosocial behaviour, such as sympa-

thy and empathy (Eisenberg & Fabes, 1998; Beck et al., 2004). Prosocial behaviour incorporates the convictions and feelings of the individual in question, which provide him or her with motivation to manifest behaviour oriented towards others (Auné et al., 2014). In people with a high level of emotional and social competence, who are capable of perceiving not only their own emotions but also the emotions and needs of others, there is a greater basis for willingness and the capacity to establish and develop satisfactory relationships with others, thus increasing the likelihood of prosocial behaviour (Diazgranadose, 2014). When observing the correlation on the level of cultural variables (individualism vs. collectivism) and prosocial behaviour in humans, the results of certain studies demonstrated a positive relationship between collectivism and prosocial behaviour (Parboteeah et al., 2004; Lampridis & Papastylianou, 2014). The significance of prosocial behaviour is also augmented by the fact that prosocial behaviour is attributed a key role in the prevention of criminal and antisocial behaviour (Llorca et al., 2016).

Sex, similarly, to emotional intelligence, is considered a significant determining factor of prosocial behaviour or prosocial tendencies. Here also there is a general assumption that women are more oriented than men towards helping others. Regarding gender roles, it is generally expected that women are more perceptive, empathetic and prosocial than men, in whom by contrast greater independence and orientation towards success is expected (Eisenberg, Fabes & Spinrad, 2006; Seefeldt, 2008). The stronger tendency of women towards prosocial values is attested to for example in the study by Williams (2003), which describes the finding that companies in which women are more highly represented in administrative positions engage more in voluntary contributions than firms with a lower proportion of women in such positions. In men a greater readiness to engage in prosocial behaviour is described in certain conditions (situational influences), for example if a situation is evaluated as risky, if help requires an act of high performance or if the individual is being observed (Dovidio, Piliavin, Gaertner, Schroeder & Clark, 1991). The greater emphasis on the social-psychological value of altruism on the part of women has been described by the authors of another study (Dietz, Kalof & Stern, 2002) with reference to the different socialisation of men and women. Women are socialised in order to take an interest in and care for others, whereas men are rather encouraged to engage in mutual competition.

Different conclusions which do not confirm gender differences in prosocial behaviour have been produced by other studies, for example research conducted on Chinese adolescents (Ma, 2005), in which an identical level of prosocial behaviour was positively associated with both men and women. The results of the study by Abdullahi and Kumar (2016) into students at an Indian university demonstrated only minor

partial differences in prosocial behaviour between male and female students. In most dimensions of prosocial behaviour, no significant differences were found (in five out of seven dimensions). Gender differences were not confirmed for example also in the study by Kumar et al. (2016).

Emotional intelligence and prosocial behaviour

Emotions and the emotional intelligence associated therewith are considered to represent the basis for the conduct that is generally termed prosocial behaviour. This concerns behaviour that can be traced back to various motivations steeped in prosocial values (Eisenberg, 1986, 2000). Some theories of emotional intelligence consider prosocial behaviour an attribute of emotional intelligence (Mayer, Heisee & Salovey, 1995). A mutual correlation between prosocial behaviour and emotional intelligence has been described by several authors whose research aim was oriented towards capacities and stances of people such as empathy and altruism, which are considered significant aspects of prosocial behaviour (Cob & Mayer, 2000; empathy, Ashkanasy & Daus, 2008). This is documented for example by the results of investigations in which a positive correlation was demonstrated between emotional intelligence, altruism and a type of behaviour that could be considered prosocial (behaviour on the basis of a decision made on the basis of one's own free will – sportsmanship, organizational compliance, organizational loyalty, conscientiousness, individual initiative etc.) (Charbonneau and Nicol, 2002; Chin, Anantharaman & Tong, (2011). A significant relationship between emotional intelligence and prosocial behaviour has been confirmed by several studies, e.g. by Afolabi (2013), who demonstrated that a high emotional intelligence score increased the tendency towards prosocial behaviour. Other variables such as sex or age did not manifest a significant correlation with prosocial behaviour. Other studies have indicated that a high level of emotional intelligence is associated with prosocial behaviour, as well as parental affectivity and positive relationships with peers. Conversely, a low level of emotional intelligence is associated with self-destructive and deviant behaviour (Brackett, Mayer & Warner, 2003).

Emotional intelligence is generally considered a mediating factor (moderator) between prosocial behaviour and an individual's moral identity (Cote, DeCelles, McCarthy, Van Kleef & Hideg, 2011). In other studies, a correlation has been demonstrated between behaviour incorporating prosocial factors and emotional intelligence, simultaneously with the observation that a prediction of antisocial behavioural factors reduces the emotional intelligence score (Petrides, Sangareau, Furnham & Frederickson, 2006). A significant positive relationship between empathy (which is generally regarded as a motivating factor for prosocial behaviour)

and psychological well-being, emotionality and sociability has been described by authors of research focusing on the relationship between emotional intelligence (individual traits and the global trait of emotional intelligence) and prosocial behaviour (Jena, Bhattacharyya, Hati, Ghosh & Panda, 2014). Similar positive correlations between empathy and personal well-being have been documented also by other studies (e.g. Thomas et al., 2007).

METHOD

Research hypotheses

In our survey, we focused on a target population of primary and secondary school teachers in the Czech Republic, who filled out the TEIQue-SF and Prosocial Personality Battery (PSB) questionnaires in electronic form. We were interested in determining whether there was a significant relationship between the total score of prosocial personality battery and the level of emotional intelligence. Based on the research, we formulated two hypotheses:

- H1:** There is a significant positive correlation between total PSB score and emotional intelligence.
- H2:** Women record higher emotional intelligence scores than men.

Data Collection

The research group consisted of 997 primary and secondary school teachers, of whom 109 were men (average age 44.9) and 889 were women (average age 45.17). The data gathering took place in the period around the turn of 2022. The research was conceived as a quantitative type of investigation. The data was gathered electronically via the system Google forms, which met the methodological-research criteria for relevance of online investigation (e.g. high level of security, possibility of archiving and coding during data transmission, access via generated password). In this research a Czech translation of the Trait Emotional Intelligence Questionnaire – Short form, TEIQue-SF for adolescents and adults was used, which is based on the above-described model of emotional intelligence proposed by Petrides et al., 2006. The Czech version was created by means of a translation of the Slovak version of this questionnaire, which was adapted by L. Kaliská, E. Nábělková & V. Salbot, 2021). The authors of the Slovak version refer to its good psychometric qualities and also state referential Slovak percentile norms. The questionnaire comprises a total of 30 items, which respondents evaluate on a seven-point scale, ranging from complete disagreement to complete agreement. We verified the reliability of the test with the aid of a Cronbach's alpha coefficient ($\alpha=0.74$).

Second in the research using the applied method is the abbreviated form of the Prosocial Personality Battery, compiled by a team of authors headed by L. A. Penner (Penner, Fritzsche et al., 1995). This questionnaire measures various personality dispositions, which are manifested in the form of prosocial thoughts, feelings and behaviours. The structure of the questionnaire, which contains 30 items, corresponds to L. A. Penner's model of the prosocial personality, and seven dimensions or subscales. In the administration of this method, respondents are offered a total of 30 statements, and their task is to assess the degree of accuracy with which they describe their personality. A five-point Likert scale is used for this purpose: 1) strongly disagree; 2) disagree; 3) don't know; 4) agree; 5) strongly agree. An exception applies in the case of the self-report altruism (SRA) subscale, in which it is the task of respondents to express their opinion relating to the presented items on a five-point scale: 1) never; 2) once; 3) more than once; 4) often; 5) very often.

Statistical analysis

In the first phase, the data was processed into xls format, which is compatible with the program MS Excel 2013, into which it is possible to export the data obtained via electronic questionnaires. In the second phase a formal and logical check of the data was conducted. Further data processing took place with the aid of the statistical software STATISTICA version 13. An analysis of the distribution of the individual results confirmed a normal distribution of data, and for this reason parametric statistics were selected, especially descriptive statistics and a t-test. The tests were conducted on a 5% level of significance. In order to determine the difference of the degree of emotional intelligence of the TEIQue-SF questionnaire, a two-sample Student t-test was used, on a level of significance of 0.05. A Pearson correlation coefficient was used to determine the correlation between the emotional intelligence score and age and length of work experience.

FINDINGS

In the following text we present the results of the investigation into emotional intelligence in teachers. The calculation of the correlation coefficient (see Table 1) demonstrated a significant correlation between the degree of emotional intelligence and age, length of work experience and length of employment in the current post. On the basis of this finding, we accept hypothesis H1 (There is a significant positive correlation between total PSB score and emotional intelligence). The calculations of the correlation coefficient demonstrated that emotional intelligence in teachers decreases significantly with higher age. Also, in teachers with longer pedagogical experience, there was a significant decrease in the overall emotional intelligence score (Table 1).

Table 2 presents the calculation of the t-test, which points to the fact that no significant difference exists between the mean value of men and women in the TEIQue-SF and PSB questionnaire. Based on this finding, we can reject hypothesis H2 (Women record higher emotional intelligence scores than men) (Table 2).

DISCUSSION AND CONCLUSION

Emotional intelligence has been defined as an important psychological construct in mental and physical health criteria (Mérida- López, Quintana- Ortiz, & Extremera, 2022). EI can help define the quality of personal and professional relationships and overall career and life success (Lucas-Mangas, Valdivieso-Léon, Espinoza-Díaz & Tous- Pallarés, 2022). It is therefore a crucial factor that is required in individuals pursuing a career in the teaching profession. In our survey, we aimed at mapping levels of trait EI in Czech primary and secondary school teachers. The findings showed that the length of work experience and age were negatively associated with trait EI for the group, as well as for both groups of men and women. The results indicate possible burnout effects that might play a role in lower trait EI scores in older teachers with longer work

Table 1: Pearson correlation coefficient of Emotional Intelligence (EI), Prosocial Behaviour (PSB), age and length of work experience in cohort of teachers

Variables	Emotional intelligence	Age	Length of teaching experience	PSB
Emotional intelligence	1	-.1234**	-.1250**	.1531**
Age	-.1234**	1	.8200**	.0079
Length of teaching experience	-.1250**	.8200**	1	-.0061**
PSB	.1531**	.0079	-.0061	1

Table 2. Gender differences in EI and Prosocial Behaviour (PSB)

Variables	Mean female	Mean male	Value	SV	p	Valid female	Valid male	SD female	SD male
PSB	62.95	64.00	-1.06	995	0.28	889	108	9.59	10.22
EI	119.1	120.21	-0.87	995	0.37	889	108	11.59	9.44

experience. Perceived stress, subjective happiness (Mérida-López, Quintana-Ortiz, & Extremera, 2022), perceived social support and levels of burnout (Mérida-López, Quintana-Ortiz, & Extremera, 2022) may all be reflected in lower trait EI scores. The study by Cece et al. (Cece, Guillet-Descas & Lentillon-Kaestner, 2022) suggests that teacher burnout could be prevented by the ability of teachers to manage their own emotions. These reflections ensue from the results not only of theoretical models which presume that emotional intelligence is a skill or type of intelligence, and that it can be modified under the influence of age and experience (Mayer & Salovey, 1997), but also from the results of conducted emotional intelligence training sessions, in which an increase was achieved in the observed respondents (e.g. Slaski & Cartwright, 2002). Although professional studies predominate which confirm a positive relationship between the length of work experience and emotional intelligence (Amirian & Behshad, 2002), our results do not support this finding. Questions therefore remain regarding which variables are salient for the formation of emotional intelligence, how we are to characterize emotional intelligence, and which of the theoretical conceptions to prefer, which is also reflected in possibilities and ways of measuring emotional intelligence. Based on our findings and in line with prior research, we suggest a further investigation into the relationship between trait EI and the above-mentioned factors. Findings about possible relationships between these variables and trait EI may shed light on the complexity of the teaching profession with all its demands, pressures and joys, and help set up future prevention programs to ensure the well-being of teachers as part of their professional development

LIMITATION AND SUGGESTION

There are several limitations of this study that should be mentioned. The first of these is the online data collection, which, despite all the precautions that were taken, may bias the results in a certain way. At the same time, this is a cross-sectional study in which changes in the variables cannot be observed over time. In conclusion, this study has yielded several important findings. First, the findings showed that the length of work experience and age were negatively associated with trait EI for the group, as well as for both groups of men and women. The results indicate possible burnout effects that might play a role in lower trait EI scores in older teachers with longer work experience. If we consider the studies, which support a correlation between health (in connection with age) and the level of emotional intelligence, then it is possible that the results of our cohort may have been influenced by this factor. Another possibility is that the method itself, in which a scale similar to other self-assessment scales is used, is susceptible to a certain distortion. In conclusion, it is necessary to emphasize that research and observation of emotional intelligence remains an important theme, especially within the field of education,

since every personality disposition or skill has an influence on human behaviour and performance, and schools are no exception. These results should be seen as an introductory study to this broad topic, which merits further attention.

We consider monitoring of age, and therefore also the attendant length of work experience in connection with emotional and prosocial skills (incorporated within the construct of emotional intelligence and prosocial behaviour) in teachers to be significant as a consequence of the ageing of the population, in which age remains an important variable in workplaces. At the present time, with an ageing labor force, it is ever increasingly relevant to clarify the impact of age on emotional work (directing and managing the feelings and behaviour of the individual).

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