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The Impact of Enabling School Structure on Academic Optimism: Mediating Role of Altruistic Behaviors*

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Abstract: This quantitative study aims to examine the relationships between enabling school structure, academic optimism and altruistic behaviours as well as to find out whether altruistic behaviours serve as a mediator between enabling school structure and academic optimism. A scale was applied to teachers from primary- schools in Turkey via random sampling. There were 707 teachers participating in this study. Three existing scales, which are enabling school structure, academic optimism, and teachers' altruistic behaviours scales, were used to collect data from teachers. Descriptive statistics and bivariate correlations were calculated in the study to investigate correlations among all the variables and reliabilities of the measures. Structural Equation Modelling investigated the effects of Enabling School Structure on School Academic Optimism through Teachers' Altruistic Behaviours. The results confirmed a positive relationship between all variables of the study. The findings also revealed the mediator effect of TAB on the relationship between ESS and SAO. Finally, some recommendations were given based on results.

Keywords: *Enabling school structure, academic optimism, bureaucracy, altruistic behaviour.*

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Introduction

School achievement factors have become a long-standing research topic. This salient interest in determining predictors of successful and effective schools is prevalent among researchers (Dormann et al., 2019; Friedman, 2016; Jacobs & Harvey, 2005; McGuigan & Hoy, 2006). McGuigan and Hoy (2006) suggest that studying school traits that determine student success is an enduring and compelling process. Hoy, Tarter et al. (2006), as cited in Coleman, state that school has minimal effect on students' academic achievement, whereas socioeconomic characteristics embody a dominant influence in explaining student achievement. Evidence from previous research (Beard et al., 2010; Jacobs & Harvey, 2005) has supported this assumption that reveals a strong relationship between socioeconomic factors and students' performance. Another rigorous result overlapping Coleman's assumption is the "snapshot of student performance" in Programme for International Students Assessment (PISA). Unfortunately, The PISA 2018 results proved Coleman right as economically advantaged students displayed remarkable and higher performance than economically disadvantaged peers did in basic skills in reading, mathematics, and science. This trajectory was observed with respect to the results of students from Turkey that reveal that socio-economically disadvantaged students performed lower scores than socio-economically advantaged students (Organization for Economic Cooperation and Development [OECD], 2019). These results have confirmed that socioeconomic background is still a strong predictor of learning outcomes.

However, unlike Coleman, extensive research has likewise attested to profound connections between school properties and academic achievement (Beard et al., 2010; Hoy & Tarter, 2011; Hoy, Gage et al., 2006). School-specific characteristics are regarded as strong determinants in explaining academic achievement, because of the widespread belief that school can alter behaviors after controlling for demographics conditions of students (McEwan, 2009). For example, academic optimism is a latent construct that plays an important role in explaining academic achievement (Hoy, Tarter et al., 2006; Kurz, 2008; McGuigan & Hoy 2006). More studies have found that school characteristics have a dominant impact on school success. School leadership style and teacher behaviors are two significant variables that are effective in learning outcomes. Principals are responsible for creating a safe learning environment in which active participation in learning activities is ensured (Saylık, 2015) and both teachers and students can enthusiastically devote

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themselves to learning. Every teacher hopes to work in a school where school administrators look for malleable opportunities to empower students achievement (Mitchell, 2019).

School structure is regarded as another important factor that predicts school achievement. For, school structure is believed to be a core factor in shaping the management style of school leaders that may either empower or hinder impact of teaching. In today's educational institutions, enabling school structure is a requirement, a call (Hoy, 2003) for school leaders to develop a positive learning environment as it enhances academic optimism, which is strongly and consistently related to students' performance (Anderson, 2012; Hoy & Tarter, 2011; Hoy et al., 1990). Enabling school structure has therefore elicited considerable interest as a major organisational research issue because of its positive influence on students' performance (Anderson, 2012; Wu, 2013). Previous studies (Hallinger & Heck, 2010; Sebastian & Allensworth, 2012) confirmed that principals can impact students' achievement through teaching practices such as "routines, "order", and expectations" in the classroom. Sebastian and Allensworth (2012) suggest that principals can impress instruction "by working with teachers in classrooms, or through their efforts to improve professional capacity, parent involvement, high standards, or by cultivating school climate".

Much of the research has focused on the query of how school administrator influences teacher attitudes and behaviours towards learning (Anderson, 2012; Boz, 2019; Bush & Sargsyan, 2020). This study examines the relationship among enabling school structure, teachers' altruistic behaviours, and school academic optimism.

It is believed that the relationship among this trio is likely reciprocal. The researchers investigate how school structure affects teachers' altruistic behaviours and school academic optimism. They further investigate how teachers' altruistic behaviours influence school academic optimism. More importantly, they test whether teachers' altruistic behaviours mediate the relationship between enabling school structure and school academic optimism. This study is expected to find out how these school properties are conditionally related to each other. Principals' management style may influence teachers' perception towards academic optimism that results in positive school-related outcomes. Previous research (Anderson, 2012) highlighted that when school structure is enabling, teachers are likely to engage in learning. Therefore, it is suggested that teachers' altruistic behaviours prompt dynamics between enabling school stature and school academic optimism.

Literature Review

Enabling School Structure (ESS)

The term of bureaucracy evokes negativity and often is not connived by most of the employees (Hoy, 2003). Hoy and Sweetland (2001) state that "Bureaucracy is synonymous with red tape, rigid rules, autocratic superiors, and alienated and apathetic employees". According to Hoy (2003), formalization and centralization are traits of bureaucracy. Formalization refers to "rules, regulations, procedures, and policies" that shape the soul and style of management in organization while centralization focuses on strict and single-sided administration in organizations in which managers are the sole source of decision-making. Bureaucracy often reminds of negative constructs such as dysfunctionality, arbitrariness, and formalization (Punch, 1969). Due to its negative perception, a considerable number of people regard bureaucracy as a pathologic unit of organization. Therefore, some researchers totally abnegate bureaucracy. For example, Charlton (2010) has a very strict viewpoint about bureaucracy by likening bureaucracy to cancer, which first settles down, then treacherously kills.

Due to the nature of these two notions that refer to autocratic administration, strict rules and procedures that turn into a restricting function (Mitchell, 2019), teachers and principals often criticize bureaucracy (Hoy, 2003). Teachers usually complain about schools being too bureaucratic as they often face various challenges originated from the nature of bureaucratic structures when they fulfill their task (Benson, 1983) and due to its negative impact on the professional practice of teaching. Early studies confirmed the negative consequences of bureaucracy. For example, it alienates teachers (Sinden et al., 2004), increases stress (Adler & Borys, 1996), and speeds up teacher turnover (Benson, 1983). Not only teachers but also principals, executives, and other school community members of the school blame bureaucracies for hampering with artificial barriers (González-Tejero & Parra, 2011; Hoy, 2003; Hoy & Sweetland, 2001) in the learning process and for restraining a cultivating climate of the school.

The relevant literature (Hoy & Sweetland, 2001; Mitchell, 2019) accepts that bureaucracy is toxic for the development and functioning of organizations because of the restricted and imperious character of bureaucracy, but this is an unfair, incomplete, and oversimplified evaluation in judgement of the notion (Hoy, 2003). Considering bureaucracy merely through a negative perspective is not more than a facade. For, many researchers (Adler & Borys, 1996; Hoy & Sweetland, 2001) highlight that bureaucracy is twofold that works in organizations. "Formalization and centralization are the fundamental features of the structure that define the two extremes of this continuum" (Hoy, 2003, Adler and Borys, 1996). These authors state that enabling and coercive are reflection of two characteristics, formalization, and centralization of bureaucracy. The former represents the enabling "bright side" (Hoy, 2003) and the latter reveals the coercive "dark side" (Hoy, 2003) of it. The dark side represents the fatalistic side of bureaucracy. Hoy and Sweetland (2001) concluded that "dark side Bureaucracy explicitly alienates, breeds dissatisfaction, hinders creativity, and

demoralizes employees. Hoy and Sweetland (2001) address that the coercive structure punishes followers, in any case, they break the rules. Therefore, it demolishes individual autonomy and eliminates employees' well-being.

In spite of the harsh criticism raised against the bureaucratic structure, research on bureaucratic school structure has provided policymakers (Hoy, 2003; Messick, 2012) and school leaders (Cassity, 2012) with persuasive evidence for contributing to a supportive learning environment (Hoy & Sweetland, 2001). Bureaucracies also enhance students learning outcomes (Sinden et al., 2004). A line of study has confirmed a positive relationship between enabling structure and academic optimism (Anderson, 2012; Hoy, 2002; McGuigan & Hoy, 2006), instructional leadership (Blasé & Blasé, 2000), collegial leadership (Dean, 2012) organizational citizenship (Messick, 2012; Mitchell, 2019; Ngidi, 2012), authentic leadership (Boz, 2019), organizational commitment (Çoban & Demirtas, 2011), collective responsibility (Wu, 2013), and professional teacher behaviours (Mitchell, 2019).

On the other hand, the bright side –enabling- shows the positive side of bureaucracy. When the enabling side of bureaucracy is effective in organizations, 'it guides positive behaviour, clarifies responsibility, reduces stress, and enables individuals to feel and be more effective' (Adler & Borys, 1996; Hoy, 2003; Sinden et al., 2004). More, the bright side of bureaucracy helps subordinates to solve their problems, to increase cooperative endeavour, and to foster good feelings (Adler & Borys, 1996; Hoy & Sweetland, 2001). Hence, Hoy (2003) and Sinden et al. (2004) emphasise that bureaucracy is one of the greatest predictors and an opportunity that fosters development and improvement of educational programs to meet the needs of school community members. Therefore, Hoy (2003) highlighted that bureaucracy is a necessary condition of schools because it involves dynamic elements that enable interaction among elements of schools. Notwithstanding the criticism against the concept of bureaucracy, it is believed that bureaucracy is a "scapegoat" (Hoy, 2003) because unlike common opinion, many researchers confirm the necessity of bureaucracy for every organization because it may enhance the learning process in schools. Though some harsh criticism is raised against bureaucracy, such as the judgement that it has disturbing formalizations and procedures, they accept that it is required for accomplishing the goals of any organization (Hoy, 2003). Based on these studies it is asserted that bureaucracy is not always oppressive and should also be regarded as a facilitating management style that reinforces the efficiency of educational institutions.

More research reveals that formalized procedures and hierarchical structures of bureaucracy are enabling rather than coercive (Beard et al., 2010; McGuigan & Hoy, 2006; Mitchell, 2019). That is why, Hoy, (2003) highlights that bureaucracy is an essential condition of any organization including schools because characteristics of bureaucracy restrain chaos and enhance the efficiency of organizations. Consistent with arguments, a number of researches demonstrate that bureaucracy can be beneficial and functional for schools' effectiveness when formalization, a component of bureaucracy, is enabling rather than coercive. For example, Merton (1940) emphasised that bureaucratic structures play a critical role in protecting employees from arbitrary behaviours of leaders because rules, regulations, and procedures (Mitchell, 2019) of bureaucracy restrict not only the actions of subordinates but also superiors. That is to say, rules and procedures of bureaucracy prevent superiors from using the power of control as a threat upon subordinates.

Because of their hierarchy of authority, impersonality, standards, rules, regulations, and procedures of schools are considered bureaucratic structures (Hoy, 2003; Hoy, Gage et al., 2006; Mitchell, 2019; Punch, 1969). As Hoy (2003) explains "whether like it or not, our schools are bureaucratic organizations" that are induced by characteristics of bureaucracy, and they have a hierarchy of authority. In sum, bureaucracy involves both constraints and opportunities, and double-sided bureaucracy gives an option to leaders; whether the "bright" or the "dark" side. If they choose the bright side, they can shift their schools from ineffective organizations to effective ones, and if they prefer the dark side, they will probably be estranged from desired goals and learning outcomes and teachers will find themselves caught up in maelstrom. Principals attempt to realize the embedded goal of schools through teachers (Sebastian & Allensworth, 2012). To keep this in mind, principals should provide incentives for teachers to attain high expectations. This is a necessity for the health of schools.

Academic Optimism

Hoy, Tarter et al. (2006) recently introduced the construct of academic optimism, which positively influences students' academic achievement after controlling for socioeconomic factors". They identified academic optimism as a tacit but crucial construct for school achievement. Hoy, Tarter et al. (2006) hypothesize that this new construct is a crucial variable in increasing student achievement. Academic optimism, a "latent variable" (Hoy, Tarter et al., 2006; Messick, 2012), is a conceptual framework that is comprised of three related dimensions; collective efficacy, teacher trust in students and parents, and sense of academic emphasis. These three dimensions have a "transactional connection" with each other (Hoy, Tarter et al., 2006). Hoy, Gage et al. (2006) and Dean, (2012) state that with this dynamic triadic relationship, each dimension affects the other one. Hoy, Gage et al. (2006) propose that these three components of academic optimism could make a difference in explaining student achievement.

Academic optimism refers to teachers' positive belief and perception of their ability to create a quality learning environment by empowering collaboration with students and parents (Hoy, Tarter et al., 2006; Kılınç, 2013). In their

article, Beard et al. (2010) aimed to confirm the construct and identified academic optimism as "individual teachers' beliefs that they can teach effectively, their students can learn, and parents may support them". In a study, Hoy and his colleagues (2008) attempted to conceptualize and measure academic optimism and proposed that teachers with a sense of academic optimism give priority to students' needs and implement humanistic and democratic class management style in their classroom.

Though academic optimism is relatively a new concept, a scant number of scholars have given attention to the term, and robust studies querying the positive influence of the construct on school achievement (Beard et al., 2010; Boz, 2016; Cassity, 2012; Hoy et al., 2008; Ngidi, 2012, Sims, 2011; Sinden et al., 2004) have erupted after Hoy, Tarter et al. (2006) addressed importance of academic optimism in terms of student learning. In their work, McGuigan and Hoy (2006) hypothesize that academic optimism is a common thought that students are qualified and teachers are committed enough to reach expected learning outcomes. They further suggest that parents and students can contribute to student achievement when they are trusted.

Insofar, the evidence has confirmed that academic optimism is a predictor of a positive school climate that may probably turn into reinforcing collaboration within the borders of school. When a collaborative climate is established among faculty, students, and parents, they will feel free of stress and become more creative. Because they are sure of that, they can develop a prolific learning environment, and students and parents will not become barriers in accomplishing their goals (Dean, 2012; Mascall et al., 2008). In schools where a culture of academic optimism is prevalent, teachers set high but reachable goals (Goddard et al., 2000; McGuigan & Hoy, 2006). For reasons given above, when a high sense of academic optimism exists, teachers are expected to be in collaboration with one another and share their skills and knowledge to have a better school in terms of academic achievement. They trust their own capability and students to reach determined expectations.

As mentioned earlier, academic optimism is comprised of three dimensions. Academic emphasis is the first component of academic optimism. Lee and Bryk (1989) first addressed the necessity of academic emphasis regarding academic achievement. According to Hoy et al. (2002), "Academic emphasis is the extent to which the school is driven by a quest for academic excellence -a press for academic achievement" (McGuigan & Hoy, 2006). Schools having teachers with a high sense of emphasis may set high but achievable goals (Hoy, Gage et al., 2006). Earlier studies proposed that academic emphasis is one of the strong predictors of student achievement (Boz, 2016; Leithwood & Levin, 2011; Mascall et al., 2008; Schannen-Moran & Garies, 2015; Smith & hoy, 2007) and it is an ingredient of organizational health (Hoy, Gage et al., 2006). Academic emphasis fosters organizational performance, enhances mutual respect, and rises efforts among principals, teachers, and students (Bandura, 1997; Hoy et al., 2003). Hence, it is obvious that academic optimism and student achievement are closely correlated variables (Hoy, Gage et al., 2006; Mascall et al., 2008). Moreover, according to Hoy, Tarter et al. (2006, p. 427), "Academic optimism is a general latent concept related to student achievement even after controlling for SES, previous performance, and other demographic variables". Goddard et al. (2000) found a strong relationship between academic emphasis and students' mathematics and reading achievement.

The second component of academic optimism is the teacher's sense of collective efficacy. Teachers' sense of collective efficacy is "the ability to affect even unmotivated or difficult students" (Hoy et al., 2008, p. 822). As McGuigan and Hoy (2006) cited in Bandura, "self-efficacy is the belief "in one's own ability to successfully accomplish something". Teachers' sense of collective efficacy is considered as one of the most important teacher traits related to students' achievement (Friedman, 2016; Goddard et al., 2000 Henson et al., 2001 Hoy & Spero, 2005; Tschannen-Moran & Hoy, 2007). Teachers are responsible for developing a favourable learning climate for students (Bandura, 1993). Motivated teachers and students are regarded as prerequisites of achievement because, as stated, motivated individuals are higher achievers (Hein et al., 2012). It seems that self-efficacy and collective efficacy are the two crucial components of effective schools.

Trust in parents and students is the third component of academic optimism (Hoy, Tarter et al., 2006; Smith & Hoy, 2007; McGuigan & Hoy, 2006). "Trust is one's vulnerability to another in terms of the belief that the other will act in one's best interest" (Hoy, Tarter et al., 2006; Tschannen-Moran & Hoy, 2007). In their work, Tschannen-Moran and Hoy (2007) attempted to conceptualize and measure faculty trust and explored a multi-faceted definition of trust after examining a vast number body of research on the construct. They posited that the concept is comprised of three separate dimensions: "faculty trust in the principal, in colleagues, and in clients". In the process of conceptualizing and measuring, they confirmed that subscales of faculty trust were found to be correlated and reciprocally foster each other. The literature related to faculty trust proposes that faculty trust is a significant determinant in school effectiveness. For example, Tschannen-Moran and Hoy (2007) discovered that faculty trust is positively linked to parental collaboration in school decision-making.

Schools have dynamic relationships with their environment. Today, parents are more interested in things happening within the school than ever before because everything occurring at the border of school somehow affects the psychological, cultural, and cognitive development of their children. In this sense, trust in parents, which enhances parental involvement, (Tschannen-Moran & Hoy, 2007) seems to be vital for the effectiveness of the school as well as for teaching and learning outcomes. Evidence from recent studies shows close relationships between parental

involvement and student's achievement (Dotterer & Wehrspann, 2016; Hill, 2015; Sénéchal & Young, 2008; Tschannen-Moran & Hoy, 2007). Engaging parents enforce engaging students because parental engagement helps parents "set high expectations for their children" (Jacobs & Harvey, 2005). Studies of many scholars demonstrate that interacting with parents and students makes a difference to students' academic achievement (Dotterer & Wehrspann, 2016; Hill, 2015; Jacobs & Harvey, 2005; Sarkadi et al., 2008).

A bulk of study has explicitly postulated the positive impact of parental involvement on academic achievement. In one such study, (Sénéchal & Young, 2008) found that parental involvement fosters students' reading skills. Similarly, (Tschannen-Moran & Hoy, 2007) suggest that parental involvement is effective in creating a culture of collaboration. In sum, the findings of the research revealed that the trust in parents and in students is a motivating factor that leads students to succeed. More evidence suggests that teachers' trust in parents and students enhances students' achievement (McGuigan & Hoy, 2006; Tschannen-Moran & Gareis, 2015). Trust is likely to make a chance for school in terms of academic achievement (Tschannen-Moran & Hoy, 2007).

Altruism

Today, both society and institutional organizations need more altruist individuals than ever before. For, the prevalence of selfishness and egoism among individuals is evident and more prevalent than ever before in every field of life. Due to various reasons, we witness unethical behaviours from every individual of the society, and unfortunately especially corporate ethical failure prevails (Carucci, 2016). However, some people are aware that there is no immediate gain from time to time and prefer helping others (Batson, 1983; Lay & Hoppmann, 2015). Many people are in search of helping others and devoting much of their energy and time to make others happier. Million dollars and millions of hours are spent for helping hospitals, nursing homes, AIDS, hospices, and the fire department (Batson, 1983). They simply sacrifice their lives to please other people.

Why do people act with a devoted spirit? What are the motivators or antecedents of altruism? Efforts to better understand why people behave altruistically in early studies (Alexander et al., 1994; Friedman, 2016; Oda et al., 2014) have underlined a variety of motivators or antecedents that work as a driving force lying behind the nature of altruistic behaviours. Studies focusing on the factors that guide and shape altruistic behaviours generally fall into two categories: "Social Psychology and Evolutionary Psychology" (Egilmez & Naylor-Tincknell, 2017). The former works as a core element that motivates people for altruistic behaviors while the latter points to social press as an antecedent of altruism (Egilmez & Naylor-Tincknell, 2017; Simon, 1993). Some studies on altruism identify a number of motivators such as egoism (Friedman, 2016), social press (Simon, 1993), narcissism, and idealism (Csikai & Rozensky, 1997), which are some common personality traits that function as premise of altruistic behaviors.

According to Ariane and Jutta (2015), Comte was the first to coin the concept of altruism in literature. Altruism has captured great attention among disciplines such as Philosophy, Biology, Socio-biology, Psychology, Developmental Psychology, and especially Social Psychology. Social Psychology is the scientific discipline that most fits for describing the spirit of altruism (Batson, 1997). Batson highlights that the disciplines mentioned above tried to answer the question "why do we help others?" and attempted to explain the underlying reasons for aspiration "to live for others" with the notion of altruism.

Simon (1993) analyses the concept of altruism from the evolutionary theory paradigm. Simon identifies the term as a behaviour that "reduces the actor's fitness while enhancing the fitness of others". He labeled altruistic individuals as "docile" individuals, emphasising that social pressure is the core predictor by which altruistic behaviours are driven. Similarly, Lay & Hoppmann (2015) concluded that altruistic behaviour is a pro-social behaviour that motivates someone to act for the benefit of the other without any expectation of a benefit for him or herself. In other words, altruistic behaviours are guided by social characteristics. Of course, social forces are not the sole motivators and antecedents for self-abnegating behaviours, and the psychological states of individuals, such as "feelings such as sympathy or empathy" (Gummerum & Hanoch, 2012), also serve as pivotal motivators that guide altruistic behaviour.

The concept of altruism has been defined by several scientists in the relevant literature. According to Friedman (2016, p. 630) "Altruism is to worry about or care for the fate of others, or a behaviour that offers benefit for others" without expecting any egoistic motivation or external award. Batson (1997) considered altruism as a motivational state with the ultimate goal of increasing another's welfare. Oda et al. (2014) claimed that the sense of altruism can serve as an inhibitor between positive and negative fitness of another and self-fitness. Many attempts that sought to clarify and define altruism considered motivation as helping behaviour (Burks & Kobus, 2012). Altruistic individuals are probably brave and strong characters, and as evangelist Billy Graham states, "Tears shed for self are tears of weakness, but tears shed for others are a sign of strength" (Myra & Shelly, 2005, p. 237).

Nobody abnegates the importance and vital impact of teachers in teaching and learning process. However, the relevant literature suggests that only good teachers can serve as changing agents in school achievement (Beishuizen et al., 2001; Friedman, 2016; Hamachek, 1975). This widely accepted consensus drives scholars to be in efforts to find out the characteristics of good teachers to prompt students learning. A line of study has attempted to designate different attributes of a good teacher that is critical for school achievement. Good teachers are those who "perceive the world

from the students' point of view (Hamachek, 1975) and those who have knowledge of the subject" (Bakx et al., 2015; Hamachek, 1975). Teachers who "make a contribution to the next generations" are also regarded as good teachers (Erten, 2015). Good teachers "wish to serve society, impart knowledge, and preserve cultural values" (Friedman, 2016) and help others (Hamachek, 1975) lead a comfortable life. Others put forward that commitment is another characteristic of good teachers (Scott et al., 1999). Rachlin (2002) emphasises that the emotional basis of altruism lies in our possessing empathy, self-control, and a happier mode of existence leading to altruistic behaviours. Beishuizen et al. (2001) claim that teachers, who are able to "execute skills routinely", can be labeled as good teachers. More research highlights that altruism is one of the core traits of good teachers (Alexander et al., 1994, as cited in Joseph & Green, 1986; Scott et al., 1999).

The relevant literature of theoretical and empirical work has confirmed that altruistic manners contribute to teachers' positive organizational behaviours (İşmen & Yıldız, 2005; Van Emmerik et al., 2005). Likewise, Friedman (2016) found that altruism is one of the pillars that motivate people to teaching professionalism. More work of Dilmac (2009) indicates that teachers' professional efficacy is linked to the sub-dimension of the teacher altruism scale of 'benevolence in the current situation', "social responsibility", and "benevolence in emergencies". Notably, research demonstrating the relationship between altruistic behaviours and positive teachers' traits has found that teachers with a high sense of altruism are thriving to promote academic performance (İşmen & Yıldız, 2005). Altruism reinforces power, hedonism, success, excitement, self-control, and benevolence of teachers (Friedman, 2016). In addition, altruism is recognized as a strong predictor of safe behaviours (Shi & Zhang, 2017) and organizational citizenship (Van Emmerik et al., 2005). Sağnak and Kuruöz (2017) have found a significant correlation between teachers' altruistic behaviours and mindfulness. Guinot et al. (2015) proposed that altruism promotes the learning capacity of individuals, noting that altruism is an inhibitor of relationship conflict. Teachers with a high sense of altruism are good at developing a positive relationship between students and motivating them for the learning process (Friedman, 2016).

The main purpose of this paper is to elaborate on the relationship between enabling school structure, academic optimism, and altruism. Furthermore, researchers specifically examined the mediating impact of altruism on the relationship between enabling school structure and academic optimism. To our knowledge, this is the first study to investigate the relationship among enabling school structure, academic optimism, and teachers' altruistic behaviours. Therefore, it is suggested that the findings of the current study embedded important messages for school administrators who seek to maintain a positive and quality learning environment, to facilitate two-way communication, to search for dysfunctional implications, and to look at themselves in the mirror in the border of school. In addition, the application of academic optimism in societies coming from different socio-cultural backgrounds could help understand the nature of the construct.

Efforts to understand to what extent and how school structures affect schools' academic optimism and teachers' altruistic behaviours are expected to make a significant contribution to student outcomes. Evidence (Hoy, 2003; Hoy & Sweetland, 2001; Mitchell, 2008; Sinden et al., 2004) reveals that enabling school structure consistently fosters relationships between principals and teachers as well as ensures that a climate of trust fosters teacher commitment (Hoy, 2003). Moreover, enabling school structure increases satisfaction, facilitates telling truth, decreases the role conflict (Dean, 2012; Hoy & Sweetland, 2001), and enhances school academic optimism (Messick, 2012). In this sense, the findings of the study may provide useful insights into the nature of the learning environment and academic performance and are also expected to guide principals in fostering the quality of learning in school. The findings of the current study may help principals prevent the failure of school to meet the expectation of stakeholders. This may be a primary cause of the intended criticism of the current situation of school. Furthermore, just as Hoy, Tarter et al. (2006) postulate, more research is needed to understand the nature of academic optimism and its influence on success of schools. Though a substantial number of studies have attempted to explore the relationship between academic optimism and other organizational behaviour, this is probably the first study which focuses on the relationship between teacher altruistic behaviours and academic optimism. Moreover, since there was no earlier research trying to investigate the connection between teachers' altruistic behaviours and school enabling structure and academic optimism, this study may fill the gap in the relevant literature and contribute to the strength of enabling structure and to the increase in academic optimism. The main underlying presupposition of this study is that teachers' altruistic behaviours can play a mediating role between enabling schools structure and schools' academic optimism. Due to their senior positions in the education settings, principals can influence factors within their schools that affect substantial school achievement.

In this research, the following hypotheses were addressed;

H₁. Enabling school structure is positively associated with teachers' altruistic behaviours

H₂. There is a positive relationship between enabling school structure and teachers' school academic optimism

H₃. The more altruistic behaviours of teachers, the more academic optimism of a school

H₄. Teachers' altruistic behaviours play a mediator role between enabling school structure and school academic optimism.

Methodology

Research Goal

The explanatory variables for this study are enabling school structure (ESS) and teachers' altruistic behaviours (TAB). The mediating variable is TAB. The school academic optimism (SAO) is the outcome variable. A nonexperimental survey design was used in this study to assess the relationships among enabling school structure, academic optimism, and teachers' altruistic behaviours.

Sample and Data Collection

A total of 707 primary school teachers working in a province located in South Eastern of Turkey took part in the study. Of the participants, 315 were male and 392 were females. Participants' average tenure was 44,6 for females and 55,4 for males. Eighty percent of the participants had a bachelor's degree and nearly ten percent of the participants had a master's degree.

Analysing of Data

Data were collected via a questionnaire. After getting permission from principals, teachers were informed about the scope of the study. Once they agreed to participate in the study, they were given the questionnaire to complete the survey. The participants were informed that their answers would not be shared with the third party. Participation was voluntary along with further information that they have the right to renounce to get involved in the study. It took each participant 12–18 min to complete the questionnaire. A total of 707 teachers responded to the questionnaires.

Research instrument

Teachers completed three scales in the questionnaire: the Enabling School Structure scale (ESS), the School Academic Optimism scale (SAO), and the Teachers' Altruistic Behaviours (TAB).

The Enabling School Structure Scale

To assess the structure of the school, Enabling School Structure was used. Enabling School Structure Scale (ESS) is a 5-point Likert-type scale and consists of 12 items. Responses range from never to always (coded as 1 to 5 respectively). A higher cumulative score means a high sense of enabling school structure. Previously tested studies confirmed the validity of the Turkish version of this scale, and the results confirmed the reliability of the scale (Buluç, 2009). The Cronbach's alpha score of the reliability was 0.85 in this study.

School Academic Optimism Scale

The academic optimism of the school was measured with the School Academic Optimism Scale (SAO). SAO is a 19-item, 5-point Likert-type scale ranging from strongly disagree to strongly agree (coded as 1 to 5 respectively). The instrument was initially developed by Hoy and Spero (2005) and adopted into Turkish by Çoban and Demirtas (2011). The scale measures three dimensions: collective efficacy, trust in students and parents, and academic emphasis of the school (Sinden et al., 2004). The validity of this scale has been confirmed by some studies and the reported reliability of internal consistency ranges from 0.77 to 0.92 (Çoban & Demirtas, 2011; Hoy, Gage et al., 2006; Sims, 2011). Cronbach's alpha was reasonable for all sub-dimensions, Cronbach's alpha reliability for efficacy was found as 0.76, as 0.83 for trust, and as 0.87 for academic emphasis. The Cronbach's alpha reliability was measured as 0.86 in this study. These results show that Cronbach's alpha was good.

The Teacher Altruistic Behaviours Scale

In order to measure the altruistic behaviours of teachers, the Teacher Altruistic Behaviours Scale was used. The Teacher Altruistic Behaviours Scale (TAB) is an 18-item and 5-point Likert-type scale. The scale ranges from *never* to *always*. The reported reliability for the Turkish version of this scale is 0.92 (Yavuzer et al., 2006). The Cronbach's alpha reliability score for this study was 0.90. Internal consistency of four TAB dimensions were as follows: everyday helping (0.86), social responsibility-sharing (0.85), emergency helping (0.76) and donation (0.69).

As all the data were based on perceptions and collected from a single sample at a single point in time, common method bias might be a threat to the validity of the study. The common method bias is observed in a standard questionnaire survey study based on self-reported measures. In the questionnaire research, a respondent subject responds to the items in a particular survey at one point in time, and multiple constructs or items are measured using the same method. This leads to spurious effects (Podsakoff et al., 2012). In this study, Harman's one-factor test was employed to detect the possible common method bias. The scales used in this study have been used in many studies in literature, and are valid and reliable. Furthermore, these measured the variables of the model into constructs with eigenvalues greater than 1. In addition, the items that measured the variables of all three scales used are in structures with eigenvalues

greater than 1 (Buluc, 2009; Çoban & Demirtas, 2011; Yavuzer et al. 2006). Therefore, it can be mentioned that the concern about the common method bias in the data collected does not seem to be an issue in this study.

Statistical analysis

In this part of the study, several analyses were conducted to assess the hypotheses. First, descriptive statistics were conducted, and then bivariate correlations were assessed to investigate the relationship between variables of the study, and reliabilities of the measures were calculated in the study. The IBM SPSS Statistics 22 AMOS GRAPHICS 16 software was used to assess descriptive statistics, correlations, regressions, and the reliability of the instrument. The final step of the study included testing the mediating role of teachers' altruistic behaviours between enabling school structure and school academic optimism. For this purpose, an analysis involved in structural equation modeling was conducted to test the association among variables of the study, Enabling School Structure (ESS on School Academic Optimism (SAO) and Teacher Altruistic Behaviours (TAB). The final step of the study included testing the mediating role of teachers enabling behaviours between enabling school structure and school academic optimism. A series of steps were conducted to develop the final model of the study. Two models were tested to measure the mediating effect of TAB between other variables of the study. The χ^2 test of model fit, the root-mean-square error of approximation (RMSEA), the goodness-of-fit index (GFI), and the Tucker-Lewis index used to assess the model fit were calculated. Then the χ^2 test and χ^2/df ratio of model fit, the goodness-of-fit index (GFI), and the root-mean-square error of approximation (RMSEA) were used to assess the model fit. The final model of analysis investigated the goodness of fit and power of the model.

The research model for hypotheses H₁, (Enabling school structure is positively associated with teachers' altruistic behaviours), H₂ (there is a positive relationship between enabling school structure and teachers school academic optimism), and H₃ (The more altruistic behaviour of teachers, the more academic optimism of a school is) is depicted in figure 1. The model involves the relationship between ESS and TAB. The model also involves a correlation between SAO and TAB.

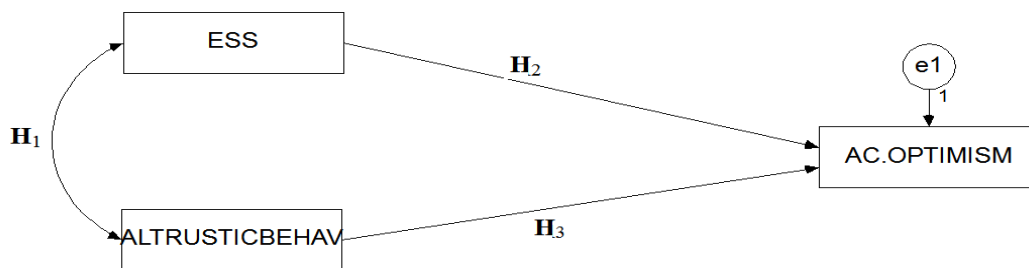


Figure 1. The hypotheses model.

Before the inferential statistics analyses the assumptions have been checked. The values for skewness and kurtosis between -2 and +2 are considered acceptable (George & Mallery, 2010) in order to prove normal univariate distribution. To detect the outliers' analysis, the Mahalanobis distance technique was used. For the linearity assumption and multicollinearity problem, the correlations matrix of variables was examined. As a result, it was decided that the assumptions were not seriously violated, and statistical analyses were carried out.

Findings

Correlational analysis

To demonstrate a preliminary description of the correlations between variables of the study, a correlation analysis was conducted. The results from the analysis were used to test Hypotheses 1, 2 and 3. The correlational table (see table 1) indicated a positive correlation between Enabling School Structure and School Academic Optimism ($r = .34, p < .01$), Enabling school Structure was weakly-to-moderately and positively associated with Teachers' Altruistic Behaviours ($r = .28, p < .01$). The results also indicate that there is a weak but positive relationship between school academic optimism and altruistic behaviours of teachers ($r = .30, p < .01$). All variables of the study were positively correlated with each other. For the depiction of this analysis, please see Table 1. The results obtained from the study confirmed the assumptions of research hypotheses (H₁, H₂, H₃) of the current study. Therefore, the goodness of fit and the chi-square test of model fit were used to assess the significance of the theoretical model. The findings indicated that the model had good fit as supported by a non-significant one. The chi-square value was significant ($\chi^2=569.43, (df=146), p < .001$), The root-mean-square error of approximation (RMSEA) was .06, the goodness of fit indices (CFI) was .96, and (GFI) was .92. The results showed a good data-to-model fit. Blunch, (2012), Çokluk et al. (2012) and Mitchell (2019) suggest that if the RMSEA is lower than .08 and the GFI is greater than .90, the model has a good fit. Fit indices obtained from the final model confirmed that the model has adequate fit data.

Table 1. Bivariate Correlations

Variables	SAO	1.	2.	3.	4.	5.	6.	7.	8.	9.
SAO	1									
1. Collective	.50**	1								
2. Trust	.80**	.07*	1							
3. Emphasis	.85**	.19**	.59**	1						
4. ESS	.34**	.29**	.19**	.28**	1					
5. TAB	.29**	.29**	.16**	.22**	.27**	1				
6. Helping	.23**	.26**	.11**	.15**	.20**	.88**	1			
7. Sharing	.27**	.28**	.14**	.21**	.33**	.85**	.64**	1		
8. E. Helping	.25**	.26**	.14**	.17**	.31**	.76**	.59**	.59**	1	
9. Donation	.12**	.00	.11**	.14**	.07*	.46**	.28**	.17**	.22**	1

**p<0,01; * p<0,05; N=707

Regression Analysis

In this section of the study, the IBM SPSS AMOS GRAPHICS 19 was used to calculate the effect of enabling school structure on school academic optimism and teachers' altruistic behaviours. Finally, the effect of perception of teachers about school academic optimism and on altruistic behaviours of teachers was measured. The IBM SPSS AMOS Graphics 19 was used to test H₁, H₂ and H₃. In addition to the correlation analysis, the hierarchical regression analysis was conducted to measure research hypotheses of the current study. In other words, the regression analysis was used to determine whether enabling school structure affects school academic optimism and teachers' altruistic behaviours. The regression analysis was also used to see whether school academic optimism influences teachers' altruistic behaviours. The results of the regression analysis were conducted to test the research hypotheses (H₁-H₂-H₃). The results of the regression analysis demonstrated that the effect of enabling school structure on school academic optimism and teachers' altruistic behaviours. The results displaying the rate of relationship between variables of study are presented in table 2.

Table 2. Path coefficients and significant level of Hypotheses

Hypothesis			Estimate	S.E.	t-test	p	
H1:	ESS	↔	TAB	,147	,021	7,112	,000
H2:	SAO	←	ESS	,208	,026	7,886	,000
H3:	SAO	←	TAB	,167	,027	6,114	,000

Table 2 indicates that a unit increase in Enabling School Structure is correlated with a ,208 increase in School Academic Optimism. The results also reveal that a unit increase in Teachers' Altruistic Behaviours is equal to a ,167 increase in School Academic optimism. The result presents a slight but positive relationship between Enabling school Structure and Teachers' Altruistic Behaviours (Covariance=,147). The results suggest that all variables of the study positively and significantly predict each other.

Structural equation model analysis

Research hypothesis 4. The mediating effect of TAB

The final section of the analysis involves the findings of the structural equation model. The analysis was used to measure H₄. The proposed theoretical models (see figure 2) were specified in this stage of the investigation. The structural equation model, which states that teachers' altruistic behaviours may function as a mediator between ESS and SAO, was built up. First, a measurement model (see figure 3) was created to measure the direct impact of Enabling School Structure on Academic optimism.

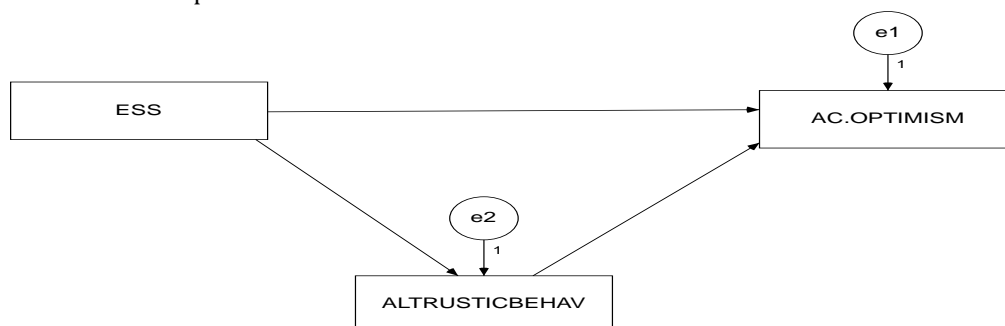


Figure 2. Theoretical model

The findings of the first model suggest that ESS had a positive and significant effect on SAO ($\beta = .52, p < .01$). Next, hypothesis four (H_4), which states that the TAB functions as a mediator between two variables of the study, was tested. Therefore, the TAB variable was added to the model (see Figure 4) to test the mediator effect of TAB between ESS and SAO.

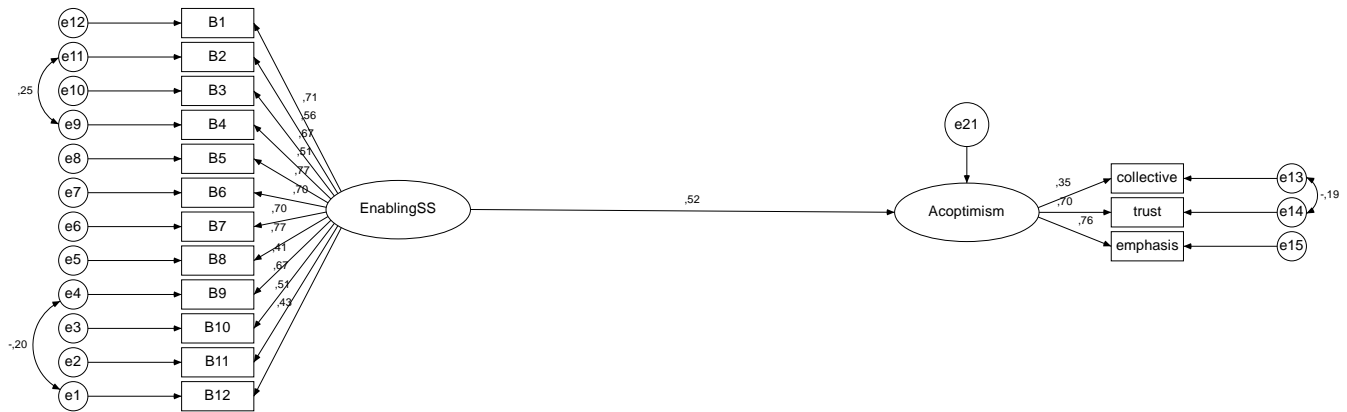


Figure 3. Direct relationship between ESS and SAO. (Model fit indices $\chi^2=470.95; df=83; p<.001; GFI=.89; IFI=.88; RMSEA=.087$).

The result of the SEM analysis revealed that ESS had an effect on SAO ($\beta=.47, p<.01$) through TAB. The results predicted that TAB caused a slight decrease in the effect of ESS on SAO when TAB was included in the model (see Figure 4).

However, the decrease was slight. Overall, this analysis suggests that TAB partially mediates the relationship between ESS and SAO.

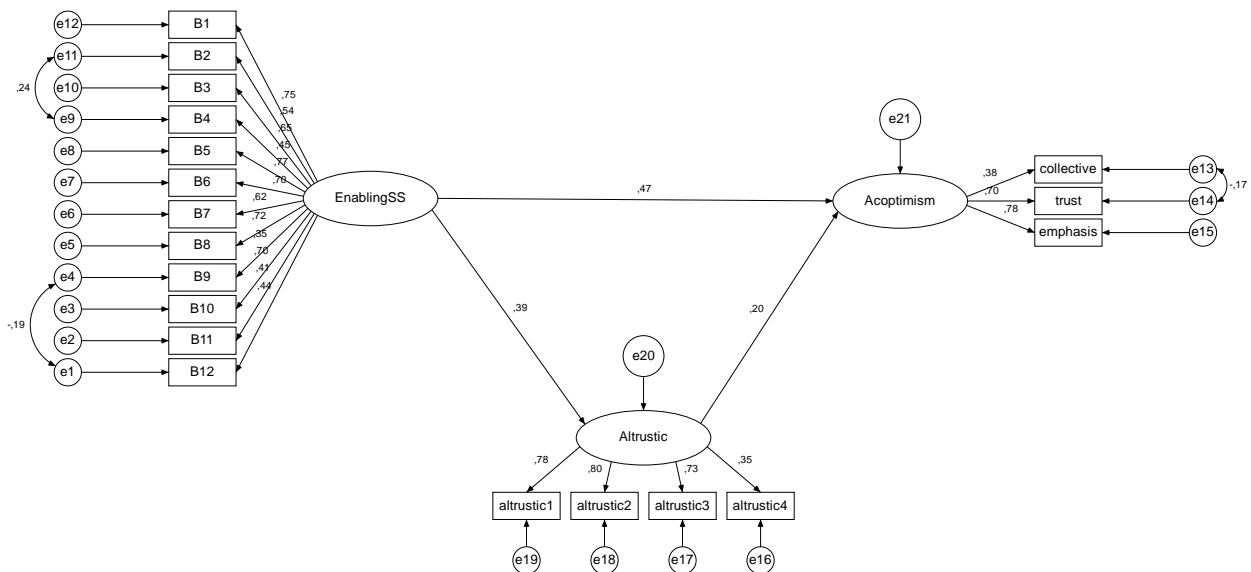


Figure 4. The final model with all significant paths remaining, (Model fit indices $\chi^2=569.43; df=146; p<.001; \chi^2/DF=3.90; GFI=.92; RMSEA=.064$).

Table 3. The direct and indirect effects of Enabling School Structure on Academic Optimism

	Path	*Coefficient (β)
Academic optimism	Direct Effect	0.47
	Indirect effect (mediated by altruistic behaviours)	0.08
	Altruistic behaviours→Ac.Optimism	0.20
	Total effect	0.55

The hypothesis predicted a positive direct effect of teachers' perception of enabling school structure on school academic optimism behaviour is 0.47. The indirect relationship between the perception of teachers towards enabling school structure and their school's academic optimism behaviour is 0.08. The total effect is 0.55.

Discussion

This research has been designed to explore the core proposition that enabling school structure influences teachers' altruistic behaviour and school academic optimism. Using the data of Turkish teachers, the mediation role of altruistic behaviour of teachers on the relationship between enabling school structure and school academic optimism was tested. Hypotheses that guided the present study were proven, revealing that altruistic behaviour is a mediating force between enabling school structure and school academic optimism. In other words, teachers with high sense of altruism cultivate a positive learning environment (Mitchell, 2019) by strengthening an enabling school structure that leads a higher level of academic optimism (Anderson et al., 2018). When teachers behave with a dedicated spirit (altruist), it is quite likely that principals will exhibit a more facilitating leadership style that reinforces the learning environment. The present study provides impressive messages especially for principals to maintain an enabling school structure to improve the quality of learning that is known to be consistently linked with teachers' altruistic behaviours and school academic optimism (Kılınc, 2013).

The first hypothesis that states ESS is positively associated with TAB was supported. Bivariate correlation results indicated that two variables had a positive association with each other. It was hypothesised that when a school has an enabling structure, the frequency of teachers' altruistic behaviors increases, that is, possibly positive climate learning is pervasive within the school. The findings support this assertion. The findings provide compelling support for building up enabling school structure. For, enabling school structure may enhance learning outcomes (Sinden et al., 2004), help subordinates solve the problems of schools, increase cooperative endeavour (Hoy, 2003), foster solidarity among stakeholders of school and evoke positive feelings in subordinates. In addition, enabling structure cultivates positive feelings and empowers commitment (Rachlin, 2002) among teachers, students, parents, and principals, It also reduces the role conflict (Michaels et al., 1988), eliminates stress, fosters responsibility, and increases effectiveness (Hoy & Sweetland, 2001; Sinden et al., 2004), which may result in higher academic achievement.

The data reveal that principals should reinforce two-way communication channels so that teachers can freely express the problems that they encounter during the teaching and learning process. Unless the problems are expressed freely, no rational solution to the problems is possible (Hoy et al., 2002). Thus, motivated teachers should work with a self-sacrificing spirit and cultivate student motivation. As it has already been mentioned, enabling school structure also fosters collaboration among colleagues (Wu, 2013). Likewise, in schools having a strong culture of enabling structures, teachers act in a devoted spirit that leads to altruistic behaviours. Altruistic behaviours reciprocally enhance teachers' commitment (Rachlin, 2002). The result of the study drives us to claim that altruistic teachers may contribute to organizational development by fostering teachers' self-efficacy. A high sense of altruism is expected to maintain a positive relationship with teachers and students because (Bergem, 1990) found positive correlation results in positive feelings between teachers and students.

We have no opportunity to compare the findings of our study with the results of previous studies because of the lack of supportive studies focusing on the relationship between two constructs. Teachers may work ambitiously and devotedly when principals' implications and practices are facilitative because management style and attitudes of leaders are known to be significant in affecting behaviors of employees (Asch, 1955; Blasé & Blasé, 2000; Boz, 2019; Sebastian & Allensworth, 2012) and in reinforcing quality of learning (Sebastian & Allensworth, 2012). Furthermore, a positive learning environment (Messick, 2012; Sinden et al., 2004; Sutcliffe & Weick, 2002) prompts teachers' for altruistic behaviours. In other words, teachers in a facilitating arena will probably feel under pressure to do their best and self-sacrifice for the benefit of their school. Another possible explanation to this finding predicts that our school has a moderate enabling school structure and teachers are altruist. This is a promising development with respect to education.

From this point of view, it is suggested that administrators should provide supportive implications to build up "the bright side" of bureaucracy that fosters the efficacy of schools (Hoy, 2003), thus, teachers appear to be more altruistic. Teachers in this study agree that enabling school structure enforces their self-efficacy and well-being (Song et al., 2020), which may result in positive outcomes of education. Consistent with these results, Fredrickson (2001) declared that positive emotions predict one's well-being that fosters productivity and hampers negative emotions such as "anxiety, sadness and anger. The findings of the study refer to surprising and promising results for the future of schools, meaning that our schools are not slaves of coercive bureaucracy in spite of the fact that The Ministry of National Education is highly centralized in Turkey. However, we must be prudent about the findings revealing that teachers participating in the study think that their school structure is enabling because the findings of the current study may not be an intrinsic view of teachers. Teachers may have dissembled and were not courageous enough to stand against the authority of principals. For example, just as (Asch, 1955) pinpointed, individuals under pressure are likely to change their opinion, judgement, and practices in the direction of authority.

The hypothesis stating that there is a positive association between ESS and SAO was supported. The analysis of the current study indicated that enabling school structure moderately and positively was related to academic optimism. The evidence from this study is consistent with the findings of earlier studies. The results of many works (Anderson, 2012; Beard, 2008; Beard et al. 2010; Hoy & Sweetland, 2001; McGuigan & Hoy, 2006) support our findings. In another research, Messick (2012) found out a positive relationship between enabling school structure and schools' academic optimism. The results proposed that when teachers perceive that principals endeavour to put the enabling side of

bureaucracy into effect and remove the coercing side of bureaucracy, they are likely to increase the quality of learning that substantially depends on teachers' beliefs, attitudes, and behaviours. In particular, teachers working with supportive principals are more likely to develop autonomous behaviours with no requirement to follow fix and determined methods in teaching, and their actions are not restricted with rule and procedures (Blasé & Blasé, 2000).

The results of the current study indicating a correlation between enabling school structure and academic optimism are not surprising because there are resemblances between the two variables. Both require collaboration, trust, mutual respect, collective efficacy, and commitment (Hoy, Tarter et al., 2006; Hoy & Sweetland, 2001). In other words, this is an expected result because schools having an enabling structure increase teachers' trust in colleagues, principals, students, and parents (Anderson, 2012). Furthermore, enabling school structure fosters collaboration among teachers, enhances problem-solving, and empowers teachers' capacity, which results in higher academic optimism (Hoy & Sweetland, 2001; McGuigan & Hoy, 2006; Messick, 2012; Mitchell, 2019; Sinden et al., 2004). Teachers may have the opportunity to collaborate with one another and to engage in collective inquiry activities in schools that have a high measure of ESS (McGuigan & Hoy, 2006). This is maybe the initial reason for this result. According to Hoy and Sweetland (2001), enabling school structure empowers collective efficacy and academic emphasis. That is to say, theories and research which argue that enabling schools predict academic optimism (Hoy et al., 2002; Hoy & Sweetland, 2001; Kılınc, 2013; Sinden et al., 2004) are supported with data of the current study. It is, therefore, possible to propose that teachers working with supportive principals will probably be more motivated, altruistic, and devoted with considerable enthusiasm and maintain close relationships with their students and colleagues to set high but achievable expectations for students, which may result in higher academic achievement. Such enthusiastic and self-sacrificing behaviours of principals will probably be role models and a source of inspiration for teachers because social learning theory proposes that an individual learns from beholding attitudes and behaviours of outstanding individuals (Bandura, 1993). Another explicit conclusion of a high sense of enabling school structure is that it possibly increases the school-parent interaction. Enabling school structure reinforces academic optimism and academic optimism enhances trust in parents because, as we mentioned earlier, trust is one of the three components of academic optimism and they reciprocally affect each other (Hoy, Tarter et al., 2006; Hoy & Sweetland, 2001).

Every incident happening within schools somehow affects us because, just as Bryk (2010, p. 26) stated, "in schools, everything interacts with everything". In other words, any efforts, implication, and initiatives of principals influence attitudes and behaviours of teachers, of students and of parents that are linked to the dynamics of the learning process. In this context, it may be argued that the school is a multi-organ structure in which each organ is vitally interrelated. Each organ is interactive and the well-being or miserableness of each affects the other. Hence, it is possible to liken the school to a federation of organs, as seen from the statement of Kropotkin (1897) who describes the dynamics and function of the body as a world of the federation. Every incident within schools has a conditional casual character. Therefore, we must keep in mind that every implication of principals somehow influences behaviours of teachers. Hence, they should consider the positive and negative effects of their leadership paradigm. They need to strengthen ties among teachers, students, and parents. The results are promising for principals to turn their schools into enabling structures because it is believed that these collaborative efforts to ensure mutual trust and solidarity can make great contributions to academic achievement.

Another striking result of the current study is that teachers' self-sacrificing altruistic behaviours foster school academic optimism. In other words, results confirmed that teachers' altruistic behaviours positively and significantly predict schools' academic optimism. Because of the lack of research, trying to investigate the relationship between two constructs, we have no opportunity to compare the present results with the results of studies conducted previously. The results suggest that teachers with a high sense of altruism are likely to set high but achievable expectations because they believe in students' intellectual capacity and parents' collaborative support. They believe that students are capable of scoring higher academic achievement. Messick (2012) posited that characteristics of academic optimism are also characteristics of successful schools, adding that these characteristics are also properties of schools where teachers show behaviours beyond their responsibility at work. Students' achievement is the priority of both altruistic teachers and of teachers with high sense of academic optimism. Teachers having a high sense of academic optimism are in the opinion that all student can manage to reach the expectation set for them (Hoy et al., 2002; Kılınc, 2013). Similarly, students are the final targets for altruistic teachers and for the altruistic teachers' struggle to maintain welfare and benefit of students (Friedman, 2016), thus, the results should be regarded in this perspective as well. Creating an inspiring learning environment for teachers is only possible by supporting altruistic teachers. Furthermore, altruistic teachers devote efforts to improve student learning and to look for new and effective ways for connecting parents to school (Bryk, 2010), and they strengthen the teachers-students interaction. Thus, intimate school academic optimism may be driven by behaviours of altruistic teachers.

The results also reveal that enabling school structure and teachers' altruistic behaviours mutually predict each other and foster schools' academic optimism together. When principals perceive self-sacrificing behaviours from teachers, they focus on the core mission of learning, and students will probably become more motivated for learning (Robinson et al., 2008), which refers to the important role of principals' and teachers' altruistic behaviours. For example, principals can shift their schools from ineffective to effective ones by creating an impressive learning environment.

More, they can eliminate procedures and standards that hamper communication channels and students' learning and collaborative efforts among school community members in education settings. Their efforts possibly result in a positive school atmosphere (Hong, 2017; McGuigan & Hoy, 2006). Principals can strengthen teachers' ability, gain the support of parents (Hong, 2017), highly motivate students to attain high expectations (Hoy, 2003; Kılınc 2013; McGuigan & Hoy, 2006; Messick, 2012), and foster virtuous behaviours among teachers. On the other hand, principals may hamper the learning process with their negative implementation that can demolish learning quality and outcomes as well. In sum, principals influence everything that happens within the school (McGuigan & Hoy, 2006).

One of the most intriguing findings of the study was that teachers' altruistic behaviours moderately mediate the relationship between enabling school structures and the schools' academic optimism. This finding illustrates the importance of altruistic behaviours in ensuring a culture of academic optimism in schools. For, the results predicted that behaviours of teachers play a critical role in explaining the relationship between enabling structure and school's academic optimism. This is the first study that examines the relationship among enabling school structure, teachers' altruistic behaviours, and schools' academic optimism. This makes our study more important. The results highlighted the importance of enabling structure because enabling school structure entails principals to manage school together with teachers (Mitchell, 2019).

Conclusion

This study is expected to make an important contribution by exploring the convergence among enabling school structure, academic optimism, and altruism. More importantly, the present study hopefully helps us understand whether teachers' altruistic behaviours serve as a mediator between enabling school structure and school academic optimism. A bulk of studies has provided satisfactory evidence that clarifies the role of enabling school structure, academic optimism, and altruism on learning outcomes, yet no previous study focused on the convergence among these three variables. In this regard, the current research fills the gap.

It was hypothesized that trio variables of the study are positively correlated with each other. More importantly, it was asserted that teacher's altruistic behaviours work as a mediator between enabling school structure and schools' academic optimism. Data obtained from a large sample of teachers provide significant evidence supporting that enabling school structure has mutual relationship with teacher's altruistic behaviours and with school academic optimism. This result of the SEM analysis supports the hypothesis that enabling school structure significantly influences schools' academic optimism through teachers' altruistic behaviours. Furthermore, it was concluded that enabling school structure and altruism conjointly may be regarded as two factors in fostering schools' academic optimism.

Based on these results, it can be asserted that if teachers perceive an enabling climate within the border of school, they can work more enthusiastically and attach more importance to their job and students' achievement because when principals give autonomy to teachers, they will strengthen the school academic optimism. In sum, if principals want to improve academic optimism that results in positive learning outcomes, they need to have altruistic teachers. The study let us see the whole picture from the teachers' perspective. The results clearly identify implications for policymakers and practitioners in schools.

Recommendations

The current study focuses on the relationship of enabling school structure with school academic optimism and teachers' altruistic behaviours. Evidence of the study concludes that trio of variables are positively correlated with each other. In other words, a unit change in one of these variables affects the other. The findings of the study suggest some recommendations for teachers and principals. Both teachers and principals are directly responsible for improving the quality of learning. Principals can improve students' achievement by cultivating a positive learning environment that motivates teachers to be more committed to their work. The findings empower the importance of school structure on teachers' behaviours that have a dominant impact on academic optimism.

Practitioners in schools should regard themselves as enabling agent to soften the negativity of bureaucracy. They need to represent the positive side of bureaucracy and devote more time and energy to reinforce collaboration among teachers. The practitioners in school need to evaluate bureaucracy with a holistic approach to bridge the gap between theory and practice. Although this study assumes that the effects of principals on school effectiveness are salient, they also have an impact on behaviours of teachers. Practitioners need to remember that there is 'no single style of management that seems appropriate for all schools, thus, they must find the style and structures most suited to their own local situation' (Bossert et al., 1982), for example, the cultural and political background of society is needed to be considered because a specific style of management draws different conclusions.

More studies are necessary to be conducted in different cultures to clarify the effect of ESS on other variables of the study. Furthermore, just as Hoy, Tarter et al., (2006) postulates, more research is needed to understand the nature of academic optimism and its influence on the success of schools. Finally, align with these results; future studies should pay attention to the relationship between these trio variables and other organizational properties.

Limitations

This study has several limitations. First, data were collected from one source through independent variables. Second, the results of the mediation effect of the enabling school structure on school academic optimism through teachers' altruism are moderate. Third, the study is limited to a moderate size of 707 teachers. Fourth, researchers considered the effect of the prevailing political climate in the country where the study was conducted. In other words, teachers may have avoided reflecting their real perceptions. This is possible especially when teachers were asked to state their thought about the managerial practices of principals who are sheltered by the implications of the guard wall of centralized bureaucracy in Turkey. Fifth, this is a correlational study, thus, a longitudinal design may be more useful.

References

- Adler, P. S., & Borys, B. (1996). Two types of bureaucracy: Enabling and coercive. *Administrative science quarterly*, 41(1), 61-89.
- Alexander, D., Chant, D., & Cox, B. (1994). What motivates people to become teachers. *Australian Journal of Teacher Education*, 19(2), 40-49. <https://doi.org/10.14221/ajte.1994v19n2.4>
- Anderson, K. (2012). *Examining relationships between enabling structures, academic optimism and student achievement* [Unpublished doctoral dissertation]. University of Auburn.
- Anderson, K., Kochan, F., Kensler, L. A., & Reames, E. H. (2018). Academic optimism, enabling structures, and student achievement: Delving into relationships. *Journal of School Leadership*, 28(4), 434-461. <https://doi.org/10.1177/105268461802800401>
- Ariane, M. R., & Jutta, R. (2015, March 25-27). *Consumer empowerment in food retailing and the role of altruistic motives: An application of the theory of planned behaviour* [Paper presentation]. National Symposium on Consumer Behaviour in a Changing World: Food, Culture, and Society, Naples, Italy.
- Asch, S. E. (1955). Opinions and social pressure. *Scientific American*, 193(5), 31-35. <https://doi.org/10.1038/scientificamerican1155-31>
- Bakx, A., Koopman, M., De Kruijf, J., & Den Brok, P. (2015). Primary school pupils views of characteristics of good primary school teachers: An exploratory, open approach for investigating pupils perceptions. *Teachers and Teaching: Theory and Practice*, 21(5), 543-564. <https://doi.org/10.1080/13540602.2014.995477>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148. https://doi.org/10.1207/s15326985ep2802_3
- Batson, C. D. (1983). Sociobiology and the role of religion in promoting prosocial behavior: An alternative view. *Journal of Personality and Social Psychology*, 45(6), 1380-1385. <https://doi.org/10.1037/0022-3514.45.6.1380>
- Batson, C. D. (1997). Self-other merging and the empathy-altruism hypothesis: Reply to Neuberg et al. (1997). *Journal of Personality and Social Psychology*, 73, 517-522. <https://doi.org/10.1037/0022-3514.73.3.517>
- Beard, K. S. (2008). *An exploratory study of academic optimism and flow of elementary school teachers* [Unpublished doctoral dissertation]. The Ohio State University.
- Beard, K. S., Hoy, W. K., & Hoy, A. W. (2010). Academic optimism of individual teachers: Confirming a new construct. *Teaching and Teacher Education*, 26(5), 1136-1144. <https://doi.org/10.1016/j.tate.2010.02.003>
- Beishuizen, J. J., Hof, E., Van Putten, C. M., Bouwmeester, S., & Asscher, J. J. (2001). Students' and teachers' cognitions about good teachers. *British Journal of Educational Psychology*, 71(2), 185-201. <https://doi.org/10.1348/000709901158451>
- Benson, J. (1983). The bureaucratic nature of schools and teacher job satisfaction. *Journal of Educational Administration*, 21(2), 137-148. <https://doi.org/10.1108/eb009874>
- Bergem, T. (1990). The teacher as moral agent. *Journal of Moral Education*, 19(2), 88-100. <https://doi.org/10.1080/0305724900190203>
- Blasé, J., & Blasé, J. (2000). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration*, 38(2), 130-141. <https://doi.org/10.1108/09578230010320082>
- Blunch, N. (2012). *Introduction to structural equation modeling using IBM SPSS statistics and AMOS*, Sage. <https://doi.org/10.4135/9781446249345>.
- Bossert, S. T., Dwyer, D. C., Rowan, B., & Lee, G. V. (1982). The instructional management role of the principal. *Educational Administration Quarterly*, 18(3), 34-64. <https://doi.org/10.1177/0013161X82018003004>
- Boz, A. (2019). Öğretim elemanlarının istenmeyen davranışları ile öğrenci yabancılaşması arasındaki ilişki [The

- relationship between instructors' misbehaviours and undergraduate students' alienation]. *Pamukkale University Journal of Education/ Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 49, 20-45.
- Bryk, A. S. (2010). Organizing schools for improvement. *Phi Delta Kappan*, 91(7), 23-30.
- Buluc, B. (2009). İlköğretim okullarında bürokratik okul yapısı ile okul müdürlerinin liderlik stilleri arasındaki ilişki [The relationship between bureaucratic school structure and leadership styles of school principals in primary schools]. *Education and Science/ Eğitim ve Bilim*, 34(152), 71-86.
- Burks, D. J., & Kobus, A. M. (2012). The legacy of altruism in health care: the promotion of empathy, prosociality and humanism. *Medical Education*, 46(3), 317-325. <https://doi.org/10.1111/j.1365-2923.2011.04159.x>
- Bush, T., & Sargsyan, G. (2013). Educational leadership and management: Theory, policy, and practice. *Main Issues of Pedagogy and Psychology*, 3(3), 31-43. <https://doi.org/10.24234/miopap.v3i3.255>
- Carucci, R. (2016, December 16). Why unethical people make unethical choices. *Harvard Business Review*. <https://hbr.org/2016/12/why-ethical-people-make-unethical-choices>.
- Cassity, A. H. (2012). *Relationships among perceptions of professional learning communities, school academic optimism, and student achievement in Alabama middle and high schools* [Unpublished doctoral dissertation]. University of Alabama Libraries.
- Charlton, B. G. (2010). The cancer of bureaucracy: How it will destroy science, medicine, education; and eventually everything else. *Medical Hypotheses*, 74(6), 961-965. <https://doi.org/10.1016/j.mehy.2009.11.038>
- Çoban, D., & Demirtaş, H. (2011). The relationship between the level of schools' academic optimism and teachers' organizational commitment. *Educational Administration: Theory and Practice*, 17(3), 317-348.
- Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2012). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları* [Multivariate statistics for social sciences: SPSS and LISREL applications]. Ankara: Pegem Akademi.
- Csikai, E. L., & Rozensky, C. (1997). "Social work idealism" and students' perceived reasons for entering social work. *Journal of Social Work Education*, 33(3), 529-538. <https://doi.org/10.1080/10437797.1997.10778891>
- Dean, S. D. (2011). *Collegial leadership, teacher professionalism, faculty trust: predicting teacher academic optimism in elementary schools* [Unpublished doctoral dissertation]. University of Alabama Libraries.
- Dilmac, B. (2009). An analysis of teachers general tendency to procrastinate, perception of professional efficiency/self-efficiency and altruism. *Electronic Journal of Research in Educational Psychology*, 7(3), 1323-1338.
- Dormann, M., Hinz, S., & Wittmann, E. (2019). Improving school administration through information technology? How digitalisation changes the bureaucratic features of public school administration. *Educational Management Administration and Leadership*, 47(2), 275-290. <https://doi.org/10.1177/1741143217732793>
- Dotterer, A. M., & Wehrspann, E. (2016). Parent involvement and academic outcomes among urban adolescents: Examining the role of school engagement. *Educational Psychology*, 36(4), 812-830. <https://doi.org/10.1080/01443410.2015.1099617>
- Egilmez, E., & Naylor-Tincknell, J. (2017). Altruism and popularity. *International Journal of Educational Methodology*, 3(2), 65-74. <https://doi.org/10.12973/ijem.3.2.65>
- Emmerik, I. H. V., Jawahar, I. M., & Stone, T. H. (2005). Associations among altruism, burnout dimensions, and organizational citizenship behaviour. *Work & Stress*, 19(1), 93-100. <https://doi.org/10.1080/02678370500046283>
- Erten, İ. H. (2015). Öğretmenliği kariyer olarak seçmede özgeci güdülenmeye dair toplumsal cazibe yanlılığı sorunu [Social desirability bias in altruistic motivation for choosing teaching as a career]. *Hacettepe University Journal of Education/ Hacettepe Eğitim Dergisi*, 30(1), 77-89.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226. <https://doi.org/10.1037/0003-066X.56.3.218>
- Friedman, I. A. (2016). Being a teacher: altruistic and narcissistic expectations of pre-service teachers. *Teachers and Teaching: Theory and Practice*, 22(5), 625-648. <https://doi.org/10.1080/13540602.2016.1158469>
- 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. <https://doi.org/10.3102/00028312037002479>
- Goddard, R. D., Sweetland, S. R., & Hoy, W. K. (2000). Academic emphasis of urban elementary schools and student achievement in reading and mathematics: A multilevel analysis. *Educational Administration Quarterly*, 36(5), 683-

702. <https://doi.org/10.1177/00131610021969164>

- Serrano González-Tejero, J. M., & Pons Parra, R. M. (2011). El constructivismo hoy: Enfoques constructivistas en educación [Constructivism today: Constructivist approaches in education]. *Electronic Journal of Educational Research/ Revista Electrónica de Investigación Educativa*, 13(1), 1-27.
- George, D., & Mallery, M. (2010). *SPSS for windows step by step: a simple guide and reference* (10th ed.). Pearson Education India.
- Guinot, J., Chiva, R., & Mallén, F. (2015). The effects of altruism and relationship conflict on organizational learning. *International Journal of Conflict Management*, 26(1), 85-112. <https://doi.org/10.1108/IJCM-12-2013-0100>
- Gummerum, M., & Hanoch, Y. (2012). Altruism behind bars: Sharing, justice, perspective taking and empathy among inmates. *Social Justice Research*, 25(1), 61-78. <https://doi.org/10.1007/s11211-012-0149-8>
- Hallinger, P., & Heck, R. H. (2010). Leadership for learning: Does collaborative leadership make a difference in school improvement? *Educational Management Administration & Leadership*, 38(6), 654-678. <https://doi.org/10.1177/1741143210379060>
- Hamachek, D. (1975). Characteristics of good teachers and implications for teacher educators. In M. Mohan & R. E. Hull (Eds.), *Teaching effectiveness: Its meaning, assessment, and improvement* (pp. 239-251). Educational Technology Publications.
- Hein, V., Ries, F., Pires, F., Caune, A., Ekler, J. H., Emeljanovas, A., & Valantiniene, I. (2012). The relationship between teaching styles and motivation to teach among physical education teachers. *Journal of Sports Science & Medicine*, 11(1), 123.
- Henson, R. K., Kogan, L. R., & Vacha-Haase, T. (2001). A reliability generalization study of the teacher efficacy scale and related instruments. *Educational and Psychological Measurement*, 61(3), 404-420. <https://doi.org/10.1177/00131640121971284>
- Hill, N. E. (2015). Including fathers in the picture: A meta-analysis of parental involvement and students' academic achievement. *Journal of Educational Psychology*, 107(4), 919-934. <https://doi.org/10.1037/edu0000023>
- Hong, F. Y. (2017). Antecedent and consequence of school academic optimism and teachers' academic optimism model. *Educational Studies*, 43(2), 165-185. <https://doi.org/10.1080/03055698.2016.1248902>
- Hoy, W. K. (2003). An analysis of enabling and mindful school structures: Some theoretical, research and practical considerations. *Journal of Educational Administration*, 41(1), 87-109. <https://doi.org/10.1108/09578230310457457>
- Hoy, W. K., Gage, C. Q., & Tarter, C. J. (2006). School mindfulness and faculty trust: Necessary conditions for each other? *Educational Administration Quarterly*, 42(2), 236-255. <https://doi.org/10.1177/0013161X04273844>
- Hoy, A. W., Hoy, W. K., & Kurz, N. M. (2008). Teacher's academic optimism: The development and test of a new construct. *Teaching and teacher education*, 24(4), 821-835. <https://doi.org/10.1016/j.tate.2007.08.004>
- Hoy, W. K., Smith, P. A., & Sweetland, S. R. (2002). The development of the organizational climate index for high schools: Its measure and relationship to faculty trust. *The High School Journal*, 86(2), 38-49. <https://doi.org/10.1353/hsj.2002.0023>
- Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21(4), 343-356. <https://doi.org/10.1016/j.tate.2005.01.007>
- Hoy, W. K., & Sweetland, S. R. (2001). Designing better schools: The meaning and measure of enabling school structures. *Educational Administration Quarterly*, 37(3), 296-321. <https://doi.org/10.1177/00131610121969334>
- Hoy, W. K., & Tarter, C. J. (2011). Positive psychology and educational administration: An optimistic research agenda. *Educational Administration Quarterly*, 47(3), 427-445. <https://doi.org/10.1177/0013161X10396930>
- Hoy, W. K., Tarter, C. J., & Hoy, A. W. (2006). Academic optimism of schools: A force for student achievement. *American Educational Research Journal*, 43(3), 425-446. <https://doi.org/10.3102/00028312043003425>
- İşmen, A. E., & Yıldız, S. A. (2005). Öğretmenliğe ilişkin tutumların özgecilik ve atılganlık düzeyleri açısından incelenmesi [The relationship between altruism, assertiveness and attitudes towards teaching profession]. *Educational Administration; Theory and Practice/ Kuram ve Uygulamada Eğitim Yönetimi*, (42), 151-66.
- Jacobs, N., & Harvey, D. (2005). Do parents make a difference to children's academic achievement? Differences between parents of higher and lower achieving students. *Educational Studies*, 31(4), 431-448. <https://doi.org/10.1080/03055690500415746>

- Kilınç, A. Ç. (2013). The relationship between individual teacher academic optimism and school climate. *International Online Journal of Educational Sciences*, 5(3), 621-634.
- Kropotkin, P. A. (1897). *Anarchism: Its philosophy and ideal*. Rows Collection.
- Lay, J. C., & Hoppmann, C. A. (2015). Altruism and Prosocial Behavior. In *Encyclopedia of Geropsychology*. https://doi.org/10.1007/978-981-287-080-3_69-1
- Lee, V. E., & Bryk, A. S. (1989). A multilevel model of the social distribution of high school achievement. *Sociology of Education*, 62(3), 172-192.
- Leithwood, K., & Levin, B. (2011). Understanding how leadership influences student learning. In S. Jarvela (Ed.), *Social and emotional aspects of learning* (pp. 251-255). Elsevier. <https://doi.org/10.1016/B978-0-08-044894-7.00439-5>
- Mascall, B., Leithwood, K., Straus, T., & Sacks, R. (2008). The relationship between distributed leadership and teachers' academic optimism. *Journal of Educational Administration*, 46(2), 214-228. <https://doi.org/10.1108/09578230810863271>
- McEwan, E. K. (2009). *Ten traits of highly effective schools: Raising the achievement bar for all students*. Corwin Press.
- McGuigan, L., & Hoy, W. K. (2006). Principal leadership: Creating a culture of academic optimism to improve achievement for all students. *Leadership and policy in schools*, 5(3), 203-229. <https://doi.org/10.1080/15700760600805816>
- Merton, R. K. (1963). *Bureaucratic Structure and Personality*. In N. J. Smelser & W. T. Smelser (Eds.), *Personality and social systems* (pp. 255-264). John Wiley & Sons Inc. <https://doi.org/10.1037/11302-024>
- Messick, P. (2012). *Examining relationships among enabling school structures, academic optimism, and organizational citizenship behaviors* [Unpublished doctoral dissertation]. University of Auburn.
- Michaels, R. E., Cron, W. L., Dubinsky, A. J., & Joachimsthaler, E. A. (1988). Influence of formalization on the organizational commitment and work alienation of salespeople and industrial buyers. *Journal of Marketing Research*, 25(4), 376-383. <https://doi.org/10.2307/3172948>
- Mitchell, R. M. (2019). Enabling school structure & transformational school leadership: Promoting increased organizational citizenship and professional teacher behavior. *Leadership and Policy in Schools*, 18(4), 614-627. <https://doi.org/10.1080/15700763.2018.1475577>
- Myra, H. L., & Shelley, M. (2005). *The leadership secrets of Billy Graham*. Harper Collins.
- Ngidi, D. P. (2012). Academic optimism: An individual teacher belief. *Educational Studies*, 38(2), 139-150. <https://doi.org/10.1080/03055698.2011.567830>
- Oda, R., Machii, W., Takagi, S., Kato, Y., Takeda, M., Kiyonari, T., Fukukawa, Y., & Hiraishi, K. (2014). Personality and altruism in daily life. *Personality and Individual Differences*, 56, 206-209. <https://doi.org/10.1016/j.paid.2013.09.017>
- Organisation for Economic Cooperation and Development. (2019). PISA Science performance. https://www.oecd-ilibrary.org/education/science-performance-pisa/indicator/english_91952204-en
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*, 63(1), 539-569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Punch, K. F. (1969). Bureaucratic structure in schools: Towards redefinition and measurement. *Educational Administration Quarterly*, 5(2), 43-57. <https://doi.org/10.1177/0013131X6900500204>
- Rachlin, H. (2002). Altruism and selfishness. *Behavioral and Brain Sciences*, 25(2), 239-250. <https://doi.org/10.1017/S0140525X02000055>
- Robinson, V. M., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*, 44(5), 635-674. <https://doi.org/10.1177/0013161X08321509>
- Sağnak, M., & Kuruöz, M. (2017). Authentic Leadership and Altruism: The Mediating Role of Meaningfulness. *Universal Journal of Educational Research*, 5(3), 447-452. <https://doi.org/10.13189/ujer.2017.050316>
- Sarkadi, A., Kristiansson, R., Oberklaid, F., & Bremberg, S. (2008). Fathers' involvement and children's developmental outcomes: a systematic review of longitudinal studies. *Acta Paediatrica*, 97(2), 153-158. <https://doi.org/10.1111/j.1651-2227.2007.00572.x>

- Saylık, A. (2015). İngiltere eğitim sistemi üzerine bir inceleme: amaç, yapı ve süreç bakımından Türkiye eğitim sistemiyle karşılaştırılması [A study on education system of England: Comparison with Turkish education system in terms of aim, structure and process]. *Route Educational and Social Science Journal*, 2(2), 652-671.
- Scott, C., Cox, S., & Dinham, S. (1999). The occupational motivation, satisfaction and health of English school teachers. *Educational Psychology*, 19(3), 287-308. <https://doi.org/10.1080/0144341990190304>
- Sebastian, J., & Allensworth, E. (2012). The influence of principal leadership on classroom instruction and student learning: A study of mediated pathways to learning. *Educational Administration Quarterly*, 48(4), 626-663. <https://doi.org/10.1177/0013161X11436273>
- Sénéchal, M., & Young, L. (2008). The effect of family literacy interventions on children's acquisition of reading from kindergarten to grade 3: A meta-analytic review. *Review of Educational Research*, 78(4), 880-907. <https://doi.org/10.3102/0034654308320319>
- Shi, X., & Zhang, L. (2017). Effects of altruism and burnout on driving behavior of bus drivers. *Accident Analysis & Prevention*, 102(5), 110-115. <https://doi.org/10.1016/j.aap.2017.02.025>
- Simon, H. (1993). Altruism and economics. *The American Economic Review*, 83(2), 156-161.
- Sims, R. L. (2011). *Mindfulness and academic optimism: A test of their relationship* [Unpublished doctoral dissertation]. University of Alabama.
- Sinden, J. E., Hoy, W. K., & Sweetland, S. R. (2004). An analysis of enabling school structure: Theoretical, empirical, and research considerations. *Journal of Educational Administration*, 42(4), 462-478. <https://doi.org/10.1108/09578230410544071>
- Smith, P. A. & Hoy, W. K. (2007). Academic optimism and student achievement in urban elementary schools. *Journal of Educational Administration*, 45(5), 556-568. <https://doi.org/10.1108/09578230710778196>
- Song, H., Gu, Q., & Zhang, Z. (2020). An exploratory study of teachers' subjective wellbeing: understanding the links between teachers' income satisfaction, altruism, self-efficacy and work satisfaction. *Teachers and Teaching*, 26(1), 3-31.
- Sutcliffe, K., & Weick, K. (2002). Managing the unexpected: Assuring high performance in an age of complexity. *European Management Journal*, 20(2), 709-710.
- Tschannen-Moran, M., & Gareis, C. R. (2015). Principals, trust, and cultivating vibrant schools. *Societies*, 5(2), 256-276. <https://doi.org/10.3390/soc5020256>
- Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23(6), 944-956. <https://doi.org/10.1016/j.tate.2006.05.003>
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education*, 6(2), 137-148. [https://doi.org/10.1016/0742-051X\(90\)90031-Y](https://doi.org/10.1016/0742-051X(90)90031-Y)
- Wu, J. H. (2013). Academic optimism and collective responsibility: An organizational model of the dynamics of student achievement. *Asia Pacific Education Review*, 14(3), 419-433. <https://doi.org/10.1007/s12564-013-9269-6>
- Yavuzer, H., Ismen-Gazioglu, E., Yildiz, A., Demir, I., Meseci, F., Kiliçaslan, A., & Sertelin, Ç. (2006). The teacher altruism scale: Development, validity and reliability. *Educational Sciences: Theory and Practice/ Kuram ve Uygulamada Eğitim Bilimleri*, 6(3), 964-972.