Teacher's Trait Emotional Intelligence and Leadership Style: do they depend on

educational attainment and teaching experience?

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Declaration

I hereby declare that this submission is my own work and to the best of my knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been submitted for the award of any other course or degree at NU or any other educational institution, except where due acknowledgement is made in the thesis. This thesis is the result of my own independent work, except where otherwise stated, and the views expressed here are my own.

Signed:

Date:

NUGSE RESEARCH APPROVAL DECISION LETTER

The NUGSE Research Committee reviewed the project entitled Contribution to teachers' emotional intelligence and leadership style to school children's academic performance in secondary schools by Gulnara Malikova and decided:

☒ To grant approval for this study

☐ To grant approval for this study subject to minor changes, to be signed off by supervisor

☐ To request additional information/clarification to determine approval

☐ To refer the application for IREC review

Approval: This approval is effective for the life of the study. However, any time you change any aspect of your project (e.g., recruitment process, administering materials, collecting data, gaining consent, and changing participants) you will need to submit a request for modification to the NUGSE Research Committee. Make sure to address all of the information requested on the request for modification form(s). Please be advised that in some circumstances, changes to the protocol may disqualify the project from approval.

Sincerely,

NUGSE Research Committee

ACKNOWLEDGEMENTS

Abstract

The relationship between Emotional Intelligence and Leadership has received much attention of researchers in past decades. However, researchers and educators still know little about the nature of relationship between trait emotional intelligence (Trait EI) and styles of leadership. Thus, the main topic of this study is to explore whether there is any connection between secondary teachers' trait emotional intelligence and their style of leadership, and whether that connection also depends on teachers' educational qualifications and /or years of teaching experience. Quantitative correlational explanatory research design has been used to explain the relationship between the variables (teachers' trait emotional intelligence, style of leadership, teachers' educational qualification, and length of teaching experience). The sample for this study consists of 105 teachers, selected by convenience sampling, from six secondary public schools that are located in Astana. Participants' Style of Leadership was identified through the Leadership Styles Questionnaire (Northouse, 2011). Trait Emotional Intelligence of participants was measured using the TEIQue - Short Form (Petrides & Furnham, 2001). All data were collected during one week and then analyzed through computer software SPSS.

Key words: *styles of leadership, trait emotional intelligence, educational attainment, teaching experience, teacher leadership.*

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Chapter 1. Introduction

This thesis focuses on the relationship between teacher's Trait Emotional Intelligence (Trait EI), Leadership Style,Educational Attainment and Teaching Experience within six state secondary schools of Astana (Kazakhstan). More specifically, it thoroughly investigates whether there is any link between teachers' Trait EI and Leadership Style, and whether they are affected by teachers' Educational Attainment and Teaching Experience or not.

Background of the Study

There is evidence that a major reason ofpupils' academic success and performanceis teacher, teacher's effectiveness, beliefs, teaching methods, and personality traits (Goddard, Wayne Hoy, & Anita Hoy, 2000; Rowan, Chiang, & Miller, 1997; Trigwell, Prosser, & Waterhouse, 1999; Wenglinsky, 2002). According to I-Hua Chang (2011), "teachers conduct the actual learning practices; therefore, their beliefs, strategies, and classroom management directly influence student learning" (p. 491). Hence, there are lots of studies in the academic community concerning about the factors that affect teachers' effectiveness (Benor & Leviyof, 1997;Goldman et al. 1997;Koutrouba, 2012; Krisko, 2001). One of such factors is a level of Emotional Intelligence (EI), which is regarded as the key to effective Teacher Leadership (George, 2000; Goleman, Boyatzis, & McKee, 2002; Higgs & Aitken, 2003; Kerr et al., 2006; Palmer et al., 2001). As Leithwood, Lewis, Anderson, & Wahlstrom (2004) claim, teacher's Leadership is one of the main school-related factors for improving student learning and school effectiveness; as well as teachers' Emotional Intelligence (Goleman, 1995; Mayer & Cobb, 2000; Parker et al, 2004). In other words, a school of the 21st century requires a leader with high Emotional Intelligence to be adaptable to rapid changes and be able to transform, restructure and redesign the schools. As Singh and her colleagues (2012) posit, "Emotional

Intelligence is important for a leader because their Leadership Style has a big influence on the climate of the organization and performance of subordinates" (p. 123). As a result, the relationship between Emotional Intelligence and Leadership has become a rapidly growing concern for educators and researchers within the past decades (Bar-On, 1997;Esfahani & Soflu, 2011; George, 2000; Goleman, 1995; Mukhuty, 2013; Palmer et al., 2001; Petrides & Furnham, 2000).

Research Problem

Emotional Intelligence is often associated in the academic community with the ability of person to perceive, use, understand, and manage his/her own and other people's emotions (Mayer and Salovey, 1997). Since 1995 this concept has received the attention of researcherswho have found that Emotional Intelligence contributes to effective Leadership (George, 2000;Hayashi & Ewert, 2006; Heifetz &Linsky, 2002; Jones & George, 1998; Lopez-Zafra, Garcia-Retamera, &BerriosMartos, 2012; Moore, 2009). George (2000) indicates that "Emotional Intelligence may contribute to a leader's ability to successfully implement changes in an organization" (p. 1044).In addition, Esfahani and Soflu (2011) found in their study that those managers who were able to understand and control their own emotions "feel high commitment toward the organization and induce self-confidence in subordinates, so are respected and accepted by employees" (p. 2384). Furthermore, it is believed that leaders with high Emotional Intelligence have "a better chance of avoiding such mistakes themselves as well as being attuned to when others are interfering with idea evaluation and modification" (Zhou & George, 2003; p. 561). In other words, Emotional Intelligence is an essential feature of effective Leadership and necessary for building up warm relationships with other people. Besides, high Emotional Intelligence of leaders helps to create warm climate in organization, that is very essential for organization's success and effectiveness.

However, despite a large body of literature about Emotional Intelligence, Teacher Leadership, and Leadership Styles, there is still a lack of research about how far these factors interrelate with each other and whether they depend on such things like Teaching Experience or Educational Attainment. Hence, there is a significant need in studies, focusing on the attributes that affect level of Trait Emotional Intelligence and choice of defined Leadership Style. In addition, such kind of research has not been conducted in Kazakhstan' schools, and, consequently, there is a knowledge gap in terms of Kazakhstan context.

Research Purposes

The current research study has addressed the following key objectives:

- Investigating the nature of relationship between teachers' Trait Emotional Intelligence and Leadership Style they use in work with pupils. It identifieswhether the style of teacher's Leadership depends on their Trait Emotional Intelligence or not;

- Investigating the nature of association between teachers' Trait EI and Leadership Style;and Educational Attainment withTeaching Experience. It identifies whether such attributes of teachersas Trait Emotional Intelligence and Leadership Style depend on their Educational Attainment and Teaching Experience or not.

These purposes of the study are caused by the following reasons. It is clear that teachers have great impact on students in terms of their academic performance; attitude to learning process; motivation to study; and educational outcomes as a whole. As Penrose, Perry, and Ball (2007) declare, "differential teacher effectiveness is a strong determinant of differences in student learning" (p. 107). Teacher effectiveness, in turn, is an issue of teacher's Leadership, because,as Harris (2005) argues, "it [teacher leadership] is essential to school development and improvement" (p. 206). Angelle and DeHart (2011) describe teacher leaders as those who are "focused on student learning, seek lifelong learning for

themselves, use facilitation and presentation skills, engage other in shared vision and meaning, develop and maintain relationships, work with a sense of integrity, and plan and organize" (p. 3). Besides, Teacher Leadership is closely linked to the concept of Emotional Intelligence, and, as Gardner and Stough (2002) posit, "managers, who have high Emotional Intelligence, implement necessary balance between organizational position and occupational skills through identifying the capabilities of their subordinates and conveying their expectations clearly" (as cited in Esfahani & Soflu, 2011, p. 2385).However, there is little information about Trait Emotional Intelligence, which is defined by Petrides, Furnham, and Adrian (2000) as "a constellation of emotional self-perceptions located at the lower levels of personality hierarchies" (p. 162). Furthermore, there is only a few number of studies focused on the link between Trait Emotional Intelligence and Leadership Style of teachers in secondary schools. Therefore, one of the purposes of this study is to investigate the nature of relationship between Trait EI and Style of Leadership among teachers of secondary schools.

The second purpose of current thesis responds to the scarcity of literature about factors affecting teachers' Trait Emotional Intelligence and Leadership Style.For instance, Schutte et al. (1998) find that females have significantly higher Emotional Intelligence rather than males. However, the results of study conducted by Petrides et al. (2000) have indicated that males score higher on self-estimates of Emotional Intelligence than females. In addition, as Penrose, Perry, and Ball (2007) note, "emotional intelligence should increase with age and experience as is the case with other cognitive abilities" (p. 110). However, they found that those participants who were young and in lower social status positions had lower Emotional Intelligence than those who were older and in higher social status positions (Penrose, Perry, & Ball, 2007). Consequently, as they concluded, "the relationship between age, length of experience, current status, and Emotional

Intelligenceremain unclear and further research is warranted" (p. 110). That is why examining the nature of association between teachers' Trait Emotional Intelligence, Leadership Style, Educational Attainment, and Teaching Experience is the second objective of this thesis.

Significance of theStudy

This thesis attempts to make its contribution towards a better understandingof Trait Emotional Intelligence and Leadershipin Kazakhstan context.Moreover, there is a dearth of published research on factors that affect Trait Emotional Intelligence and Leadership Styles. Undoubtedly, there are several studies about the relationships of social status, Emotional Intelligence, age, the length of Experience, and gender. However, as mentioned before, this field is still not examined clearly, and there is a need in further investigation. Finally, if the study confirms strong relationships between the variables, it can help to understand the underlying causes of teachers' Emotional Intelligence and Style of Leadership they choose to work with pupils. Therefore, this study may be useful to theMinistry of Education, secondary school administrators, school leaders, and educators to create or revise policies based upon the results. Administrators may even decide to bring changesin their policies. Moreover, the current study may assist school leaders in the better selection of teachers that is in fact beneficial. Finally, the study may benefit secondary school teachers, as the results of the study indicate that a change is needed in their own practices. Thus, this study will hopefully generate new knowledge and give rise to new theoretical and practical implications.

Research Questions and Design

The following research questions are stated in the current study:

- What is the effect of teachers' Trait Emotional Intelligence on theirLeadership Style (authoritarian, democratic, or laissez-faire)?

- Is there anycorrelation between teachers'length of Experience and their Trait Emotional Intelligence?

- Does the length of teachers' Experience have any impact on their Style of Leadership?

- Is there any relationship betweenteachers' Educational Attainment andtheir Trait Emotional Intelligence?

- Does teachers' Educational Attainment affect theirStyle of Leadership?

To address the research questions, quantitative correlational explanatory design was used, because it "provides an opportunity to explain the relationships among variables" (Cresswell, 2012, p. 337). The variables of this study: Trait Emotional Intelligence; Style of Leadership; Educational Attainment; and the length of teachers' Experience. I admit that mixed method of research could better apply to this study, for instance, to address the issue of teachers' perceptions of Emotional Intelligence and their roles as Leaders. However, one of the limitations of this study was a shortage of time to collect data, and hence, mixed method could not be useful. On the other hand, quantitative correlational design gives an opportunity to figure out a precise extent of relationships between the variables, if there is any.

Definition of the concepts

The main concepts used in the study are Trait Emotional Intelligence and Teacher Leadership that are defined in the following way.

According to Brackett et al. (2004), Emotional Intelligence refers to the ability "to perceive and accurately express emotion, to use emotion to facilitate thought, to understand emotions, and to manage emotions for emotional growth" (p. 1389). There exist three models of EI, which are described in detail in Chapter II "Review the Literature". The current study focuses mainly on the trait model of EI, which is, according to Petrides et

al.(2000), "a constellation of emotional self-perceptions located at the lower levels of personality hierarchies" (p. 162). The main distinction between trait EI and other models of EI (there are three conceptual models of Emotional Intelligence that will be described in the literature review) is in the measurement method, because trait EI is measured through self-reported questionnaires.

Teacher Leadership, as Harris and Lambert (2003) note, is "a model of leadership in which teaching staff at various levels within the organization have the opportunity to lead" (as cited in Grant, 2010, p. 402). In literature, Teacher Leadership is usually investigated within a democratic distributed leadership. The main reason for it is that Teacher Leadership "can be used as a strategy to democratize schools" (Grant, 2010, p. 402). In this sense, teachers serve as those who promote and develop democratic climate in the classroom, and in the schools. Besides, as Harris and Muijs (2005) state, Teacher Leadership refers mainly to "enhanced leadership roles and decision-making powers to teachers" (p. 16). Thus, the concept of Teacher Leadership is actively debated topic, especially in terms of what roles it involves and what kind of teachers can be the leaders.

Organization of the Thesis

The current thesis consists of six chapters. The first chapter is the Introductory, which is the current chapter, where the research topic, research problem, purpose of the study, its significance, the research questions and design, and some theoretical framework are clearly stated.

The second chapter is Review of the Literature that provides an overview of previous research and literature, which are necessary to understanding and interpreting the results of this study. In addition, this chapter introduces the theoretical framework of thecurrent study in order to give a full description of the key concepts and theories used in the study and their evolution within time.

The third chapter is Methodology, which fully describes methods used in the study. Besides, the chapter includes information about research site, target population and sample selection, measurement instruments, data collection procedures, data analysis procedures, and limitations of data collection process. Methodology chapter thoroughly describes the setting where data was collected and gives an explanation of reasons why the site was chosen for research. Furthermore, it provides detailed information about the tools chosen to collect data and explains the reasons of such a choice. Finally, it contains information about NUGSE Research Committee Ethics Approval process.

The fourth chapter focuses on the findings of the study. This chapter consists of two main sections: descriptive analysis; and inferential analysis. Descriptive analysis section provides detailed information about data. It also includes information about participants, i.e. their demographic characteristics gender, educational attainment, and subject/s they teach. Also it deals with the information gained through the research like average level of Trait Emotional Intelligence, frequently used Style of Leadership, and average length of Experience. In other words, it gives a full description of the participants. The second section, inferential analysis, presents information about statistical analysis which shows the results of correlation between the variables, and comparison of groups of the variables.

The fifth chapter is Discussion, which gives a detailed interpretation of the results mentioned in the previous chapter. It includes a wide range of evidence that convincingly support the findings of the study; including arguments from literature as well as my own opinions and interpretations. In addition, the chapter fully answers the questions posed in the beginning of the current research, explains how the results support the answers, how the answers fit in with existing knowledge on the topic. Apart from this, this chapter deals with implications to the results of this study.

Finally, last chapter is Conclusion, which clearly summarizes major findings of the study and gives information about limitations of the study. The chapter also includes information about weaknesses of this study and gives recommendations for further researchers, interested in the current topic, or similar to it.

Chapter 2. Review of the Literature

This literature review will address the theoretical areas of the current research related to the relationship between teachers' Trait Emotional Intelligence, their length of Experience, Educational Attainment, and Style of Leadership. More specifically, this study aims to examine the relationship between teachers' Trait EI and Leadership Style; and to investigate whether teachers' Trait EI and Leadership Style are affected by teachers' Educational Attainment and period of Experience.

To address these objectives, this study states the following research questions:

- Does teachers'Leadership Style (authoritarian, democratic, or laissez-faire) depend somehow on their Trait Emotional Intelligence?

- Is there any relationship between teachers' length of Experience and their Trait Emotional Intelligence?

- Does the length of teachers' Experience have any effect on their Style of Leadership?

- Is there any association betweenteachers' Educational Attainment andtheir Trait Emotional Intelligence?

- Does teachers' Educational Attainment have any impact ontheirStyle of Leadership?

Review of the literature on the topic is organized in four sections. The first section ("The Nature of Emotional Intelligence and Its Relationships to Other Intelligences") provides a historical overview of the concept of Emotional Intelligence and explains its distinction from other types of intelligences through existing literature. Full information about the roots of the concept and its connection with other intelligences is provided in this section of the chapter.

The second section ("The Conceptual Models of Emotional Intelligence") will focus on literature about existing approaches to the concept of Emotional Intelligence and thoroughly describes them. In addition, the section focuses on the Trait model of Emotional Intelligence, giving a full explanation about its distinction from other models of EI.

The third section ("The Concept ofTeacher Leadership") reviews literature focusing on Leadership as a concept and presents several empirical studies concerning about Teacher leadership as an important way to improve school effectiveness. There is information about the perception of Leadership and, particularly, of Leadership in classroom, or Teacher Leadership.

Finally, last section of the chapter is "Relationship between Emotional Intelligence and Leadership", whichaims to review the literature concerning about the relationship between Emotional Intelligence and Leadership. There is ample evidence in literature pointing to the fact that Emotional Intelligence affects the leaders and way they influence the others. Moreover, level of Emotional Intelligence has an impact on style the teacher chooses to work with pupils. Besides this, the section includes information about different styles of Leadership such as transformational, transactional, and laissez-faire, which are the same as the models of democratic, authoritarian, and liberal leadership, proposed in the questionnaires. Empirical studies focusing on these styles of leadership and their connection with Emotional Intelligence are also thoroughly reviewed in the section.

The Nature of Emotional Intelligence and Its Relationship to Other Intelligences

Intelligence as a concept has always attracted the attention of researchers. According to Wechsler (1958), intelligence is "the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment" (p. 3). However, as John Mayer and Peter Salovey (1990) stated, "the notion

that there are different types of intelligence has been a part of intelligence field almost since its inception" (p. 187). In 1920 Thorndike distinguished three types of intelligence: abstract, or *verbal intelligence*, mechanical, or *synthetic intelligence*, and *social intelligence*. The roots of the concept of emotional intelligence date back to the construct of *social intelligence*.

By social intelligence Thorndike meant the ability to "act wisely in human relationships" and "produce adequate behaviour for the purpose of achieving a desired goal" (as cited in Crowne, 2009, p. 149). Later, Moss and Hunt (1927) described social intelligence as "the ability to get along with others" (p. 108). Even though the social intelligence was difficult to study, the interest to the topic rapidly grew. Following Thorndike, Howard Gardner introduced his theory of *personal intelligence*, based on the construct of social intelligence, which was comprised of person's both *interpersonal intelligence* and *intrapersonal intelligence* (1983). As Gardner (1999) described, "interpersonal intelligence denotes a person's capacity to understand the intentions, motivations, and desires of other people, and, consequently, to work effectively with others" (p. 43). On the contrary, "intrapersonal intelligence involves the capacity to understand oneself, to have an effective working model of oneself – including one's own desires, fears, and capacities – and to use such information effectively in regulating one's own life" (1999, p. 43). In two decades Mayer and Salovey distinguished two parts of social intelligence – *emotional* and *motivational intelligences* (1990). They defined Emotional Intelligence as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (1990, p. 189). Motivational intelligence, in turn, was described by them as intelligence that "involves understanding motivations such as the need for achievement, affiliation, or power, as well as

understanding tacit knowledge related to those motivations" (1996, p. 90). Thus, it is obvious that Emotional Intelligence and motivational intelligence, proposed by Mayer and Salovey as the subsets of social intelligence, are closely aligned with Gardner's concepts of intrapersonal intelligence and interpersonal intelligence.

The Conceptual Models of Emotional Intelligence

Since the early 1990s the concept of Emotional Intelligence has become a vital part of disputes among researchers even though there is quite a large body of academic research on it (Bar-On, 2001; George, 2000; Humphrey et. al., 2007; Masud Al Noor, 2011; Mayer & Geher, 1996; Neophytou, 2013;Schutte et. al., 1998). There currently exist three main conceptual models of Emotional Intelligence described below.

The first one belongs to John Mayer and Peter Salovey (1990), who considered Emotional Intelligence as a cognitive ability, or a 'pure' intelligence. This model of Emotional Intelligence is defined by researchers as the *ability-based model of EI*. Mayer and Salovey (1997) described Emotional Intelligence as "a set of interrelated abilities that help people to effectively deal with their own and others' emotions" (p. 10). This set includes the abilities to perceive emotions, to use emotions, to understand emotions, and to manage emotions (1997).

Another interpretation was given by Goleman, whose bestselling book *Emotional intelligence: Why it can matter more than IQ* (1995) popularized the concept of Emotional Intelligence and made it one of the most debated topics in the scientific community. According to Goleman (1995), Emotional Intelligence is a set of characteristics such as "being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope" (p.34). In other words, Goleman's model of EI includes not only a set of cognitive abilities, but also the combination of personality traits,

which can be learned and developed further by a person. In his opinion, the construct of EI is comprised of five competencies: *self-awareness, self-regulation, self-motivation, empathy,* and *handling relationships* (1995). This model is very close to the model of Bar-On who defined Emotional Intelligence as "a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands" (1997, p. 14). Thus, Goleman and Bar-On both defined Emotional Intelligence as a combination of emotional and social competencies. That is why their model is often described as the *mixed model of EI*.

A clear and compelling distinction between two constructs of Emotional Intelligence - cognitive abilities and personal traits - were given by Petrides and Furnham (2000) who evidenced that Emotional Intelligence can be conceptualized and validly measured as either ability or a personality trait. They stated that ability-based construct of EI (or cognitive-emotional ability) refers to the ability to perceive, process and utilize information, whereas trait EI (or emotional self-efficacy) is defined as "a constellation of emotional self-perceptions located at the lower levels of personality hierarchies" (2000, p. 162). It is important to understand that the Trait EI and the ability EI are two different constructs of Emotional Intelligence which are measured in a different way; hence, they have different meanings. The Trait EI is measured through self-report questionnaires, whereas the ability-based model is measured through other kinds of questionnaires. Thus, the main distinction between these two models of EI is in the method used to measure the construct.

The emergence of the Trait EI model has caused the explosion in the number of its measures (Bar-On, 1997; Boyatzis et al., 1999; Salovey et al., 1995; Schutte et al., 1998). However, most of these measures were either poorly designed or concentrated mainly on

the cognitive abilities rather than on personality traits. In 2001, Petrides and Furnham introduced the instrument focusing primarily on Trait EI – Trait Emotional Intelligence Questionnaire (TEIQue). The instrument is predicated on the trait EI theory and model, which describes Emotional Intelligence as a personality trait. The latest version of the full TEIQue form includes 153 items, providing scores on 15 facets, four factors, and global trait EI. The facets of the questionnaire are: adaptability, assertiveness, emotion perception, emotion expression, emotion management, emotion regulation, impulsiveness, relationship skills, self-esteem, self-motivation, social competence, stress management, trait empathy, trait happiness, and trait optimism (as cited in Davey, 2005, p. 306). According to Petrides (2011), the TEIQue is better than other EI-related questionnaires due to three main reasons: "first, it offers a direct route to the underlying theory of trait emotional intelligence; second, it provides comprehensive coverage of the trait EI sampling domain; and, third, it has greater predictive validity" (p. 663). In fact, the TEIQue has quite a good reliability and validity (α is about .85), so it is generally considered as a good scientific instrument to measure the Trait Emotional Intelligence. In addition to the full form version, there are various forms and translations of the TEIQue, including short forms.

The current study focuses on the Trait model of Emotional Intelligence, which can be measured by self-report inventories. In order to measure participants' trait EI short form of the TEIQue was used. In fact, researchers' interest in the topic of Emotional Intelligence has generated other debates focusing on whether EI predicts life success, has any relationships with Leadership, academic success, organization success, and so on. Some researchers examined the relations between Emotional Intelligence and academic performance, while some of them tried to find out the impact of EI on Leadership in organizations. As mentioned above, this study examines the relationship between Trait Emotional Intelligence and Leadership Style of teachers in secondary schools. Therefore,

next section of the chapter is devoted to the complex concept of Leadership, and particularly leadership in classroom, or Teacher Leadership.

The Concept of Teacher Leadership

The concept of Leadership is one of the most popular in modern society. Lots of books, papers, and research are written on this topic. For the majority of people, leadership is a person's particular role of responsibility s/he takes for something. In other words, a leader is the dominant person and the relationship is often regarded as a one-way process: one person leads, while the others follow (Spicker, 2012). In much of the literature, leadership, according to Spicker (2012), is "a virtue – a set of features, characteristics or behaviors that are generally approved of, even if the outcomes may not be" (p. 43). However, there are still numerous disputes among researchers in the scientific community about what leadership really is, what it refers to, what it is comprised of, and what characteristics make an effective leader (Barker, 2001; Bass, 1990; Gardner, 1998, 2006; Northouse, 2007; Spicker, 2012).

According to Gardner (1998), leaders are "individuals who are able to affect significantly the thoughts, feelings, and/or behaviors of other persons" (p. 204). Another definition was given by Harry Tomlinson (2004) who believes that "effective leadership is more about personal authenticity and at times recognizing personal fundamental flaws which limit leadership capacity" (p. 118). Later Spicker (2012) pointed out that "charisma, and the ability to persuade, influence and motivate are presented as the means to effective leadership, generally regardless of circumstances" and "leaders are people who cope when others do not" (p. 43). Thus, there are several classes of definitions of leadership. Some researchers describe it as a process of intentional influence of ones to the others, while other researchers regard it as a set of personal characteristics like self-confidence, charisma, creativity. In addition, for the majority of lay people the concept of leadership is

seemed to be aligned with management. However, lots of researchers clearly distinguish these two concepts – leadership and management. Regarding it, Hafford-Letchfield et al. (2008) argued that "management is about implementation, order, efficiency and effectiveness, whereas leadership is concerned with future direction in uncertain conditions" (p. 34). Following him, Spicker (2012) claimed that "even if we accept that leadership is the more exciting, more adventurous, hotter younger brother of management, leadership still requires people to be in a position to exercise those qualities, and effective management requires people to respond to and adapt to their circumstances" (p. 35). More specifically, leaders are people who lead others through their inspiration and motivation, while managers are people who give orders and control their implementation and quality of work, but do not concern about people's needs and emotions.

In 1983, Sara Lawrens Lightfoot's book '*The good high school'* was published, where she stated that "an essential ingredient of good schools is strong, consistent and inspired leadership" (p. 323). As Donaldson (2006) explained, here leadership is understood as "the process which brings about change in the organization and which mobilizes members to think, believe, and behave in a manner that satisfies emerging organizational needs, not simply their individual needs or wants or the *status quo*" (as cited in Grant et al., 2010, p. 403). In other words, leadership is regarded as a way to help organizations to stay stable, preserved, and safe in the conditions of rapidly changing society and to adjust to these changes. Since then, the concept of leadership has become also applicable to educational organizations, and the term of 'teacher leadership' has emerged and become popular.

As York-Barr and Duke (2004) have pointed out, the central idea of teacher leadership is that "teachers rightly and importantly hold a central position in the ways schools operate and in the core functions of teaching and learning" (p. 255). Gunter (2005),

in turn, states that the theory of teacher leadership can be used "as a strategy to democratize schools" (as cited in Grant, 2010, p. 402). In this sense, teacher leadership is perceived as an important feature of successful and effective school, which can promote democracy within the school, and hence, affect schoolchildren's academic performance.

Silva, Gimbert and Nolan (2000) claim that there are three main waves in evolution of the perception of teacher leadership. During the first wave, teachers arediscussed as the servant leaders, because they serve the roles of managers, whose main responsibility is to fulfill school operations. In the second wave, teacher leadership focuses more on instructional leaders, as teachers have roles of staff developers, curriculum leaders, and mentors of new teachers. Finally, the third wave has recognized teachers as "central to the process of 'reculturing' schools" and those who "hold a central position in the ways schools operate" (York-Barr & Duke, 2004, p. 255). The third wave has caused a great change in the perception of school improvement and teachers as instructional leaders, because it was realized that effective school improvement can be caused solely through the organizational culture that "supports collaboration and continuous learning and that recognizes teachers as creators and re-creators of school culture" (York-Barr & Duke, p. 260).

The third wave of teacher leadership's evolution, described by Silva et al. (2000), is well reflected in Childs-Bowen, Moller, and Scrivner's (2000) perception that "teachers are leaders when they function in professional learning communities to affect student learning; contribute to school improvement; inspire excellence in practice; and empower stakeholders to participate in educational improvement" (as cited in York-Barr & Duke, 2004, p. 260). Grant et al.'s more succinct view defines teacher leadership as "a model of leadership, in which teaching staff at various levels within the organization have the opportunity to lead" (2010, p. 401). Another important dimension of teacher leadership

was given by Pellicer and Anderson (1995), who argued that teachers are responsible for

"initiation and implementation of planned change in a school's instructional program,

supported by the various constituencies in the school, that results in substantial and

sustained improvement in student learning" (p. 16). In this sense, they understand the issue

of teacher leadership through the lenses of instructional leadership. However, they stated

that instructional leadership is not necessarily about the role of school's principal; "rather,

instructional leadership must come from teachers if schools are to improve and teaching is

to achieve professional status" (p. 16).

To sum up, the conceptions of teacher leadership described above highlight the

roles of a teacher as not only a professional teacher, responsible for teaching and learning,

but also as a professional developer, an effective mentor, an action researcher, and

decision-maker. Besides that, teacher as a leader is a key player affecting school

environment and culture. However, as York-Barr and Duke (2004) state, "the concept of

teacher leadership has not been clearly or consistently defined" while "it is a unique form

of leadership not necessarily vested in a formal hierarchy or role description, it also is

legitimately grounded within the boundaries of several other leadership theories" (p. 263).

Another question regarding teacher leadership is what kind of teachers may act as

leaders. The majority of literature on this topic claims that leader-teachers are mainly those

who have a significant teaching experience, who are well-recognized among colleagues,

and are known as professional teachers (Katzenmeyer & Moller, 2001; Snell & Swanson,

2000; York-Barr & Duke, 2004). After conducting the research Acker-Hocevar and

Touchton (1999) concluded that "the influence of teachers in the system is a combination

of how well they know how to work the system, their perceived expertise, the influence

afforded them, the collective agency of the group, and the norms within the school district"

(as cited in York-Barr & Duke, 2004, p. 267). As York-Barr and Duke pointed out, those

teachers who are successful in classroom have more chances to become a leader and it can be easily explained though the fact of successful teachers are more respected and trusted by their colleagues (2004).

Finally, the issue of the factors and conditions affecting teachers' leadership is also very important to examine. There is significant evidence in literature that such factors as school culture, collaboration among colleagues, relationships between school principal and teachers are very essential and can influence leader-teachers (George, 2000; Humphrey, 2002; Johnson, 2008; Wong and Law, 2002). However, besides these external factors there are also some personal factors as individual's traits, perceptions, values that also affect teachers' leadership and leadership style. One of such factors is leader's emotions and level of emotional intelligence, which is often closely tied with effective leadership and vividly discussed within the last two decades (Antonakis et al., 2009; Goleman, Boyatzis, & McKee, 2013; Masud Al Noor, 2011; Palmer et al., 2001). Therefore, the next section of this chapter reviews the literature concerning about the relationship between emotional intelligence and leadership.

The Relationship between Emotional Intelligence and Leadership

Different research efforts were sent to investigating the relationship between emotional intelligence and leadership (Antonakis, 2009; Cavazotte et al., 2011; Esfahani, 2011; George, 2000; Goleman, 1995; Gooty et al. 2010; Hamidi and Azizi, 2012; Heifetz & Linsky, 2002). As Jennifer George (2000) pointed out, those leaders "who are high on emotional intelligence will be better able to take advantage of and use their positive moods and emotions to envision major improvements in their organizations" (p. 1040). In addition, Heifetz and Linsky claim that "leaders must learn to address emotional as well as conceptual work" (2002, p. 116). Thus, effective leadership is stated to depend on emotions and feelings we experience and sometimes they can influence our decisions we

make day by day as leaders. Obviously, there are lots of different classes of emotions we can feel, for instance, emotions can be motivating, or de-motivating, inspiring, or on the contrary, negative and disruptive. These emotions can predict the actions of a person, for instance, if his/her current emotions are positive s/he is likely to be more favorable, helpful, and well-intentioned. However, besides managing his/her own emotions, leaders also should be able to recognize emotions of others - of the followers. Furthermore, as George (2000) claims, "leaders need to be able to distinguish between the emotions their followers are actually experiencing, their real feelings, and the emotions they express" (p. 1041). In fact, the majority of people aware that there are some situations where they are compelled by rules to hide their real emotions and they do so. However, it is really important for a good and effective collaboration of the colleagues, for a fruitful working process, to be able to recognize and understand real emotions of the others. Moore (2009) points out to the fact that due to emotions people can build good relationships with the others, based on trust and cooperation and leaders "can display social awareness, develop collaboration, understand the loss that people experience during the change process and display skill in addressing issues and solving problems" (p. 22). As Bin Sayeed and Mera Shanker (2009) claim, "leaders are most likely to lead their followers if they have insights into the needs, values, and hopes of their followers" (p. 596). Therefore, a good leader is often a person who can recognize his own as well as others' feelings, understand them, use them rightly and manage them, or, in short, who has a high level of emotional intelligence. According to Moore (2009), leaders who "possess high levels of EI are more skillful in leading change and cultivating commitment among their staff" (p. 23).

The ability to manage emotions and handle relationships with the others is also very important in education, where teachers work with children who are very emotional and sensitive to the emotions of the others. To quote Moore (2009), school administrators that

"have emotional intelligence will not only have stronger relationships with their colleagues, teachers, parents and students, but may be more effective in leading change and initiating school reform" (p. 26). This statement refers to school leaders, i.e. school principals; however, it is also applicable to those teachers who are regarded as leaders among their peers, or colleagues.

Esfahani and Gheze Soflu (2011) investigated the relationship between emotional intelligence and transformational leadership of the managers of physical education in Golestan state. They defined transformational leaders as those who "pay attention to the needs and motivations of their subordinates and improve personal, group and organizational needs by cooperation based morale and provide new opportunities for organization by identifying effective methods for doing the job" (2011, p. 2385). The results of the study indicated that there is a significant and direct relationship between EI and EL of the participants. As they state, "one of the effective factors of productivity, efficacy and job satisfaction of employees in different organizations is leadership style of managers" (p. 2391). This is also applicable to education, where teachers are leaders, whereas students are regarded as followers. Students' productivity, interest in learning, motivation, academic success and activity in lessons partly depend on leadership style of teachers. That is why it is a big issue of education to examine factors affecting teachers' leadership style.

Another research, conducted by Singh, Hii, and Goo Lean (2012), examined the relationship between emotional intelligence and effective leadership among managers in Miri Shipbuilding Industry. They defined effective leadership as "the leader's skills that are capable of motivating and encouraging subordinates to contribute the effectiveness and success of the organization as a whole" (p. 124). In their study Singh and his colleagues used the mixed model of EI, which belongs to Goleman (1995) and is comprised of the

combination of personal and social competencies: self-awareness, self-regulation, motivation, empathy, and social skills. Singh et al. predicted that there was a positive relationship between all these competencies of EI and effective leadership. Hence, effective leadership served in their study as the dependent variable, while the competencies of emotional intelligence were independent variables. Close-ended questionnaires, developed on 5-point Likert scale, were used to collect the data from 50 managers reporting to 8 project managers. The EI self-generated questionnaires, based on Goleman's Emotional Competence Framework, and Leadership Practice Inventory Observer (LPI-O) developed by Kouzes and Posner were sent via email to participants. The questionnaires completed by the participants also contained demographic information. There were 58 project managers and line managers who participated in the study, all of them were from eight shipbuilding companies in Miri. The findings of the study show that "overall emotional intelligence has significant correlation with effective leadership and only one dimension of EI, i.e. Motivation (personal competence) has significant positive relationship with effectiveness of leadership" (p. 126). To sum up, the positive association between emotional intelligence and leadership in organizations has been clearly stated in a number of studies; however, this association was not investigated among the teachers of secondary schools.

Hamidi and Azizi (2012) conducted the descriptive-correlative research focusing on relationships between emotional intelligence and leadership styles of principals in high schools of Sanandj city in Iran. The study involved 42 school principals and 252 teachers, selected by proportional stratified sampling. In order to measure variables and collect data the leadership style profile (LSP) and Shrink's emotional intelligence questionnaire were used. The LSP has 32 items that measure two types of leadership style: open styles and closed styles of leadership. The Shrink's EI questionnaire is comprised of 33 items, which

were based on Goleman's model of emotional intelligence. Data was analyzed through SPSS program, using descriptive statistics, Pearson correlation, Independent t test, and One-way ANOVA. As a result, Hamidi and Azizi (2012) found that there was a strong correlation between emotional intelligence and open styles of leadership. By 'open styles of leadership' the authors meant leadership "revolving around teamwork, collaboration, conflict management and influence", whereas "closed style leaders expect immediate compliance with orders, without explaining the reasons behind them" (Hamidi & Azizi, 2012, p. 61). Thus, the study showed that "principals with high emotional intelligence apply open leadership style more and try hard to make enthusiasm among their team members" (p. 66). Another important result is that employees' job satisfaction also depends on a leader's level of emotional intelligence. The higher is a leaders' EI, more is satisfaction of employees.

There is evidence that trait emotional intelligence as well as teachers' leadership style have a great impact on schoolchildren's academic performance (Petrides et al., 2004; Shatzer et al., 2013). Petrides and his colleagues conducted the empirical study that investigated the role of trait emotional intelligence of pupils on their academic achievement with data from national examinations in various academic subjects. Data was collected from 91 pupils of Year 11 in British secondary schools. In order to measure their trait EI they used TEIQue (Trait Emotional Intelligence Questionnaire), which includes 144 items based on a five - point Likert scale. As a result, the findings presented that trait EI did not have significant influence on Maths or Science performance, but moderated the effect on English and overall GCSE (General Certificate of Secondary Education).

As for the effect of teacher's leadership style on academic performance of students, the study was conducted by Shatzer et al. (2013). Their research aimed to investigate the impact of transformational and instructional styles of school principals on pupils' academic

performance; and determine which one is more effective in teaching practice. The study involved 590 teachers in 37 elementary schools in the Intermountain West of the United States. School principals' transformational style of leadership was measured through the MLQ (Multifactor Leadership Questionnaire) and instructional style was measured through the PIMRS (Principal Instructional Management Rating Scale), which were completed by the teachers. Academic performance of students was measured by a criterion referenced test. Results of the study indicate that principals' leadership have a great impact on students' academic success, particularly, instructional leadership. By *instructional leadership* the authors mean the style which focuses on "collaboration among teachers, creating opportunities for professional growth, and the development of professional learning communities" (p. 3); whereas *transformational leadership* in their study refers tofour different practices, such as inspirational motivation, individualized consideration, idealized influence, and intellectual stimulation (p. 3). The findings of the study clearly point to the association between the principals' leadership style and students' academic achievement; however, the role of teachers as leaders is not highlighted in the study.

To conclude, it is clear from the literature review that the topic of emotional intelligence and leadership is still a big concern among educators and researchers. However, there is a scarcity of literature focusing on the nature of relationship between these two concepts, particularly on the trait model of emotional intelligence, among teachers of secondary schools. Moreover, there are not anystudies examining whether they depend on teachers' educational attainment or the length of their experience. On the whole, we can consider that the topic of the relationship between trait emotional intelligence and leadership style of teachers in secondary schools is a novelty for academic community and, hence, can be interesting and significant for teachers, educators, schools principals, and educational researchers.

Chapter 3. Methodology

The topic of emotional intelligence and its connection to leadership have begun to receive widespread attention over the past decades (Boyatzis & Smith, 2012; Goleman, 1995; Goleman, Boyatzis, & McKee, 2002). However, there is little information about whether there is any correlation between teachers' trait emotional intelligence and defined style of leadership in secondary schools of Kazakhstan or not; and whether these traits of teachers can be affected by their educational attainment and length of experience. Consequently, the current study has two main purposes: to investigate the nature of relationship between teachers' trait emotional intelligence and leadership style they use in work with pupils; and to identify whether such attributes of teachersas trait emotional intelligence and leadership style depend on their educational attainment and teaching experience or not.

The following research questions are addressed in this study:

- What is the effect of teachers' trait emotional intelligence on theirleadership style (authoritarian, democratic, or laissez-faire)?

- Is there any correlation between teachers' length of experience and their trait emotional intelligence?

- Does the length of teachers' experience have any impact on their style of leadership?

- Is there any relationship betweenteachers' educational attainment andtheir trait emotional intelligence?

- Does teachers' educational attainment affect theirstyle of leadership?

A quantitative correlational explanatory design was used to answer the questions and address the purposes of the study. This design was selected because it "provides an opportunity to explain the relationships among variables" (Cresswell, 2012, p. 337), which

coincides precisely with the purpose of the study – to examine the nature of relationships between the variables, mentioned above.

The questionnaires, consisting of three parts, were used to collect data in secondary schools of Astana with the primary goal of examining the kind of relationships among the variables. The first part of the questionnaires focused on demographic information about the participants, the second part aimed to measure the participants' level of trait emotional intelligence, and the third part identified the respondents' style of leadership. The data from the questionnaires were collected and analyzed using descriptive and inferential statistics, through SPSS program.

The 'Methodology' chapter provides a full description of the methods and procedures used to conduct the research. The research process and design of the study is explained and described in detail: setting, sample / participants, measurement instruments, procedures, and analysis that were used to complete the study.

The first section of this chapter ("Setting") is about the research site where the research was conducted. A full description of the schools, their location, and conditions of data collection process is given in this section.

The second section of the chapter ("Sample / Participants") provides a general description of the sampling plan that was used in the study. The process of participants' selection from the broader population will be explained in this section. In addition, the description of the respondents will be presented here, including demographic data.

The present chapter will then turn towards the section "Measurement Instruments", which fully describes the instruments, or tools, that were used to collect the data. This section consists of three subsections – "Trait Emotional Intelligence Measurement" and "Leadership style measurement", where the methods used in the study to measure trait emotional intelligence and leadership style are described.

The next section ("Data collection procedures") is devoted to data collection procedures used to conduct the study. The process of data collection and the procedures that were followed throughout the study are explained in this section.

Then it turns to "Data analysis procedures" section, which is about how the data was analyzed, however, the results of the data analysis will be presented more thoroughly in Chapter Four "Results".

Finally, last section ("Limitations") presents a range of limitations appearing during the process.

Setting

All the data collection was carried out in six public secondary schools located in Astana (Kazakhstan). These schools were chosen in a certain way: the first six school principals who let me conduct the study on their school territory were chosen to participate in the research. In fact, not each school principal wanted to be involved in the study, so the process of recruiting schools for the research was not easy and instant. Even though the total number of the participants was only 105, and there was an opportunity to conduct the study in fewer than three schools, I decided to choose more sites in order to make the study more objective. The reason for this was that the study focuses on such notions as trait emotional intelligence and leadership style, and, in my opinion, the style of leadership or level of trait emotional intelligence among the teachers could be the same within the framework of one school. Therefore, it was decided to conduct the study in six schools at least, but initial plan was to recruit about ten schools for the research, however, there was a little hope to do it due to scarcity of time given for data gathering.

The schools were either Russian or mixed (Kazakh and Russian), but it was not a main criterion for the study. Also, the schools were located in different districts of Astana. The majority of the school principals were mostly females; this is very common fact in

educational field in Kazakhstan. Furthermore, the overwhelming majority of the teachers working in these schools were also females. As for schoolchildren, they were ranged in age from 6 to 19 and wear a school uniform, which is not common for all Kazakhstan schools but it relates to each of the schools where the study was conducted. In fact, not all schools have their own uniform for schoolchildren, however if they do it means that the school has a special status in the city.

The data was collected in the same way in all of the schools – the participants gathered in the resource room where they were provided with instructions about the study, its details, the type of questions, about time required for it, and then those who agreed to participate completed the questionnaires. It is described more thoroughly in "Data collection procedures" section. The resource room looks like a small typical classroom containing a table for a teacher, about twenty desks for students, a half-sized chalkboard posted at the front wall, and bookshelves.

Participants

It is obvious that the specified population (unit of analysis) required for the research was teachers of secondary schools regardless of their gender, age, length of experience, social status, teaching subject as well as other factors. Considering the fact that the design of current study is quantitative, a large, representative sample group should have been selected. Additionally, the number of participants in quantitative correlational study that relates variables should be roughly thirty for each variable, according to Cresswell (2012, p. 146). Therefore, the total number of the respondents in my study is 105, even though it was expected to be 150 initially. However, the initial plan failed because of the number of limitations which will be described in the end of current chapter.

The sampling procedure used in the study was probabilistic convenience sampling. In other words, the participants were selected because they were willing to partake in the

study, and because they were restricted only to those schools which agreed to be involved

in the data gathering, i.e. available and accessible. As mentioned above, the first six

schools, which agreed to be involved in the study, were selected unintentionally. The same

was with teachers, who were selected also by a criterion whether they were willing to

participate or not. No participants were recruited outside the volunteer sign-up; they were

not required to give any contact information.

For this study, 105 participants were involved, with 102 females (97.1 %) and three

males (2.9 %). The respondents were from diverse ethnic backgrounds, including Kazakhs,

Russians, and Ukrainians; with different ages, social status, levels of educational

attainment, teaching subjects, and years of experience. Of those participants, almost half

(44.8 %) had been working as teachers for more than 20 years, while close to one third

(29.5 %) of the total sample had a range of experience from 11 to 20 years. Those who

were teachers for less than 10 years worked out at 25.7 % of total number of the

respondents. Additionally, it emerged that about a half of the sample taught Languages and

Literature (54 teachers out of 105); 20 participants taught Geography, Biology, and

History; 14 participants were teachers of Algebra and Geometry; and, finally, only 11

teachers participated in the study as teachers of Physics and Chemistry. There was also a

group of other subjects, such as Arts, Music, and Physical Education, which included six

participants out of 105. As for level of educational attainment of the participants, a massive

90 % had completed undergraduate education, 5.7% had got a postgraduate degree, and a

mere 2.9 % of the respondents had completed vocational education.

Measurement Instruments

This section provides a full description of the tools, or instruments, that were used

to gather the data for study. As mentioned before, this study focuses on the relationships

between Trait Emotional Intelligence and Leadership Styles of teachers in secondary

schools of Astana. Therefore, only two instruments were used in the current study to measure these variables – the questionnaire devoted to Trait EI and the questionnaire devoted to identify the respondents' style of leadership. However, the questionnaire also requires the demographic information about the participants (Appendix A). This section consists of two parts – the first part is about Trait Emotional Intelligence measurement instruments, and the second one is about the tool identifying Leadership Style of the respondents. Information about reliability and validity of the instruments will be provided in "Data Analysis" chapter, because these criterions can be checked only after obtaining results and analyzing them.

Trait emotional intelligence measurement

The Trait Emotional Intelligence Questionnaire– short form, developed by Petrides and Furnham (2001), was used to measure level of teachers' trait emotional intelligence in secondary schools. This is a 30-item questionnaire (Appendix B) designed to measure trait EI and based on the full form of the TEIQue, for which there is a substantial body of research (Furnham, A.;Harvey, N.;Petrides, K. V.;Sevdalis, N., and other authors mentioned in literature review). The Trait EI is measured through self-report questionnaires and it is the main distinction between ability-based model of EI and trait model of EI. The current measurement instrument (TEIQue – short form) includes two items from each of 15 facets of the TEIQue: adaptability, assertiveness, emotion perception, emotion expression, emotion management, emotion regulation, impulsiveness, relationship skills, self-esteem, self-motivation, social competence, stress management, trait empathy, trait happiness, and trait optimism. As Petrides pointed out (2011, p. 663), the short form of the TEIQue can be used mainly "in research designs with limited experimental time, or wherein trait emotional intelligence is a peripheral variable". Participants were given the questionnaire individually, and the process of completion it

took approximately seven minutes. There are other versions of this questionnaire, such as Full Form, Adolescent Form (for ages 13-17), Adolescent Short Form, Child Form, Child Short Form, TEIQue 360 (for peer or 360 degree ratings), and TEIQue 360 Short.

Current version was chosen due to completion time and number of items which were convenient so as not to lose participants' focus. The questionnaire had a seven-point Likert scale, where '1' represented 'Strongly Disagree', and '7' represented 'Strongly Agree'. Some of items in the questionnaire should have been reverse scored.

Leadership style identification

The modified version of Leadership style questionnaire (Appendix C), designed by Northouse (2011), was used to identify style of leadership participants used in interacting with their pupils. This is an 18-item questionnaire with a five-point Likert scale. Initially, the questionnaire was designed for managers, employers, and employees of organizations. Therefore, the statements in the questionnaire looked like "Employees need to be supervised closely, or they are not likely to do their work". However, I decided to modify it in terms of educational field by reversing all words 'employees' in statements to 'students', and words 'employers' to 'teachers'.

In this questionnaire the 5 - point Likert scale was used where '1' also represented 'Strongly Disagree', while '5' – 'Strongly Agree'.

Data Collection Procedures

After identifying the target population and choosing the measurement instruments for my study I had to turn towards the process of data collection. However, before gathering data I needed to obtain approval from institutional review board, which is "a committee made up of faculty members who review and approve research so that the research protects the rights of the participants (Cresswell, 2012, p. 148). Application Form was completed in order to obtain the approval, with a detailed description of the study, its

procedures, with an example of consent form for participants, and evidence that there were not any risks in the research and participants' rights would be protected.

Next step after approval from the Graduate School of Education Ethics Committee was to get permission from the Department of Education in Astana, which is a formal organization governing all public schools in Astana. Therefore, formal letters from the GSE of Nazarbayev University were sent to the Department, with a request to allow conducting the study in public schools of Astana. A positive answer from the Department was received in a week, so this step was completed successfully even though it took quite some time.

As mentioned above, this study was initially supposed to recruit ten secondary public schools. However, only six school principals (*'gatekeepers'*) agreed to be involved in the research, providing entrance to a school, locating participants, and assisting in data collection, despite the permission from the Department of Education.

Thus, data collection began in the middle of March and was completed by April, and the whole duration of data collection process was two weeks that gave me an opportunity to visit each school different dates. As I came to school, all teachers gathered in a resource room and were informed about the purpose of the study, its significance and the benefits for society. They were asked to read and sign two copies of consent forms (Appendix D) if they agreed to participate in the study. The consent forms included information about purpose of the research, instruments for data collection, required time, any risks and benefits, participants' right to withdraw from the study, and my phone number and e-mail if they had any questions or complaints. Those who decided to participate signed the forms and gave me back one copy for it, because the second one was for them. However, there were some teachers refusing to sign and not willing to participate in the study; they were asked to leave the resource room.

After signing the consent forms, the participants were given the questionnaires and were instructed how to complete them. As already stated, the questionnaires consisted of three parts: demographic questions, trait emotional intelligence questionnaire, and questions on identification of participants' leadership style. Completion of the questionnaires took approximately 10 – 12 minutes. Then all the questionnaires were gathered and prepared for analysis.

Data Analysis Procedures

Once data collection was completed the data was unblended. This is when quantitative data from the questionnaires was anonymised and entered into a database created in Statistical Package for the Social Sciences (SPSS). The collected data were analyzed using two methods of quantitative design: descriptive statistics and inferential statistics. The results of analysis were presented according to the research questions, mentioned in the beginning of the current chapter. However, a full description of the respondents and obtained results was given.

Descriptive analysis included information about the proportion of participants in gender, years of experience, teaching subjects, and level of educational attainment. In addition, there was also information about average level of trait emotional intelligence (M = 150.9, SD = 15.3) among the respondents. Trait Emotional Intelligence (trait EI) was analyzed through the variables of years of experience, teaching subjects, and level of educational attainment. For instance, it emerged that the average level of trait EI among the participants who had been working for less than 10 years was 147.78 (SD = 15.5), or trait EI of the respondents with vocational education was 143 (SD = 3), while participants with undergraduate level of education had 150.99 (SD = 15.475). This information is very useful for research, making it more detailed and precise.

The next section of the descriptive analysis deals with the identification of participants' most common leadership style. This variable was also analyzed through period of experience, teaching subject, and level of educational attainment. Gender was not included in such an analysis, because there were only three males out of 105 participants, so it was not a representative sample. Thus, for instance, it emerged that the most common style of leadership among the teachers is democratic one. Besides, the level of participants' trait EI is described through their leadership style to define whether there is any regularity. The results of the analysis are presented in "Findings" chapter.

Inferential statistics includes information about the relationships among the variables, their connection with each other. Groups of variables were compared to each other and explored in detail; some of the results displayed graphically, gaining a complete understanding of the findings.

Limitations

The major limitation of the study is the relatively short duration of data collection period. We had only two weeks and it was a big challenge to get permission from governing organizations; to arrange with school principals about conditions and period of data collection; to gather all the participants in a day suitable for everyone; and to control the whole process.

Secondly, the period of data collection coincided with the vacation period in Kazakhstan's schools, and state holidays. Therefore, it was impossible to conduct the research in schools, because they had a vacation and there were no schoolchildren, and a small number of teachers were at schools. Thus, in fact, I had only a week for data collection period instead of two.

Thirdly, there were some situations, where school principals did not want to give permission to conduct the study in their schools because some other researchers had

already conducted it a few days ago. It means that next time the Faculty should think about directing and sending students to other cities and regions too, because there is a limited number of secondary schools in Astana, but lots of students conducting research.

Chapter 4. Findings

As stated in Introductory Chapter, the study reported here examinesthe relationship between teacher's trait emotional intelligence (trait EI); leadership styles, namely: authoritarian, democratic, and laissez-faire; educational attainment; and length of experience within six state secondary schools of Astana (Kazakhstan). The current study thoroughly investigates whether there are any links between teachers' trait EI and leadership style, and whether they are affected by teachers' educational attainment and years of experience or not.

This chapter provides a detailed description and analysis of the data about teachers' level of trait emotional intelligence and their preference of leadership styles in secondary schools of Astana. As it was previously outlined, teachers of secondary schools have completed two questionnaires – TEIQ-SF of trait emotional intelligence and Northouse's questionnaire of leadership styles.

In an attempt to gain insights into patterns of trait emotional intelligence and styles of leadership among a diverse group of teachers, this chapter therefore presents a series of analyses revolving around the following research questions:

- What is the effect of teachers' trait emotional intelligence on theirleadership style (authoritarian, democratic, or laissez-faire)?

- Is there any correlation between teachers' length of experience and their trait emotional intelligence?

- Does the length of teachers' experience have any impact on their style of leadership?

- Is there any relationship betweenteachers' educational attainment andtheir trait emotional intelligence?

- Does teachers' educational attainment affect theirstyle of leadership?

The questionnaires have been completed by 105 teachers in six state secondary schools of Astana. These questionnaires contain questions about the participants' demographic information (gender, the length of experience, subject/s they teach, level of educational attainment). The second part of the questionnaires measure participants' level of trait emotional intelligence, while the third part of the questionnaires identifies the participants' leadership style.

In addition, levels of participants' trait emotional intelligence will be compared in terms of the years of experience and education level. The same will be done with leadership styles of participants, which will be compared, too.

All data collected during the research was analyzed through SPSS program. The findings received from this analysis are presented in this chapter and will be interpreted and explored in greater depth in the "Discussion" chapter to follow. This chapter is organized in terms of the two main sections – "Descriptive Analysis" and "Inferential Analysis", each one had its own subsections in terms of the specific research questions posed above.

Descriptive Analysis

According to Cresswell, "descriptive statistics will help you summarize, the overall trends or tendencies in your data, provide an understanding of how varied your scores might be, and provide insight into where one score stands in comparison with others" (p. 183). In other words, we need descriptive analysis in order to give a full description of the participants and results of the data.

In this section, detailed information about the participants will be given, such as gender of the participants, their level of educational attainment, subject/s they teach, and period of time they work as teachers. In addition, levels of participants' trait emotional intelligence and style of their leadership, according to results of the questionnaires they

completed will be presented, too. It is necessary to fully understand the data;the type of teachers participated in the study, and their general characteristics. This information will also be useful for further interpretation of the data. This section of the present chapter consists of six subsections according to the independent variables of the research.

Gender of participants

First of all, as it was mentioned above, 105 teachers from different secondary schools of Astana agreed to participate in the study and complete the questionnaires, which had also demographic questions. The participants were selected by convenient snowball sampling that is described in detail in previous "Methodology" chapter. The overwhelming majority of participants (precisely 97.1 %) were females, which amounts 102 people, while only 3 out of the whole number of participants were males. It can be seen from the bar chart given below.

Figure 1. Percentage of Participants by their Gender
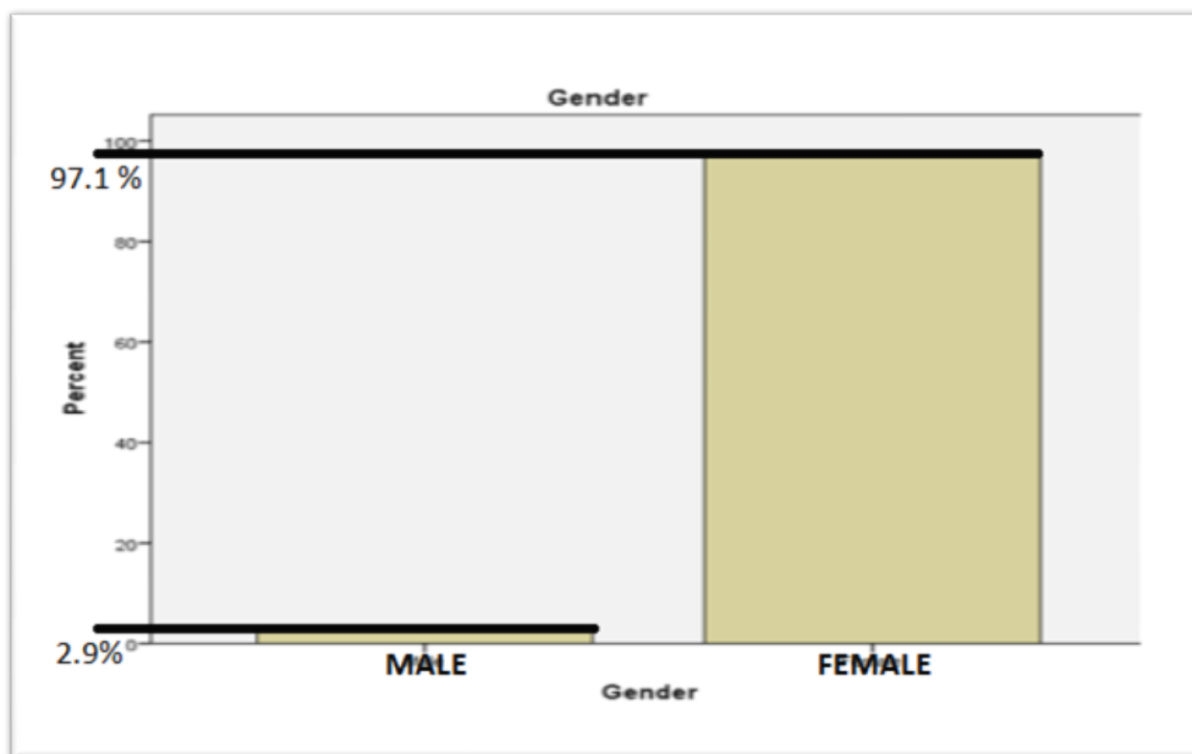
The length of experience

There emerged three groups among the participants – those who have worked for less than 10 years, so called 'young teachers'. The second group consisted of those whose experience was 11-20 years, 'experienced teachers'. Finally, the last group consisted of teachers working for more than 20 years, 'very experienced teachers'. It emerged that the highest number of the participants – 47 people - belong to the group of teachers working more than 20 years (about 44.8 %), while those who have worked for 11-20 years were a bit fewer (about 29.5 %), mere 31 teachers among the participants. Thus, the preferable majority of teachers in schools are those who are 'very experienced'. However, as we see from the pie chart given below, the group having the fewest number of teachers is those who have worked for less than 10 years (27 participants out of 105 which amounts 25.7 %). So, it is obvious, that there is a lack of 'young teachers' in secondary schools. Why it is so, will be interpreted in the "DISCUSSION" chapter.

Figure 2. Proportion of the Participants by their Length of Experience
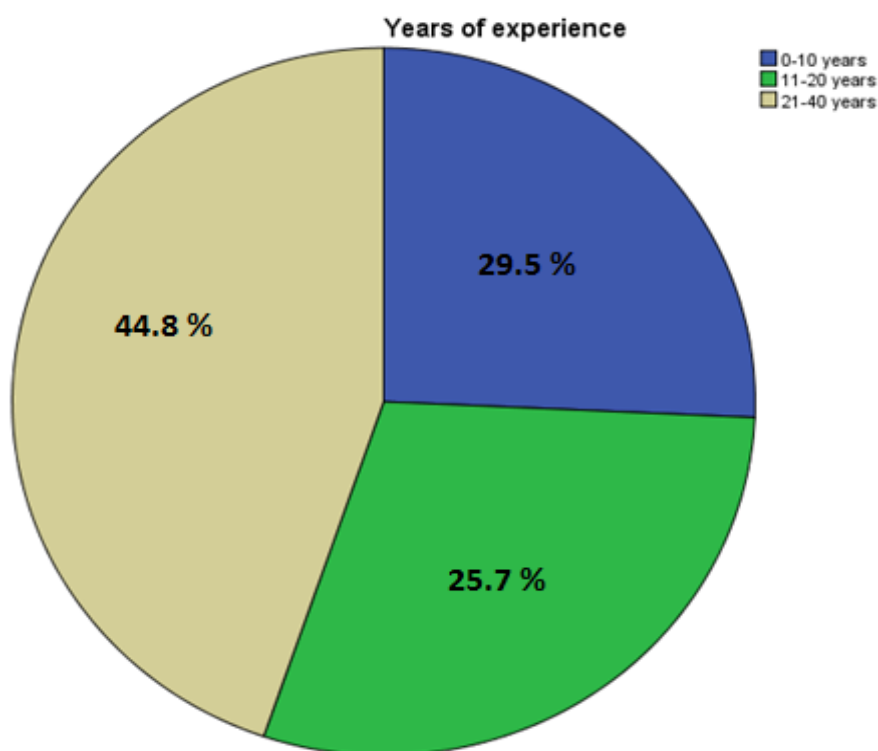
Subject/s taught by the participants

In terms of subjects taught by the teachers participated in the study, most of them teach Languages and Literature - 54 out of 105 (more than 50 %), while only 11 participants (10.5 %) are teachers of Physics and Chemistry. However, it should be taken into account that there are three subgroups in the group of Languages and Literature teachers – Russian, Kazakh, and English languages and literatures – and this explains this high number of participants in the group. The second largest group of participants by subject is those who teach Geography, Biology & History. Their number amounts of 20 people, and this is 19 % of participants. The groups of Algebra & Geometry; and Physics & Chemistry are not far from each other in the number of participants – 14 and 11 teachers respectively. All these subjects were combined into such groups, because there were some teachers among the participants who taught more than one subject, and in general it looked like these combined groups of subjects. Apart from these general groups, there is also a group named "Other", which includes different subjects, like Arts, Computer Studies, Music, etc.

Figure 3. Percentage of the participants by subject they teach
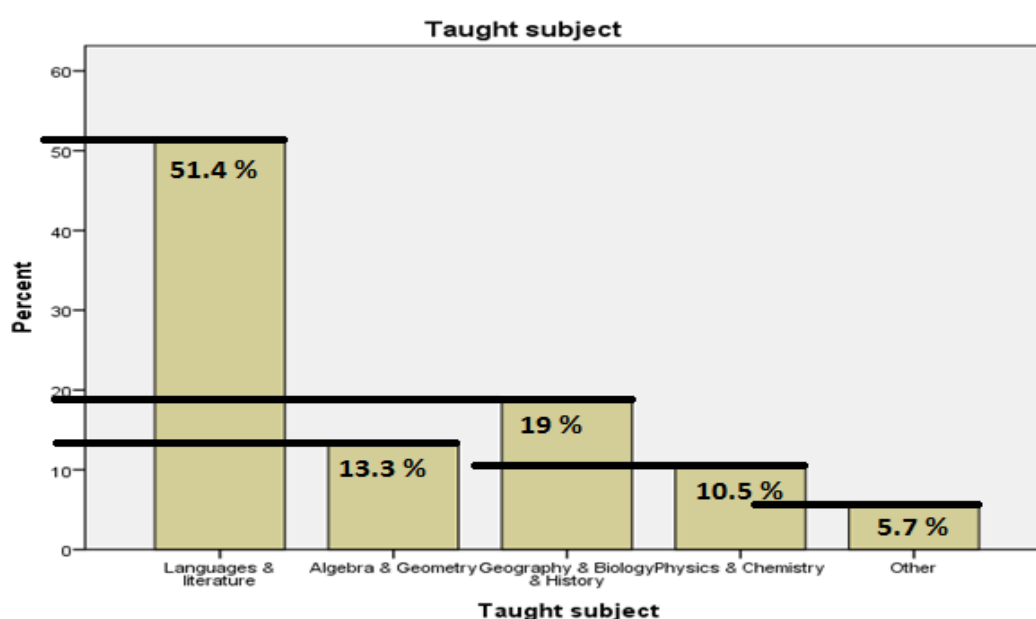
Level of educational attainment

In the given questionnaires three types of educational attainments were offered to choose. They were: vocational education (for those who completed colleges), undergraduate education (Bachelor or Specialist degree), and postgraduate education (PhD degree). According to the data, the vast majority of participants (96 out of 105, which amounts more than 90 % of teachers) have completed general university education, and have a degree of Specialist or Bachelor. As for a postgraduate level of educational attainment, it was completed by mere 5.7 % of participants, which amounts six teachers. However, just a 2.9 % of teachers belong to the group of those who completed only vocational education. It can be seen from the table presented below.

Table 1. Level of the participants' educational attainment

Level of education	N of participants	%
Vocational education	3	2,9
Undergraduate education	96	91,4
Postgraduate education	6	5,7
Total	105	100

Trait emotional intelligence

The participants have also completed the questionnaire of trait emotional intelligence that was a short form of Trait Emotional Intelligence Questionnaire. The questionnaire was made as a seven-point Likert scale asking informants whether they agree or disagree with a collection of thirty statements concerning about their emotions, mood, attitude to different situations, and relationships with close people. They were offered to choose one of the seven options – 'Strongly disagree', 'Disagree', 'Slightly disagree',

'Neutral', 'Slightly agree', 'Agree', 'Strongly agree'. The sample of the questionnaire is presented in the Appendix A.

According to the data, the minimum level of trait emotional intelligence among the participants is 112, while maximum level is 184. Thus, the range is 72. The average level of EI for the participants is 150.9 with a standard deviation 15.3. However, the question is what features distinguish the 'marginal' participants from 'ordinary' those who gained average level of EI. Does it depend on the level of education, or the period of experience, or other factors?

To address this question trait emotional intelligence of the participants was investigated in terms of the length of their experience. As a result, we can see that average level of trait emotional intelligence among participants with less than 10 years experience is 147.8, while for those who have worked for 11-20 years or more than 20 years it is higher – 149.7 and 153.5 respectively. Thus, concluding from the data, there is a gradual increase in the level of trait emotional intelligence as the period of experience is higher. More detailed interpretation of the figure will be given further in the Findings section.

Furthermore, if trait emotional intelligence of the participants is analyzed through their levels of educational attainment I receive another interesting picture. Level of trait emotional intelligence of those who completed vocational education is roughly 143, while participants with undergraduate level of education have 150.9 for average figure of trait EI. Finally, those teachers who have postgraduate education have the average level of trait EI of 153.6. Thus, there is also an obvious increase in trait EI with the level of educational attainment.

Finally, the participants' trait emotional intelligence can be also looked at in terms ofsubject/s they teach. It is really interesting that the highest average level of EI belongs to the teachers of Algebra & Geometry; and Physics & Chemistry – 152.6 and 160.7

respectively. On the contrary, teachers of humanity sciences, such as Languages &

Literature; and Geography, Biology & History have less level of EI – 149.3 and 148.9

respectively.

Table 2. The Participants' average Trait EI by groups

Length of experience	M (trait EI)	Educational attainment	M (trait EI)	Subject of the teachers	M (trait EI)
less than 10 years	147.8	Vocational education	143	Algebra and Geometry	152.6
11 – 20 years	149.7	Undergraduate education	150.9	Physics and Chemistry	160.7
more than 20 years	153.5	Postgraduate education	153.6	Languages and Literature	149.3
				Geography, Biology, and History	148.9

Leadership style

The second questionnaire, about three styles of leadership, as it was mentioned

above, was an adapted version of Leadership styles questionnaire, developed by Northouse

(2001). It is represented as a five-point Likert scale of 18 statements about leadership at

work. However, it was adapted as a leadership at school by changing all 'employer' words

to 'teacher' and 'employee' to 'students'. The main idea of the statements and

questionnaire remained without changes. Thus, the participants had to choose the extent of

their agreement with given statement from the options – 'Strongly disagree', 'Disagree',

'Neutral', 'Agree', 'Strongly agree'. As a result, the questionnaire defined which style of

leadership (authoritarian, democratic, or laizzes-faire) is the most preferable by the

participant.

According to the data, a massive 81 % of the participants, which amounts 85 people

out of 105, prefer democratic style of leadership during their work with schoolchildren. It

emerged from the collected data that only 6.7 % of respondents choose laizzes-faire style

of leadership to work with children, whereas a modest 12.4 % is composed by those who prefer authoritarian style of leadership in work.

Table 3. The Participants' Styles of Leadership

Leadership style	N of participants	%
Authoritarian leadership	13	12,4
Democratic leadership	85	81,0
Laissez-faire leadership	7	6,7
Total	105	100

When these data was compared with the results about participants' emotional intelligence, it emerged that those people whose democratic style of leadership is higher have higher average score on EI. On the contrary, those who prefer authoritarian style in work have lower level of emotional intelligence compared to democratic teachers, but higher compared to the teachers with laizzes-faire style of leadership. It can be seen clearly form the tables given below. The results obtained from the research are discussed in detail further in the next chapter "Discussion".

Table 4. The Participants' trait EI scores by their Styles of Leadership

Leadership style	N of participants	Minimum trait EI	Maximum trait EI	Mean	Std. Deviation
Authoritarian leadership	13	118	170	148, 85	16, 727
Democratic leadership	85	112	184	152, 08	15, 225
Laissez-faire leadership	7	123	152	140, 57	9, 744

To sum up, this section of the chapter has given a whole description of the participants who completed the questionnaire. Thus, one may see that the typical image of

the respondents is female teachers with undergraduate degree, and having more than 20 years of teaching experience. It also means there is a lack of young or male teachers in schools nowadays.

Descriptive statistics are very useful to describe the data in a study, summarizing and simplifying it. However, they are useless in making any conclusions about the data and cannot answer the questions of the study. For that inferential statistics are more useful and can give a clear and visible picture of the data. Therefore, next section presents the results of inferential analysis.

Inferential Analysis

As Cresswell points out, "the basic idea [of inferential analysis] is to look at scores from a sample and use the results to draw inferences or make predictions about the population" (p. 187). According to Pallant (2010, p. 122), "correlation is often used when you wish to describe the strength and direction of the relationship between two [or a group of] variables". In other words, we need to do inferential analysis in order to investigate the nature of relationship between the variables.

Addressing the first question of the research –what is the effect of teachers' trait emotional intelligence on their leadership style (authoritarian, democratic, or laissez-faire) – Pearson correlation was used to analyze the relationship between these variables. As Muijs (2011) states, what Pearson correlation is used for is to "look at whether or not a high score on one variable is associated with a high score on the other". Thus, in this case we need Pearson r to receive information about the nature of relationship between teachers' trait emotional intelligence and style of leadership. The results are reported in the table presented below:

Table 5. Pearson r between Trait EI and Leadership styles

		Authoritarian Leadership	Democratic Leadership	Laissez-faire Leadership
Trait EI				
	Pearson Correlation	-.113	.271	-.074
	Sig. (2-tailed)	.251	.005	.452

As shown in the table, correlation coefficient between trait emotional intelligence and democratic style of leadership (r = .271) is significant at the 0.01 level (2-tailed). Accordingly, there is a significant relationship between trait emotional intelligence and democratic leadership. It means that the teachers with high trait emotional intelligence apply democratic style of leadership more. The result also shows that there is negative relationship between trait emotional intelligence and authoritarian leadership (r = -.113). It means that the teachers with high trait emotional intelligence apply authoritarian leadership less.Finally, as the results show, there is negative relationship between trait emotional intelligence and laissez-faire style of leadership (r = .074). It also means that the teachers with high trait emotional intelligence apply laissez-faire leadership less.

The relationship between participants' length of experience and trait emotional intelligence; and teachers' educational attainment and trait emotional intelligence, was investigated using *Pearson product-moment correlation coefficient*. The results show that there is no relationship at all between the participants' trait emotional intelligence and educational attainment; it is indicated by the correlation(r = .086). A correlation between level of EI and period of experience indicates a small positive correlation (r = .158). The value of r = .125 between EI and teachers' subject also shows a small positive correlation. The results are shown in the table below, but are discussed in detail in next chapter ("Discussions").

Table 6. Pearson r between Trait EI, length of experience, educational attainment, and subject taught by the participants

	Length of experience	Educational attainment	Subject they teach
Trait EI			
Pearson Correlation	.158	.086	.125
Sig. (2-tailed)	.107	.380	.204

To address the question about the association between teachers' length of experience and their style of leadership Pearson r was conducted, too. As the results show, there is very weak correlation between teachers' length of experience and style of leadership (r = .029), which indicates not significant correlation between length of experience and leadership style of teachers. The possible reasons of such results are thoroughly discussed in "Discussions" chapter.

Finally, the question about the relationships between teachers' educational attainment and their style of leadership was investigated through Pearson r.There is also not very strong correlation, only r = .156 at the significance level of 0.312. In other words, there was not significant correlation between educational attainment and leadership style of teachers.

The difference in trait emotional intelligence scores for the three groups of young (less than 10 years), experienced (11 – 20 years) and very well experienced teachers (more than 20 years) were examined by a one-way between groups analyses of variance (ANOVA). In this analysis length of experience is represented as independent variable, whereas trait emotional intelligence and as dependent variables. What ANOVA does is test the null hypothesis that several group means are equal in the population. Figure 10 plots the trait emotional intelligence means for each of the three groups of teachers in terms of

their experience, and the increase in the average level of participant's trait emotional

intelligencecan be clearlyseen from the mean plotpresented below:

Figure 4. Mean plot of Trait EI in terms of the participants' experience
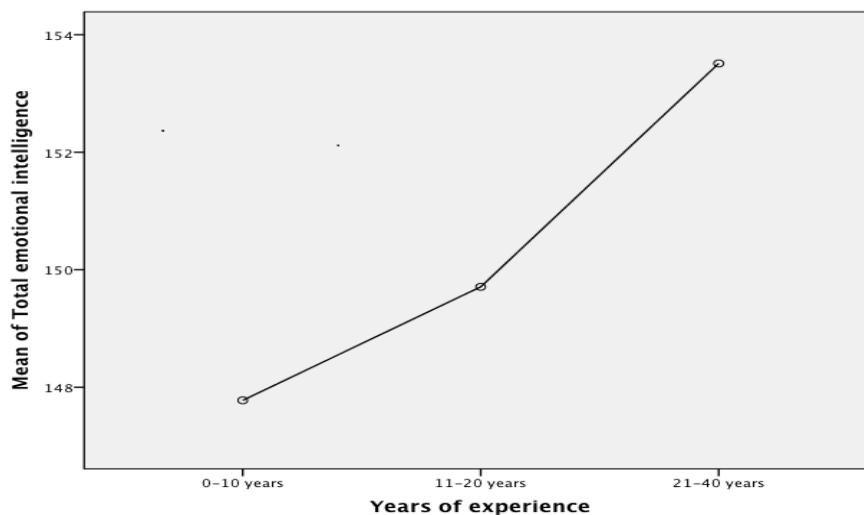
Besides that, the increase in the average level of participant's trait emotional

intelligence in terms of their educational attainment can also be clearlyseen from the mean

plot presented below (Figure 11):

Figure 5. Mean plot of Trait EI in terms of the participants' educational attainment
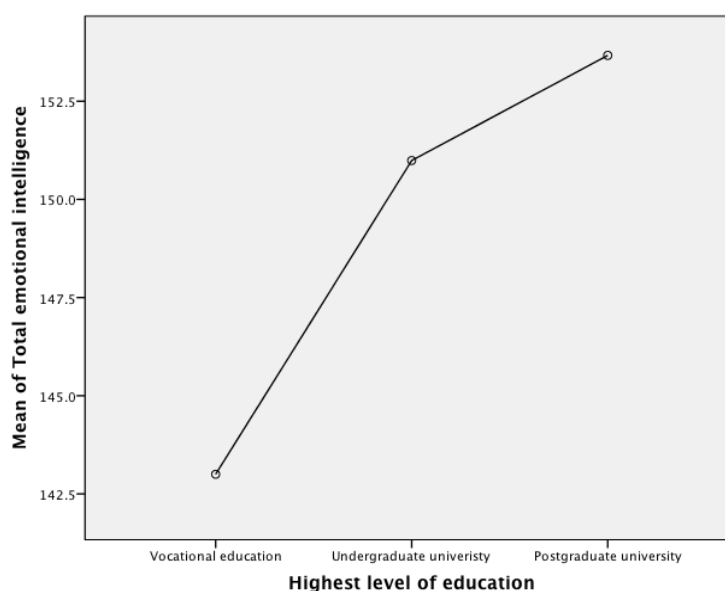
Another interesting result received from one-way between-groups analyses of

variance (ANOVA) is that average level of participants' trait emotional intelligence

different for teachers of different subjects. As it can be seen from the mean plot below teachers of Algebra, geometry, physics, and chemistry have higher level of trait emotional intelligence than teachers of languages, literature, biology, geography, and history. Actually, it was not a purpose of this thesis; however, demographic questionnaire includes a question about the subject participants teach. As a result, when relationship between participants' trait emotional intelligence and subject they teach was examined through one-way between groups ANOVA analysis such a picture was received.

Figure 6. Mean plot of Trait EI in terms of subject/s of teachers
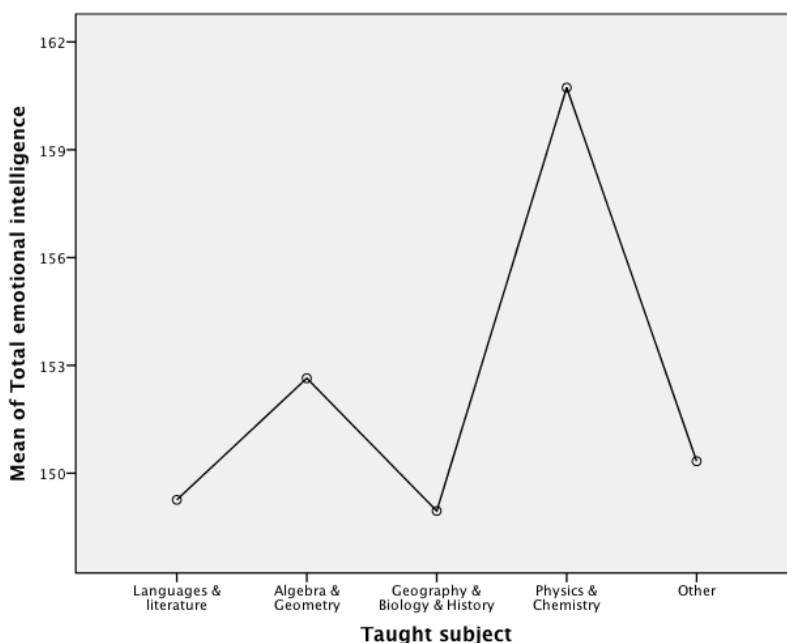
To sum up, the results of the current study show that:

1.   Teachers with democratic style of teaching have higher trait emotional intelligence, rather than those who have authoritarian, or laissez-faire style of teaching;

2.   There is a small positive correlation between length of experience and trait emotional intelligence; hence, more experienced teachers are likely to have higher trait emotional intelligence;

3. There is no significant difference in teachers' trait emotional intelligence in terms of their educational attainment, however, there is a small difference in terms of subject/s they teach;

4. Teachers' style of leadership depends neither on their length of experience nor on educational attainment.

Chapter 5. Discussion

This chapter provides a final interpretation of the results that were reported and listed in the previous chapter "Findings" and presents implications for school administrators, principals, school leaders, teachers, educators. As stated above, the current study investigates the links between teacher's trait emotional intelligence, leadership style, educational attainment and length of experience within six state secondary schools of Astana (Kazakhstan). In other words, it thoroughly examines whether there is any association between teachers' trait EI and leadership style, and whether they are influenced by teachers' educational attainment and years of experience or not.

Hence, the main purposes of the current study are:

• to investigate the nature of relationship between teachers' trait emotional intelligence and leadership style they use in work with pupils; and

• to identify whether such attributes of teachers as trait emotional intelligence and leadership style depend on their educational attainment and teaching experience or not.

To address these purposes quantitative correlational explanatory design was chosen for this study, because it gives an opportunity to examine the relationship between the dependent and the independent variables.

There are five following research questions stated in thecurrent quantitative correlational explanatory study:

• Is there any effect of teachers' trait emotional intelligence on theirleadership style (authoritarian, democratic, or laissez-faire)?

• Is there any association between teachers' length of experience and their trait emotional intelligence?

• Does the length of teachers' experience have any influence on their style of leadership?

- Is there any correlation betweenteachers' educational attainment andtheir trait emotional intelligence?

- Does teachers' educational attainment have any impact on theirstyle of leadership?

The results of the study show that there is a positive correlation between trait emotional intelligence and democratic style of leadership, indicating that teachers with democratic style of leadership have higher trait emotional intelligence. In fact, there are a plenty of research studies claiming that there is a strong positive relationship (Beytekin, 2013; Hamidi & Azizi, 2012; Lopes-Zafra et al., 2012). As Almog and Shechtman (2007) assert, "democratic teachers tend to perceive students in a holistic manner, attending to both their cognitive and emotional needs" (p. 117). In this sense, democratic teachers serve as leaders with high emotional intelligence, as those who can perceive others' emotions, use them, and manage. In addition,Almog & Shechtman (2007) argue that teachers with a democratic style of teaching "develop a democratic classroom climate; a system based on mutual respect between teachers and students as well as among the students themselves; and shared decision-making and allocating of tasks" (p. 117). According to them, democratic classroom climate "is an emphasis on self-discipline based on understanding and empathy rather than on arbitrary authority or on external rewards" (p. 117). In fact, democratic atmosphere causes pupils' trust, and they can express their own thoughts and emotions easily, without a fear to be laughed at. Consequently, it develops special emotional links between teacher and pupils.

Another interpretation of democratic teaching was given by Shechtman (2002), who state that "democratic teachers tend to be self-transcendent and open to change rather than self-enhancing and conservative" (p. 364). In addition, according to him, democratic teachers are those who are described by the students as "being understanding, helpful, friendly, and one who rarely uses negative expressions of anger and dissatisfaction" (p.

364). To paraphrase the idea, the ideal teacher for schoolchildren is a teacher who has a high level of emotional intelligence, who can understand real emotions of children and make them feel comfortable. Thus, we can consider that teacher with high emotional intelligence is expected to be a democratic teacher. Additionally, democratic teachers are more likely to deal effectively with students' behavioral problems (Almog & Shechtman, 2007, p. 117). It probably happens due to the ability of democratic teachers to recognize and distinguish emotions other people express, and, therefore, to manage and direct them. This is very important aspect of effective teaching and learning. Freire's (1998) statement should be quoted fully to express the idea precisely:

"No one can learn tolerance in a climate of irresponsibility, which does not produce democracy. Under an authoritarian regime, in which authority is abused, or a permissive one, in which freedom is not limited, one can hardly learn tolerance" (p. 41).

Thus, democratic leadership as well as emotionally intelligence of teachersis the key ingredient of effective and successful teaching and learning process in school. Consequently, principals in schools of Kazakhstan, or school administrators, should aware the importance of development of trait emotional intelligence among teachers. For instance, some training course, or seminars, could be conducted for teachers to introduce them with the concept of emotional intelligence, with its necessity for effective work with children. Teachers should understand clearly the meaning of emotions they show and possible consequences of these emotions; they also should be able to recognize pupils' needs and concerns. It is essential for educational program to make teachers awarethat their emotions and teaching style affect schoolchildren' performance, academic success and, even, further development. As Hargreaves (1998) claim, "the emotions of teaching and teacher development are absolutely central to maintaining and improving educational

quality in our schools, and to the work of educational leaders who are ultimately responsible for producing this quality" (p. 315).

The findings of the current study also suggest that there is a small positive correlation between length of experience and trait emotional intelligence. To paraphrase the idea, more experienced teachers are likely to have higher trait emotional intelligence. This assertion is supported by Penrose, Perry, and Ball (2007), who believe that "emotional intelligence should increase with age and experience as is the case with other cognitive abilities" (p. 110). In fact, the older teacher is, the more he is experienced. As a result, more experienced teacher can more effectively deal with own emotions as well as with others'. Moreover, his/ her experience may help him/ her to better perceive other people's emotions and understand them. This, in turn, might give him, or her, an opportunity to manage them. As Penrose, Perry, and Ball (2007) mention, some studies, focused on the relationship between emotional intelligence and age, were conducted; and found a positive correlation, but the results referred mainly to women executives (p. 111). On the other hand, they admit that "results in these studies may have been affected by restriction of range for age and experience which may make it difficult to detect relationships with emotional intelligence" (p. 111). However, as suggested above, the findings of thisstudy show that there is a significant positive relationship between teachers' emotional intelligence and length of experience. It probably happens because teacher become wiser with age and experience, and this makes him/ her more stable emotionally. Furthermore, it should be taken into account that teachers' work closely links to work with people, and this gives them an opportunity to become a master in people's emotions, feelings, hidden thoughts with experience. Hence, the more experienced a teacher, the higher is his/ her emotional intelligence. In this case, it should be taken into account, that more knowledgeable teachers are more emotionally stable. Consequently, it would be a good

idea for school administrators, or school principals to provide each of the young and unproven teachers with a mentor, who would be older and more skilled; and hence, wiser. This implication could solve the problem of less experienced teachers, who sometimes suffer from a lack of practice and can make some mistakes in work. On the one hand, it would complicate the work of more skilled, making them responsible for younger teachers. However, on the other hand, it would simplify the process of adaptation for 'green' teachers. In addition, the problem of skilled teachers' workload could be solved by distributing their duties to the younger ones.

Apart from positive relationship between teachers' Trait Emotional Intelligence and their length of Experience, this study suggests that there is not any connection between teachers' Trait Emotional Intelligence and Educational Attainment. There are almost no studies investigating any links between these two attributes of teachers. However, in my opinion, this is an issue of measurement instrument's limitation. TEIQue is designed to measure only Trait Emotional Intelligence, which is a model of Emotional Intelligence concept. It should be taken into account that there are several competencies of Emotional Intelligence, one of which is a person's self-esteem. However, the TEIQue is not designed to measure each of the competencies separately. The reason why it is important is that Educational Attainment could be a cause of a person's self-esteem, which is a part of a construct of Emotional Intelligence. In this sense, Educational Attainment could be correlated with Emotional Intelligence, not overall, but with one of its parts. It is only a suggestion, but probability is high.

Also, the findings of the current study show the difference in Trait Emotional Intelligence among the teachers of different subjects.More specifically, analysis of the data indicates that teachers of Algebra, Geometry, Physics, and Chemistry have higher Trait Emotional Intelligence than teachers of Literature, Languages, History, Geography, and

Biology. Indeed, there are almost not any studies concerning about the relationship between teachers' Trait Emotional Intelligence and subject they teach. However, the similar concern was the core of the study conducted by Tariq et al. (2013), who explored the roles of Emotional Intelligence (EI) and Emotional Self-Efficacy (ESE) in Mathematical literacy among undergraduates. Besides this, the study aimed to investigate the influence of students' EI and ESE on their attitudes to and beliefs about Mathematics. The study involved in participation 93 female and 82 male first-year students, who completed a test of Mathematical literacy, followed by an online survey designed to measure the students' EI, ESE and factors associated with Mathematical literacy. The findings indicate that those who were better at Mathematics and obtained higher results on Mathematics test have higher Emotional Intelligence and were more confident and persistent. Additionally, analysis of the data revealed that both EI and ESE had a great impact on the students' perception and beliefs about Mathematics. In fact, that is very interesting outcome of the current study, because, initially there was not any intention to correlate participants Trait Emotional Intelligence with subject/s they teach. However, the information about their subject was a part of demographics questionnaire.

Finally, the current study claims that there is negative correlation between teachers' style of leadership and educational attainment as well as teaching experience. It is entirely possible that leadership style depends on other factors, rather than teachers' educational attainment or the length of experience. It could depend on teachers' experience in whole, as practice experience, but not on the length of experience. Byrne and Bradley (2006) assert that leadership style can depend on personal values and national cultures. They claim that "leaders make themselves through personal mastery rather than being made to order" (p. 169). Another factor affecting leadership styles is Emotional Intelligence, according to the results of the current study. Emotional Intelligence is a key ingredient of effective

leadership. In addition, as analysis of the data show, Emotional Intelligence mostly correlates with democratic style of leadership, rather than authoritarian, or laissez-faire.

In spite of the results of this study, indicating that the more democratic a teacher is, his/ her Trait Emotional Intelligence is higher, it is strongly believed that an experienced teacher should use different styles of leadership, according to the situation. The reason for it is individual approach to schoolchildren, because there are some pupils who work effectively in democratic climate of the classroom, however, there are some individual who needs more authoritarian style of teaching. Consequently, effective teacher leadership is assumed to be different depending on situation. It is more important to make teachers know that whichever style of leadership they choose, the effect of it is felt, first of all, by pupils. Hence, they should be aware the responsibility of their choice.

Next chapter is a concluding part of the thesis, which summarizes the main ideas of this study, received during the research process.

Chapter 6. Conclusion

This chapter summarizes the set of findings that arepresented in chapter "Findings" and discussed thoroughly in previous chapter Discussion". Besides, this chapterprovides information about the limitations of the current study, which made conducting the research more complicated than it had been expected. Finally, this chapter gives several useful recommendations for further research in order to make it more effective and todevelop the topic.

The current research focuses on the relationships between teachers' Trait Emotional Intelligence, Leadership Style, Educational Attainment, and length of Experience. There are two main objectives in this study stated in the beginning of the thesis:

- to investigate the nature of relationship between teachers' Trait Emotional Intelligence and Leadership Style they use in work with pupils with the purpose to identify whether the style of teacher's Leadership depends on their Trait Emotional Intelligence or not;

- to examine the nature of association between teachers' Trait EI and Leadership Style; and Educational Attainment with teaching Experience with the purpose to identify whether such attributes of teachersas Trait Emotional Intelligence and Leadership Style depend on their Educational Attainment and teaching Experience or not.

This study statesthe following research questions:

- What is the effect of teachers' trait emotional intelligence on theirleadership style (authoritarian, democratic, or laissez-faire)?

- Is there any correlation between teachers' length of experience and their trait emotional intelligence?

- Does the length of teachers' experience have any impact on their style of leadership?

- Is there any relationship betweenteachers' educational attainment andtheir trait emotional intelligence?

- Does teachers' educational attainment affect theirstyle of leadership?

To address these research questions, quantitative correlational explanatory design was conducted. Teachers' Trait EI was measured by the TEIQue (Petrides, 2001), whereas Style of Leadership was identified through the Leadership Style Questionnaire (Northouse, 2011). All collected data was analyzed through the computer software SPSS, including descriptive and inferential statistics. Results, shown in the chapter "Data analysis" indicate the following:

- There is a positive relationship between teachers' Trait EI and democratic Style of leadership. In other words, the more democratic a teacher, his/ her Trait EI is higher.

- There is a small correlation between Trait EI and teachers' length of experience. More specifically, the more experienced a teacher, his/ her Trait EI is higher.

- There is not any association between Trait EI and teachers' educational attainment; however it is possibly a limitation of the measurement instrument.

- There is a positive relationship between Trait EI and subject/s of teachers. More specifically, the results show that teachers of exact Sciences (such as Physics, Chemistry, Algebra, and Geometry) have higher Trait EI than teachers of Languages, Literature, History, Biology, and Geography. That is really interesting point, requiring more investigation.

- There is not any link between teachers' style of leadership and teachers' educational attainment, as well as the length of experience. There other factors, affecting style of leadership, such as personal values and beliefs, national cultures, or emotional intelligence.

The following recommendations can be given for further research:

- It would be interesting to investigate whether there is any link between Emotional Intelligence and Exact Sciences. In the case if there is a link, the concept of emotional intelligence will receive another dimension in academic community.

- The weakness of this study is a lack of male participants. There are only three males out of 105 participants, and this makes impossible to compare some gender results. Therefore, the relationship between Trait Emotional Intelligence and length of Experience or Educational Attainment could be reexamined.

Finally, there was a major limitation of this study, referring to an absence of access to SPSS computer software for students. In order to conduct the research I had to download trial versions of the program which were valid for only 14 day, that made our work more complicated. In some extent it affected the quality of the study and prevented to make it better.

References

Al Noor, M., Uddin, M. I., & Shamaly, S. S. (2011). Leadership style and emotional intelligence: A gender comparison. *European Journal of Business and Management, 3*(10), 27-52.

Almog, O., & Shechtman, Z. (2007). Teachers' democratic and efficacy beliefs and styles of coping with behavioural problems of pupils with special needs. *European Journal of Special Needs Education, 22*(2), 115-129.

Angelle, P. S., & DeHart, C. A. (2011). Teacher perceptions of teacher leadership: Examining differences by experience, degree, and position. *NASSP Bulletin,95*(2), 141-160,doi: 0192636511415397.

Bar-On, R. (1997). *EQ-i BarOn emotional quotient inventory: A measure of emotional intelligence: Technical manual* Multi-Health Systems.

Bass, B. M. (1985). Leadership and performance beyond expectations, New York: Free Press.

Benor, D. E., & Leviyof, I. (1997). The development of students' perceptions of effective teaching: The ideal, best and poorest clinical teacher in nursing. *The Journal of Nursing Education, 36*(5), 206-211.

Brighouse, T. (2008). The passionate teacher and the passionate leader in the passionate school.Passionate Leadership in Education, In B. Davies & T. Brighouse (Eds.), *Passionate leadership in education*. (pp. 13-34). Thousand Oaks, CA: Sage.

Chang, I. (2011). A study of the relationships between distributed leadership, teacher academic optimism and student achievement in Taiwanese elementary schools. *School Leadership & Management, 31*(5), 491-515.

Creswell, J.W.(2012). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research,* Boston: Pearson.

Crowne, K. A. (2009). The relationships among social intelligence, emotional intelligence and cultural intelligence. *Organization Management Journal, 6*(3), 148-163.

Esfahani, N., & Soflu, H. G. (2011). Relationship between emotional intelligence and transformational leadership in physical education managers. *Procedia-Social and Behavioral Sciences, 30*, 2384-2393.

Freire, P. (1998). *Teachers as Cultural Workers. Letters to Those Who Dare Teach.* Oxford: Westview Press.

Gardner, H., & Hatch, T. (1989). Educational implications of the theory of multiple intelligences. *Educational Researcher, 18*(8), 4-10.

Gardner, L., & Stough, C. (2002). Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership & Organization Development Journal, 23*(2), 68-78.

George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations, 53*(8), 1027-1055.

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal, 37*(2), 479-507.

Goldman, R. K., Botkin, M. J., Tokunaga, H., & Kuklinski, M. (1997). Teacher consultation: Impact on teachers' effectiveness and students' cognitive competence and achievement. *American Journal of Orthopsychiatry, 67*(3), 374-384.

Goleman, D. P. (1995). *Emotional intelligence: Why it can matter more than IQ for character, health and lifelong achievement*. New York: Bantam Books.

Goleman, D., Boyatzis, R., & McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence.* Harvard Business Press.

Grant, A. M. (2012). Leading with meaning: Beneficiary contact, prosocial impact, and the performance effects of transformational leadership. *Academy of Management Journal, 55*(2), 458-476.

Hargreaves, A. (1998). The emotional politics of teaching and teacher development: With implications for educational leadership. *International Journal of Leadership in Education Theory and Practice, 1*(4), 315-336.

Harris, A. (2008). Distributed leadership: According to the evidence. *Journal of Educational Administration, 46*(2), 172-188.

Harris, A., & Lambert, L. (2003). *Building leadership capacity for school improvement* McGraw-Hill International.

Hayashi, A., & Ewert, A. (2006). Outdoor leaders' emotional intelligence and transformational leadership. *Journal of Experiential Education, 28*(3), 222-242.

Heifetz, R. A., & Linsky, M. (2002). *Leadership on the line*. Harvard Business School Press, Boston,

Higgs, M., & Aitken, P. (2003). An exploration of the relationship between emotional intelligence and leadership potential. *Journal of Managerial Psychology, 18*(8), 814-823.

Humpel, N., & Caputi, P. (2001). Exploring the relationship between work stress, years of experience and emotional competency using a sample of Australian mental health nurses. *Journal of Psychiatric and Mental Health Nursing, 8*(5), 399-403.

Humphrey, N., Curran, A., Morris, E., Farrell, P., & Woods, K. (2007). Emotional intelligence and education: A critical review. *Educational Psychology, 27*(2), 235-254.

Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review, 23*(3), 531-546.

Kerr, R., Garvin, J., Heaton, N., & Boyle, E. (2006). Emotional intelligence and leadership effectiveness. *Leadership & Organization Development Journal, 27*(4), 265-279.

Koutrouba, K. (2012). A profile of the effective teacher: Greek secondary education teachers' perceptions. *European Journal of Teacher Education, 35*(3), 359-374.

Krisko, M. E. (2001). Teacher leadership: A profile to identify the potential. Retrieved from First Search ERIC Database (ED 459147)

Lopez-Zafra, E., Garcia-Retamero, R., & Pilar Berrios Martos, M. (2012). The relationship between transformational leadership and emotional intelligence from a gendered approach. *Psychological Record, 62*(1), 97-114.

Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence, 27*(4), 267-298.

Mayer, J. D., & Cobb, C. D. (2000). Educational policy on emotional intelligence: Does it make sense? *Educational Psychology Review, 12*(2), 163-183.

Mayer, J. D., DiPaolo, M., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment, 54*(3-4), 772-781.

Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence, 17*(4), 433-442.

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence.*Emotion*, *1*(3). 232-242. doi: 10.1037/1528-3542.1.3.232

Moore, B. (2009). Emotional intelligence for school administrators: A priority for school reform. *American Secondary Education, 37*(3), 20-28.

Moss, F. A., & Hunt, T. (1927). Are you socially intelligent? *Scientific American,137,* 108-110.

Mukhuty, S. (2013). *An Empirical Study of the Role of Emotional Intelligence and Effective Leadership in a Workplace Environment of Change,*

Neophytou, L. (2013). Emotional intelligence and educational reform. *Educational Review, 65*(2), 140-154.

Palmer, B., Walls, M., Burgess, Z., & Stough, C. (2001). Emotional intelligence and effective leadership. *Leadership & Organization Development Journal, 22*(1), 5-10.

Parker, J. D., Creque Sr, R. E., Barnhart, D. L., Harris, J. I., Majeski, S. A., Wood, L. M., and Hogan, M. J. (2004). Academic achievement in high school: Does emotional intelligence matter? *Personality and Individual Differences, 37*(7), 1321-1330.

Penrose, A., Perry, C., & Ball, I. (2007). Emotional intelligence and teacher self efficacy: The contribution of teacher status and length of experience. *Issues in Educational Research, 17*(1), 107-126.

Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences, 36*(2), 277-293.

Petrides, K., & Furnham, A. (2000). Gender differences in measured and self-estimated trait emotional intelligence. *Sex Roles, 42*(5-6), 449-461.

Petrides, K., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences, 29*(2), 313-320.

Rowan, B., Chiang, F., & Miller, R. J. (1997). Using research on employees' performance to study the effects of teachers on students' achievement. *Sociology of Education,70*, 256-284.

Salovey, P., & Grewal, D. (2005). The science of emotional intelligence. *Current Directions in Psychological Science, 14*(6), 281-285.

Salovey, P., & Mayer, J. D. (1989). Emotional intelligence. *Imagination, Cognition and Personality, 9*(3), 185-211.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences, 25*(2), 167-177.

Singh, M., Hii, L., & Lean, L. G. (2012). Evaluating the correlation between emotional intelligence (EI) and effective leadership (EL) among managers in Miri Shipbuilding Industry. *Proceedings of theInternational Conference on Economics, Business and Marketing Management IPEDR29,* Singapore: IACSIT Press,.

Sutton, R. E. (2005). Teachers' emotions and classroom effectiveness: Implications from recent research. *The Clearing House,78*, 229-234.

Thorndike, E. L. (1920). Intelligence and its uses. *Harper's Magazine, 140*, 227-335.

Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education, 37*(1), 57-70.

Webster, E. A., & Hadwin, A. F. (2014). Emotions and emotion regulation in undergraduate studying: Examining students' reports from a self-regulated learning perspective. *Educational Psychology,* (ahead-of-print), 1-25.

Wechsler, D. (1958). The measurement and appraisal of adult intelligence, Baltimore (MD): Williams & Witkins.

Wenglinsky, H. (2002). The link between teacher classroom practices and student academic performance. *Education Policy Analysis Archives, 10*(12), n12.

Zhou, J., & George, J. M. (2003). Awakening employee creativity: The role of leader

emotional intelligence. *The Leadership Quarterly, 14*(4), 545-568.

Appendixes

Appendix A

General information

➢ Thepurposeofthequestionnairesistoidentify level of your emotional intelligence and style of your leadership.

➢ Time required to complete the questionnaires is about 30 – 40 minutes.

General questions

Q1   Please, tick your gender:

Female   Male

☐   ☐

Q2   Please, tick the years of your experience:

0- 5   ☐

6 -10   ☐

11 -20   ☐

21 -40   ☐

Q3   Please, tick the subject/subjects you teach:

Languages Literature	Algebra and Geometry	Geography Biology History	Chemistry Physics
☐	☐	☐	☐

Other

Q4   Please, tick the highest level of education you have completed:

Completed secondary school   ☐

Trade training   ☐

Undergraduate university   ☐

Postgraduate university   ☐

Appendix B

Trait Emotional Intelligence Questionnaire-SF

Generalinstructions

> ➢ *Please answer each statement below by putting a circle around the number that best reflects your **degree of agreement or disagreement** with that statement.*
> ➢ Give your **immediate**impressions. There are not right or wrong answers.

Completely disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Completely agree	
1	2	3	4	5	6	7	

Expressing my emotions with words is not a problem for me.	1	2	3	4	5	6	7
I often find it difficult to see things from another person's viewpoint.	1	2	3	4	5	6	7
On the whole, I'm a highly motivated person.	1	2	3	4	5	6	7
I usually find it difficult to regulate my emotions.	1	2	3	4	5	6	7
I generally don't find life enjoyable.	1	2	3	4	5	6	7
I can deal effectively with people.	1	2	3	4	5	6	7
I tend to change my mind frequently.	1	2	3	4	5	6	7
Many times, I can't figure out what emotion I'm feeling.	1	2	3	4	5	6	7
I feel that I have a number of good qualities.	1	2	3	4	5	6	7
I often find it difficult to stand up for my rights.	1	2	3	4	5	6	7
I'm usually able to influence the way other people feel.	1	2	3	4	5	6	7
On the whole, I have a gloomy perspective on most things.	1	2	3	4	5	6	7
Those close to me often complain that I don't treat them right.	1	2	3	4	5	6	7
I often find it difficult to adjust my life according to the circumstances.	1	2	3	4	5	6	7
On the whole, I'm able to deal with stress.	1	2	3	4	5	6	7
I often find it difficult to show my affection to those close to me.	1	2	3	4	5	6	7

I'm normally able to "get into someone's shoes" and experience their emotions.	1	2	3	4	5	6	7
I normally find it difficult to keep myself motivated.	1	2	3	4	5	6	7
I'm usually able to find ways to control my emotions when I want to.	1	2	3	4	5	6	7
On the whole, I'm pleased with my life.	1	2	3	4	5	6	7
I would describe myself as a good negotiator.	1	2	3	4	5	6	7
I tend to get involved in things I later wish I could get out of.	1	2	3	4	5	6	7
I often pause and think about my feelings.	1	2	3	4	5	6	7
I believe I'm full of personal strengths.	1	2	3	4	5	6	7
I tend to "back down" even if I know I'm right.	1	2	3	4	5	6	7
I don't seem to have any power at all over other people's feelings.	1	2	3	4	5	6	7
I generally believe that things will work out fine in my life.	1	2	3	4	5	6	7
I find it difficult to bond well even with those close to me.	1	2	3	4	5	6	7
Generally, I'm able to adapt to new environments.	1	2	3	4	5	6	7
Others admire me for being relaxed.	1	2	3	4	5	6	7

Appendix C

Leadership Style

Completely disagree	Disagree	Neutral	Agree	Completely agree				
1	2	3	4	5				

Students need to be supervised closely or they are not likely to do their work.	1	2	3	4	5
Students want to be a part of the decision-making process.	1	2	3	4	5
In complex situations, teachers should let students work problems out on their own.	1	2	3	4	5
It is fair to say that most students in the general population are lazy.	1	2	3	4	5
Providing guidance without pressure is the key to being a good teacher.	1	2	3	4	5
Leadership requires staying out of the way of pupils as they do their work.	1	2	3	4	5
As a rule, pupils must be given rewards or punishments in order to motivate them to achieve educational objectives.	1	2	3	4	5
Most pupils want frequent and supportive communication from their teachers.	1	2	3	4	5
As a rule, teachers should allow schoolchildren to appraise their own work.	1	2	3	4	5
Most pupils feel insecure about their studying and need direction.	1	2	3	4	5
Teachers need to help students accept responsibility for completing their work.	1	2	3	4	5
Teachers should give pupils complete freedom to solve problems on their own.	1	2	3	4	5
The teacher is the chief judge of the achievements of the students in class.	1	2	3	4	5
It is the teacher's job to help schoolchildren find their "passion".	1	2	3	4	5
In most situations, students prefer little input from the teacher.	1	2	3	4	5
Effective teachers give orders and clarify procedures.	1	2	3	4	5
Pupils are basically competent and if given a task will do a good job.	1	2	3	4	5
In general, it is best to leave pupils alone	1	2	3	4	5

Appendix D

INFORMED CONSENT FORM

Teacher's trait emotional intelligence and style of leadership: do they depend on educational attainment and teaching experience?

You are invited to participate in **a research study** on examining the relationship between teachers' trait emotional intelligence and leadership style in secondary schools in Astana; and investigate whether they depend on teachers' educational attainment and length of experience or not.You will be asked to complete two questionnaires (about your trait emotional intelligence and style of leadership) on your own.

I anticipate that your involvement will require not more than 15 (fifteen) minutes.There are no known risks and/or discomforts associated with the study. Although this study will not benefit you personally, I hope that the results will add to the knowledge about the relations between teachers' emotional intelligence and leadership and schoolchildren's academic performance in Kazakhstan secondary schools.

If you have read this form and have decided to participate in this project, please understand your **participation is voluntary** and you have the **right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled**. **The alternative is not to participate.** You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals. Your decision whether or not to participate in this study will not affect your employment or relationship with the Department or University.

If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the researcher,Gulnara Malikova, gulnara.malikova@nu.edu.kz, +7 707 0226669. If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the NUGSE Research Committee to speak to someone independent of the research team at +7 7172 709350. You can also write an email to the NUGSE Research Committee at gse@nu.edu.kz

Please sign this consent from if you agree to participate in this study.

Signature: _____   Date: _____

The extra copy of this signed and dated consent form is for you to keep.