

The Relationship between Individual Teacher Academic Optimism and School Climate

Ali Çağatay Kılınc

Karabük University, Faculty of Letters, Karabük, Turkey

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ABSTRACT

Academic optimism is one of the significant organizational and individual characteristics that has recently attracted educational researchers' attention to improve student learning and achievement. The purpose of this study was to examine the relationships between teacher sense of academic optimism and school climate. The study sample consisted of 302 teachers employed in primary schools in Kastamonu, Turkey. Results indicated that teacher sense of academic optimism was positively and significantly related to supportive, directive, and intimate school climates and that intimacy was the only significant predictor of teacher sense of academic optimism. Findings of the present study have supported the notion that school climate is a significant construct for understanding and explaining teacher sense of academic optimism. Results of this study were discussed in relation to practical implications in school settings.

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Keywords:

Academic optimism, school climate, primary school, teacher, Turkey

Introduction

The improvement of student learning and achievement along with building an effective learning environment at schools depend largely on teachers' beliefs about students' academic achievement and their focus on academic tasks. Academic optimism is one of the constructs that reflects teachers' such beliefs and efforts on improving student achievement. As a relatively new concept emerging from the empirical and theoretical research on positive psychology, optimism, and social capital (Beard et al., 2010), academic optimism has recently attracted more attention in improving student achievement (Anderson, 2012; Beard et al., 2010; Cassity, 2012; Hoy, Tarter, & Woolfolk Hoy, 2006; McGuigan, 2005; McGuigan & Hoy, 2006; Mishoe, 2012; Nelson, 2012; Rand, 2009; Steinberg, 2007; Wagner, 2008; Woolfolk Hoy, Hoy & Kurz, 2008; Wu, 2012). Academic optimism has been regarded as one of the most important school and individual characteristics that impacts overall teaching environment in schools along with student learning and achievement (Beard et al., 2010). Hoy et al. (2006) state that built upon three organizational properties entitled as academic emphasis, collective efficacy of faculty, and faculty trust in parents and students, school academic optimism has the potential to influence the quality of learning and teaching environment at schools. Scholars have long investigated the construct of academic optimism at the school level (Çoban & Demirtaş 2011; Hoy et al. 2006; McGuigan & Hoy 2006). On the other hand, recent research has produced substantive empirical data to treat academic optimism as an individual teacher characteristic implying that efficacy, trust, and academic emphasis have similar meanings at the individual level and that these

¹ Corresponding author's address: Karabük University Faculty of Letters, Karabük, Turkey
Telephone: 370 433 82 94 (2698)
Fax: 370 433 82 64
e-mail: cagataykilinc@karabuk.edu.tr

properties can be attributed to the individual teacher (Beard et al., 2010; Woolfolk Hoy et al., 2008). Therefore, this study examined the construct of academic optimism at the individual teacher level.

Scholars have recently investigated the relationships between academic optimism and enabling school structure (Anderson, 2012; McGuigan & Hoy, 2006), professional learning community (Cassity, 2012), organizational commitment (Çoban & Demirtaş, 2011), teacher burnout (Lynn, 2013; Yalçın, 2012), distributed leadership (Malloy, 2012), academic achievement (McGuigan, 2005; Mishoe, 2012; Nelson, 2012; Steinberg, 2007; Wu, 2012), instructional leadership (Allen, 2011), transformational leadership (Rutledge II, 2010), teacher flow (Beard, 2008), teacher professionalism (Dean, 2011), commitment to the profession (Kurz, 2006), organizational citizenship (Messick, 2012; Wagner, 2008) and mindfulness (Sims, 2011). Hoy et al. (2006) emphasize that academic emphasis has been a critical factor in predicting student engagement and that more research is required for a better understanding of teacher academic optimism and for constructing the theory of academic optimism in schools. Thus, we need more research to understand the academic optimism and its relationships with other school or individual properties. Although there are a number of studies on academic optimism of schools or individual teachers, research concentrating on the relationships between academic optimism and school climate is quite limited (Reeves, 2010). Thus, this study investigating the relationships between teacher sense of academic optimism and school climate may produce empirical evidence on which types of school climates support or hinder teacher sense of academic optimism.

Conceptual Framework

This study was mainly guided by positive psychology which stresses peoples' control over their own actions and words (Seligman, 2006). The construct of individual teacher academic optimism depends upon positive psychology which primarily focuses on the individuals' actions and experience in the aspects of well-being, hope, and happiness (Beard et al., 2010). Woolfolk Hoy et al. (2008) suggest that psychologists devote a great deal of time and effort to identify workplaces or circumstances in which individuals are happy and effective and that they generally analyze the positive aspects of life. It is therefore possible to argue that positive psychology is primarily related to positive human beliefs, thoughts, and feelings that create positive human experience (Kurz, 2006).

Academic optimism of schools. Academic optimism relies upon the assumption that school members feel a sense of shared purpose about achieving a higher level of student achievement and learning (McGuigan & Hoy, 2006). Woolfolk Hoy et al. (2008) summarize that academic optimism represents teachers' positive beliefs on their ability to contribute well to student learning by effectively collaborating with students and parents and by trusting their own capacity to stand against negative situations. Hoy et al. (2006) refer that academic optimism is comprised of three separate properties each of which may explain student achievement even after controlling socioeconomic factors: *academic emphasis*, *collective efficacy*, *faculty trust in parents and students*. Academic emphasis holds the normative and behavioral side of academic optimism (McGuigan & Hoy, 2006). In other words, it explains directed behaviors, practices or actions and a sense of press towards increasing the quality of classroom instruction in order to achieve a higher level of student achievement (Beard et al., 2010). Collective efficacy of teachers reflects a group of teachers' beliefs that their collective efforts or attempts to create a positive learning environment for students at schools are likely to succeed (Goddard et al., 2000). Therefore, collective efficacy symbolizes the cognitive side of academic optimism. The last variable that impacts student academic achievement within the construct of academic optimism is faculty trust in parents and students. Hoy and Tschannen-Moran (1999) claim that faculty trust in parents and students mirrors teachers' feelings on parents and students' being benevolent, reliable, competent, honest, and open. Thus, it is probable to suggest that faculty trust is closely linked with teachers' feelings that represent the affective side of academic optimism (Hoy et al., 2006).

A line of researchers (e.g. Beard et al., 2010; Hoy et al., 2006; Woolfolk Hoy et al., 2008; McGuigan & Hoy, 2006) refer that there are reciprocal relationships between the variables of academic optimism. In this regard, trust-based relationships among faculty members give rise to collective efficacy sense of teachers. In turn, the higher the collective efficacy sense of teachers, the more they trust in parents and students. When faculty members trust students and parents, they become comfortable with the belief that their efforts on improving student achievement will not be hampered by students and especially by parents and that they are more likely to influence student learning. This results in higher academic achievement which in turn

encourages faculty trust in parents and students. Finally, when teachers believe that the faculty as a whole is capable of designing more effective learning practices and building a focused school environment, faculty members together concentrate more on students' achieving higher academic standards which in turn enhances collective efficacy (Hoy et al., 2006).

Teacher sense of academic optimism. Guided by earlier research (Beard et al., 2010; Woolfolk Hoy et al., 2008), this study focuses on academic optimism at the individual teacher level. Individual sense of academic optimism is comprised of teacher sense of self efficacy, teacher trust in parents and students, and teacher academic optimism to create a positive and challenging learning environment for students (Woolfolk Hoy et al., 2008).

Teacher sense of self efficacy. Woolfolk Hoy et al. (2008) define teacher sense of self efficacy as teachers' ability to affect even the unmotivated or difficult students' learning and achievement positively. Hoy and Spero (2005) suggest that teacher sense of self efficacy impacts to a large extent efforts they invest in improving the quality of teaching and learning environment in schools. Kurz (2006) remarks that teacher' beliefs on their being capable of influencing student achievement give them power and energy to invest more in teaching. Woolfolk Hoy et al. (2008) further assert that self efficacy is one of the most crucial characteristics of teachers associated with student achievement because of the fact that teachers have higher expectations for their students, exert greater effort to enable more effective student learning and stand out against difficulties they experience when they believe in their knowledge, ability, and expertise. Therefore, as stated by Beard et al. (2010), it is reasonable to predict a close relationship between teacher sense of self efficacy and student achievement.

Teacher trust in parents and students. Trust among school members is regarded as one of the critical components producing significant gains in student achievement (Kurz, 2006). Teacher trust in parents and students may increase teacher sense of self efficacy which results in greater teacher efforts on planning and designing a more effective classroom instruction (Woolfolk Hoy et al., 2008). Considering the reciprocal relationships between the components of academic optimism (Beard et al., 2008), it is possible to argue that teachers who trust students and parents can perform more effectively to increase the quality of classroom practices which in turn enhances teacher trust in other parties of school. It is also expected that students become more open and motivated to learn when teachers trust them (Woolfolk Hoy et al., 2008). Thus, trust can be attributed as one of the crucial components to help students achieve at higher levels.

Teacher academic emphasis. Academic emphasis refers to teachers' beliefs about and efforts on student learning (Woolfolk Hoy et al. 2008). According to Goddard, Hoy, and Woolfolk Hoy (2000), academic emphasis is a pressure that teachers feel to facilitate student learning. Beard et al. (2010) define teacher academic emphasis or academic press as "the degree to which teachers find ways to engage students in appropriate and academic task" (p. 1137). Teachers with high levels of academic emphasis who exert a great amount of effort on increasing student engagement are expected to create a healthy and focused learning environment where academics are the top priority (Kurz, 2006). McGuigan and Hoy (2006) also affirm that a higher level of teacher academic emphasis can impact teacher sense of self efficacy and teacher trust in parents and students. Therefore, teacher academic emphasis is closely related to how teachers perceive their role on improving student achievement and what they do to create an appropriate learning environment in schools.

In sum, teacher sense of self efficacy refers to an individual belief which symbolizes the cognitive part of academic optimism. Teacher trust in parents and students holds the affective side of academic optimism while teacher academic emphasis is associated with time and effort teachers devote to improving instruction which represents the behavioral component of the construct (Woolfolk Hoy et al., 2008).

School climate. School climate can be attributed as the personality of a school (Halpin & Croft, 1963). School climate is faculty members' perceptions on certain properties of schoolhouse (Hoy & Clover, 1986). As one way to conceptualize the nature of workplace, school climate includes a number of within-school characteristics that impact faculty members' behaviors (Hoy et al., 1991). Kaplan and Geoffroy (1990) point out that climate addresses school community members' reflections about physical and psychological environment of school. School climate is closely related to the quality of communication and interactions among school community members (Haynes et al., 1997), which affects both teachers, school administrators,

and other workers and students (Marshall, 2004). In line with this argument, Hoy and Clover (1986) suggest that teachers and school administrators' motivation and behaviors are formed by relationships among teachers and between teachers and school principals. As Hoy et al. (1991) summarize, school climate refers to faculty members' collective perceptions on formal and informal sides of organizational structure, characteristics of colleagues, principal leadership, and how things are done in the organization.

School climate and its unique characteristics may have various effects on organizational behavior, organizational performance and relationships among school community members (Çalık & Kurt, 2010). In supportive school climates, for instance, members of school community respect each other and find ways to collaborate to basically increase the quality of classroom instruction. Furthermore, principals in such kind of school climates are open to ideas and suggestions from teachers as teachers are regarded as the potential power to create a healthy and proper school climate. Professional orientation is also high in supportive school climates. In the same vein, strong collegial and congenial relationships are experienced in intimate school climates in which teacher and principals support well each other, reflect on ideas, and socialize together (Hoy et al., 1991). In restrictive school climates, however, teachers are busy with unnecessary workload which prevents them from exerting productive efforts on increasing student engagement. Principals of these schools are also far from facilitating teacher work and focusing on student achievement. In other respects, schools with directive climates are characterized by close and rigid supervision which in turn results that school principal is the only one who controls and manages all the school activities (Hoy & Clover, 1986).

Hoy et al. (1991) claim that a healthy school climate defines a school environment which includes an orderly and serious workplace, a rewarding mechanism for students' academic achievement, coherent work units built upon trustworthy relationships among faculty members, and effective principals focusing essentially on student learning. Turan (2002) states that teachers become more committed to teaching profession in positive school climates. Hoy et al. (1991) also purport that healthy school climates are more likely to help teachers improve the quality of instruction by creating appropriate conditions for colleagues to collaborate effectively. In parallel with this argument, Kottkamp et al. (1997) remark that an open and positive school climate presents a wide variety of opportunities for faculty members to collaborate and reflect on different ideas in order to influence student learning. On the contrary, teachers are less motivated and focused to achieve higher levels of student learning and the school principal is far from proving a clear direction for school in a closed and unhealthy school climate (Hoy et al., 1991). Sweetland and Hoy (2000) also discuss that in unsupportive and negative school climates, teachers and school administrators focus mainly on routine tasks and unnecessary work instead of enhancing school environment in physical, psychological, and academic ways and that collegial and congenial relationships among faculty members are rare. It is therefore apparent that different types of school climates have different outcomes for schools.

School climate literature makes it clear that earlier studies on school climate mostly concentrated on defining and measuring the concept (Halpin & Croft, 1963; Hoy & Clover, 1986; Hoy et al., 1991; Kottkamp et al., 1987). There has also been a variety of recent studies investigating the relationships between school climate and organizational commitment (Turan, 2002), job satisfaction (Schulte et al., 2006) and teacher burnout (Grayson & Alvarez, 2008), student achievement (MacNeil et al., 2009; Uline & Tschannen-Moran, 2008), school effectiveness (Maloy & Seldin, 1983), organizational health (Hoy & Hannum, 1997; Hoy et al., 1990), organizational citizenship (DiPaola & Tschannen-Moran, 2001) and school leadership (Griffith, 1999; Kelley & Daugherty, 2005; Shaw, 2009).

Albeit relationships between academic optimism and various concepts have already been investigated, the number of studies centered upon relationships between academic optimism and school climate is quite limited (Reeves, 2010). Hoy et al. (1991) emphasize that healthy school climates nurture academic excellence, academically oriented teachers, and effective student learning. Mishoe (2012) postulates that school climate of academic press plays a crucial role in facilitating student learning. Sweetland and Hoy (2000) also argue that positive school climates encourage academic emphasis by enabling an appropriate learning environment while faculty members are disengaged, unsatisfied, and busy with heavy workload in closed school climates.

Organizational climate and academic optimism are similar in nature that they both have been investigated by scholars to learn more about factors that make schools effective in student learning and student achievement (Reeves, 2010). Hoy and Tarter (1997) suggest that an open and healthy school climate may well be a predictor of a school environment characterized by trust, commitment, and high level of student achievement. Furthermore, research revealed that both school climate (Hoy & Hannum, 1997; McNeil et al., 2009; Uline & Tschannen-Moran, 2008) and academic optimism (Hoy et al., 2006; McGuigan, 2005; Mishoe, 2012; Nelson, 2012; Wu, 2012) are positively correlated with student achievement. Goddard, Sweetland, and Hoy (2000) also found that a climate of academic emphasis significantly predicted between-school differences in student achievement in math and reading. It is also postulated that collective efficacy and academic emphasis are enhanced by a supportive school climate (Hoy et al., 2002).

The present study. Hoy et al. (2006) claim that research will benefit from gaining detailed information about the relationships between academic optimism and school and individual characteristics. Beard et al. (2010) has also highlighted the importance of both school and individual properties as predictors of academic optimism. It may therefore be reasonable to investigate the types of school climates in which teacher academic optimism thrives or hinders. In the light of the explanations above, the present study tried to develop a better understanding of the relationships between school climate and teacher academic optimism. The current study guided by earlier research (Hoy et al., 1991; Hoy & Clover, 1986; Kottkamp et al., 1987; Kavgacı, 2010) measured the dimensions of school climate based on supportiveness, restrictiveness, directiveness, and intimacy as separate factors. These four components of school climate were the independent variables of this study. On the other hand, the dependent variable was teacher sense of academic optimism which was originally composed of three separate factors entitled as teacher trust in parents and students, teacher sense of self efficacy, and teacher academic emphasis (Beard et al., 2010; Woolfolk Hoy et al., 2008), however, the present study employed one-factor structure to measure teacher sense of academic optimism. The findings of this study may well contribute to the better understanding of improving academic optimism by investigating the types of school climates in which teacher sense of academic optimism flourishes or hinders. It is also expected that the study may provide some important implications for policy-makers and researchers engaging in fostering teacher academic optimism in schools. In this vein, the present study aims at addressing following questions:

1. Are primary school teachers' perceptions on academic optimism correlated with the subscales of school climate?
2. Are teachers' perceptions on the dimensions of school climate significant predictors of teacher academic optimism?

Method and Procedures

Design

This study designed in correlational research model examined the relationships between teachers' perceptions on academic optimism and school climate by using a survey for gathering data. According to Fraenkel and Wallen (2003), "in correlational research, the relationships among two or more variables are studied without any attempt to influence them" (p. 338). Supportiveness, restrictiveness, directiveness, and intimacy subscales of school climate were the independent variables and teacher sense of academic optimism was the dependent variable of the study.

Sample

The population of the study consisted of teachers employed in primary schools in Kastamonu, Turkey. A total of 302 teachers were selected via simple random sampling method from primary schools in Kastamonu as the study sample. Simple random sampling is one of the random sampling methods in which each member of the population has an equal chance of being included in the sample (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel, 2013; Fraenkel & Wallen, 2003).

Measures

Organizational Climate Description Questionnaire-RE (OCDQ-RE). This inventory was first developed by Halpin and Croft (1963) to measure the aspects of school climate and then the survey was updated for primary schools by Hoy et al. (1991). Kavgacı (2010) adapted the OCDQ-RE into Turkish culture considering linguistic and cultural issues. The original form of the survey included 42 items under six subscales. The items were answered on a rating scale from 1 (never) to 4 (always). Results of the factor analysis yielded a four-factor structure entitled as supportiveness, restrictiveness, directiveness, and intimacy. The total variance explained by these four subscales was 56% (Kavgacı, 2010). A total of 17 items were extracted from the 42-item scale due to low corrected item-total correlations. Consequently, the scale was composed of a four-factor structure with 25 items: supportiveness (8 items), restrictiveness (4 items), directiveness (5 items), and intimacy (8 items). Item-total correlations of these 25 items ranged from .44 to .74 and reliability coefficient for the whole scale was .85. In addition, reliability coefficients for the subscales of school climate were .90 for the supportiveness, .80 for the restrictiveness, .96 for the directiveness, and .83 for the intimacy factor (Kavgacı, 2010).

OCDQ-RE was an adapted scale into Turkish culture. Therefore, we found mindful to test the construct validity of this adapted scale. In this regard, we conducted Confirmatory Factor Analysis (CFA). Results of the CFA also supported the four-factor structure of OCDQ-RE (Adapted Version). Consequently, reasonable goodness-of-fit indices indicated that the model fitted the data well ($\chi^2/df = 2.29$; RMSEA = .06; CFI = .92; GFI = .87) (Byrne, 1998; Jöreskog & Sörbom, 1993). Reliability coefficients for the subscales of school climate were .93 for the supportiveness, .87 for the restrictiveness, .87 for the directiveness, and .84 for the intimacy factor. Furthermore, the supportiveness factor was composed of 8 items with item-total correlations ranging from .75 to .80, the restrictiveness factor included 4 items with item-total correlations ranging from .66 to .81, the directiveness factor composed of 5 items with item-total correlations ranging from .58 to .76, and finally the intimacy factor included 8 items with item-total correlations ranging from .41 to .72. Sample items from the factors of OCDQ-RE are presented below:

Supportiveness

- The principal listens to and accepts teachers' suggestions.
- The principal is easy to understand.

Restrictiveness

- Routine duties interfere with the job of teaching.
- Teachers have too many committee requirements.

Directiveness

- The principal supervises teachers closely.
- The principal monitors everything teachers do.

Intimacy

- Teachers' closest friends are other faculty members at this school.
- Teachers help and support each other.

Academic optimism of individual teacher measure. This scale was originally developed by Beard, Hoy and Hoy (2009). The scale included 11 items under three factors entitled as teacher sense of self efficacy (e.g. How much can you do to get students to believe they can do well in schoolwork?), teacher trust in parents and students (e.g. I have confidence in my students.), and teacher academic emphasis (e.g. I press my students to achieve academically.). Cronbach's Alpha was computed for each of the subscales and found .71 for teacher academic emphasis, .79 for teacher trust in parents and students, and .73 for teacher sense of self efficacy. This scale was adapted into Turkish by Yıldız (2011) and the adapted form was used by Yalçın (2012). Yıldız (2011) reached different factor structures for the scale. For instance, she reached for a three-factor structure with 11 items explaining 40% of total variance in her first attempt while she found a two-factor structure in the second. By the way, the third attempt produced unacceptable KMO results (.49). Yalçın's (2011) study also conducted factor analysis for the scale and found a three-factor structure with 9 items (two items were extracted from the scale because of low factor loadings). However, she decided to use one-factor structure because of the fact that loadings of the first factor were very high. Yalçın's study demonstrated that the items of the scale together explained 39.69% of the total variance while factor loadings were ranging from .29 to .85 and Cronbach's Alpha was .79. In the present study, results of the exploratory

factor analysis replicated the same factor structure produced by Yalçın (2012) with one exception: one instead of two items was excluded from the scale because of low factor loading. Thus, we found a one-factor structure including 10 items with item-total correlations ranging from .34 to .55. Ten items together explained 35.04% of the total variance. We also conducted Confirmatory Factor Analysis (CFA) to test the validity of one-factor structure of this adapted scale. CFA results demonstrated that the goodness of fit statistics indicated a good model fit ($X^2/sd = 2.31$; RMSEA = .05; CFI = .97; GFI = .96) (Byrne, 1998; Jöreskog & Sörbom, 1993). Furthermore, Cronbach's Alpha was found .81 for the whole scale.

Analyses

We began analyzing the research data by examining the missing or wrong data thoroughly. Arithmetic mean and standard deviation scores were then computed to determine the primary school teachers' perceptions on teacher academic optimism and school climate. Pearson correlation coefficients were also computed to examine the relationships between teacher sense of academic optimism and school climate. Afterwards, multiple linear regression analysis with enter model was used to predict the dependent variable (teacher sense of academic optimism) by the independent variables (subscales of school climate). According to Büyüköztürk, Çokluk and Köklü (2013), the dependent variable, which Fraenkel and Wallen (2003) call it criterion variable, is predicted by just one variable in simple regression analysis while the dependent variable is predicted by two or more variables in multiple regression analysis. Considering the independent variables (supportiveness, restrictiveness, directiveness and intimacy subscales of school climate) in the current study, we preferred to perform multiple linear regression analysis to predict the dependent variable (teacher sense of academic optimism). Therefore, all the predictor variables of the current study were entered into the regression analysis at the same time to determine the independent influence. Beta (β) coefficient and results for t-test were also considered to render the regression analysis results (Çokluk, Şekercioğlu, & Büyüköztürk, 2012).

Multiple linear regression analysis was used to analyze the mathematical relations between predictor and criterion variables. It has been suggested that the dependent variable is distributed normally and that the independent variable is composed of variables distributed normally (Kılıç, 2000; Akt. Çokluk et al., 2012). Furthermore, Çokluk et al. (2012) state that researchers may be confronted with the problem of multicollinearity which denotes that two or more predictor variables in a multiple regression model are highly correlated. Therefore, we performed Kolmogorov-Smirnov Test to test the distribution of both dependent and independent variables. Results revealed that test distribution is normal for all variables. There are various methods to determine the multiple linear relations such as examining the correlations among study variables, examining Variance Inflation Factor (VIF), Condition Index (CI), and Tolerance Value (TL), and testing the autocorrelation assumption (Çokluk et al., 2012). Results revealed that correlations among study variables were not over .58 denoting that study variables were not highly correlated. Relevant analyses to test the multiple linear relations among study variables also mirrored that VIF value was much smaller than 10 (1.62 for supportiveness, 1.07 for restrictiveness, 1.77 for directiveness, and 1.68 for intimacy), CI values were under 30 (6.86 for supportiveness, 13.18 for restrictiveness, 14.36 for directiveness, and 20.03 for intimacy), and TL was not under .20 (.61 for supportiveness, .94 for restrictiveness, .57 for directiveness, and .60 for intimacy). Finally, we tested the autocorrelation assumption by determining the "Durbin-Watson" value. Durbin-Watson value was calculated as 1.80 referring that there was no autocorrelation among variables (Çokluk et al., 2012). Consequently, results support the notion that the assumptions of the multiple regression were met which enabled to analyze the research problem via multiple regression analysis.

Results

Findings about Study Sample

A total of 302 teachers participated in the current study. Out of these, 195 (64.6%) were female and 107 (35.4%) were male. Nearly half of the participants ($n = 147$; 48.7%) were between 31-40 years old while only 24 participants (7.9%) were over 50. The participants were 113 (37.4%) classroom teachers and 189 (62.6%) in

various branches. The study sample also included 96 teachers (31.8%) with 6-10 years of seniority. Approximately one third of participants ($n = 96$; 31.85%) were employed as a teacher for 6-10 years. Furthermore, over half of the participants ($n = 190$; 62.9%) worked for the present school for 1-5 years.

Correlations among Variables

The means, standard deviations, and correlation coefficients among variables for all primary school teachers participating in the study are given in Table 1.

Table 1. Means, standard deviations, and correlations among variables for all teachers

Variables	\bar{X}	S	1	2	3	4	5
1. TSAO	4.12	.42	-	.20**	-.06	.23**	.30**
2. Supportiveness	2.95	.72		-	-.10	.54**	.53**
3. Restrictiveness	2.47	.84			-	.13*	.02
4. Directiveness	2.74	.67				-	.58**
5. Intimacy	2.93	.51					-

Notes: * $p < .05$; ** $p < .01$

TSAO: Teacher sense of academic optimism

As can be seen from Table 1, there were positive and significant correlations between supportiveness and directiveness ($r = .54, p < .01$), supportiveness and intimacy ($r = .53, p < .01$), directiveness and intimacy ($r = .58, p < .01$), and restrictiveness and directiveness ($r = .13, p < .05$) subscales of school climate. There were no significant relationships between restrictiveness and intimacy ($r = .02, p > .05$) and supportiveness and restrictiveness ($r = -.10, p > .05$). Table 1 also demonstrates that teacher sense of academic optimism was positively and significantly correlated with supportiveness ($r = .20, p < .01$), directiveness ($r = .23, p < .01$) and intimacy ($r = .30, p < .01$) subscales of school climate. On the other hand, teacher sense of academic optimism was negatively but not significantly related to restrictive school climate ($r = -.06, p < .05$).

Prediction of Teacher Sense of Academic Optimism

Table 2 indicates the results of multiple linear regression analysis for variables predicting the teacher sense of academic optimism.

Table 2. Results of regression analysis for variables predicting academic optimism

Variables	B	SE	β	t	p
Constant	3.45	.15		22.62	.00
Supportiveness	.01	.04	.02	.33	.74
Restrictiveness	-.04	.03	-.07	-1.30	.20
Directiveness	.06	.05	.09	1.28	.20
Intimacy	.19	.06	.23	3.27	.00

Notes: $R = .32$; $R^2 = .10$; $F(4, 297) = 8.27$; $p < .00$

Table 2 displays the results of multiple linear regression analysis for variables predicting teacher sense of academic optimism. Results revealed that a multiple R of .32 explained nearly 10% of the variance in the teacher sense of academic optimism scores. T-test results for the significance of regression coefficients also illustrated that intimacy was the only significant predictor of teacher academic optimism ($\beta = .23, p < .05$). Nevertheless, supportiveness ($\beta = .02, p > .05$), restrictiveness ($\beta = -.07, p > .05$), and directiveness ($\beta = .09, p > .05$) made no significant contributions to the prediction of teacher sense of academic optimism.

Discussion

Using dimensions of school climate as predictors of teacher sense of academic optimism, the current study has supported the notion that school climate is a significant construct for understanding and explaining teacher sense of academic optimism. This finding is consistent with the findings of Reeves (2010) which proved positive relationships between school climate and academic optimism. It is necessary to note at this point that Reeves' research (2010) treated the construct of academic optimism at the school level. The present study, however, used the components of teacher sense of self efficacy, teacher trust in parents and students, and teacher academic emphasis at the individual teacher level.

Findings suggested that teacher sense of academic optimism was positively and significantly associated with supportive, directive, and intimate school climates. This finding refers that teachers in schools with supportive, directive, and intimate climates tended to be more academically optimistic which in turn may result in more teacher trust in students and parents, a stronger sense of teacher self efficacy and a higher amount of teacher academic orientation towards increasing student achievement. As noted earlier in this study, different types of school climates have different effects on interpersonal relationships among school members and on overall school effectiveness (Çalık & Kurt, 2010). Hoy et al. (1991) emphasize that supportive school climate presents a wide variety of ways for all members of school community including teachers, students, principals, and parents to collaborate, to reflect on instruction, and to develop a shared sense of purpose toward increasing school effectiveness. The authors further point out that intimate school climates encourage both collegial and congenial relationships among school members which may result in a higher sense of teacher professionalism. Kottkamp et al. (1997) also make it clear that an open and positive school climate in which teachers feel comfortable to communicate, support, and reflect each other may well contribute to the teacher academic orientation. It is therefore understandable why teacher sense of academic optimism was positively correlated with supportive and intimate school climates. Results also revealed that teacher sense of academic optimism was positively and significantly related to directive school climate. Recalling the fact that teachers are not the primary concern and that principals assume all the responsibility of school activities in directive school climates (Hoy et al., 1991), this finding may seem surprising at first sight. This finding may also refer to highly centralized Turkish national education system in which The Ministry of National Education (MoNE) was the only institution claiming the responsibility for building schools, managing the financial demands of schools, and employing school teachers and principals (Korkmaz, 2006). As the chief representative of MoNE at the school level, school principals are primarily responsible for managing, regulating and supervising schools in accordance with diverse laws, legislations, and regulations in Turkey (MoNE, 2012) which equipped them with pretty much positional power. Therefore, teachers participating in the present study may need the directions or support of their school principals to be academically more optimistic. Findings from correlation analyses also illustrated that teacher sense of academic optimism and restrictive school climate were negatively correlated with each other although this correlation was not significant. Restrictive school climates hamper teachers' efforts on improving the quality of learning and teaching environment in schools and contribute to the overall effectiveness of school in that teachers in such kind of schools are mostly engaged in heavy workload often unrelated to the core of teaching profession (Hoy & Clover, 1986). Thus, it is not surprising that restrictive school climate is adversely related to teacher academic optimism.

Regression model of the present study demonstrated that school climate was a significant predictor of teacher academic optimism. Results also revealed that intimacy was the only school climate dimension that was a significant predictor of teacher academic optimism. Intimate school climates are characterized by positive relationships among school members in which members support each other in various matters. Furthermore, intimate school climates encourage teachers' collaboration and reflection with each other and other parties of school (Hoy et al., 1991). In other words, close relationships, collaboration and friendship are the top priority in intimate school climates. Therefore, this finding implies that teachers in such kind of schools may find various ways to collaborate and to reflect on ideas about academic issues. Kottkamp et al. (1997) state that teachers can work well both with each other and with the principal in open school climates. In line with this argument, teachers employed in intimate school climates are expected to trust each other, to improve the capacity of school for learning and teaching, and to be more self efficient. Sezgin (2009) also argues that teacher sense of academic emphasis is strongly required for a school to achieve higher academic

standards. Thus, an intimate school climate can promote teachers' professional orientation by facilitating the collaboration and reflection among school members.

Results also indicated that restrictiveness component of school climate, which was negatively but insignificantly related to teacher academic optimism, did not explain teacher academic optimism significantly. This finding is surprising in that teachers have difficulty in focusing on educational activities because of heavy and unnecessary workload in restrictive school climates. Principals also tend to be indifferent to achieving higher academic standards in such kind of school climates (Hoy & Clover, 1986). Beard et al. (2010) emphasize that teacher sense of academic optimism is quite much associated with teachers' engaging students in challenging but achievable academic tasks. To put it another way, teachers' sense of self efficacy, their trust in students, parents, and other school members, and their academic orientation may increase when they have various opportunities to help students learn. It would therefore be reasonable to expect that restrictiveness dimension of school climate predicted teacher academic optimism negatively and significantly. As discussed before, members respect each other and devote more time to increase the quality of learning and teaching environment of schools with principal support in supportive school climates (Hoy et al., 1991). Thus, we would expect that supportiveness dimension of school climate added to the prediction of dependent variable, teacher academic optimism, significantly. Surprisingly, however, this study indicated that supportiveness component of school climate was not a significant predictor of teacher sense of academic optimism.

Conclusion and Implications

This study concluded that supportiveness, directiveness, and intimacy dimensions of school climate were positively and significantly related to teacher academic optimism while restrictiveness was negatively but insignificantly associated with teacher academic optimism. Teachers working in schools with supportive, directive, intimate climates are more likely to be academically optimistic. This study also showed that school climate was a significant predictor of teacher academic optimism. As for the components, it appeared that only the intimacy significantly predicted teacher sense of academic optimism. As a result, the current study supported the notion that teachers would focus more on academic issues and educational activities when school climate was identified with close relationships among school members, principal support, various opportunities for all school members to collaborate with each other, and a high level of academic orientation. It is therefore possible to suggest that effective school policies allowing teachers use their capacities to concentrate more on educational activities towards increasing student achievement and engagement are urgently required. It is also possible to suggest that school members spend more time and effort on improving the quality of personal relationships which would probably be useful to create a healthy school environment as research results indicate that intimate school climates are crucial for building an academically oriented school.

This study was conducted to examine the perceptions of primary school teachers on the relationships between school climate and academic optimism. However, as mentioned in the introduction part, research on the relationships between school climate and academic optimism is quite limited (Reeves, 2010). There is little doubt that further research is called for examining the relationships between these two constructs which are, as stated by Reeves (2010), similar in that they both are regarded as potential factors for improving student learning and overall school effectiveness. Only teachers responded to the items of the questionnaire as this study was conducted to examine the relationships between school climate and teacher academic optimism according to the perceptions of primary school teachers. Thus, further research should also be conducted to examine the perceptions of school principals, parents or other parties of school on teacher academic optimism. This study examined the predictive role of school climate on teacher sense of academic optimism. Thus, we also suggest that future studies using other research methods such as observation and interview should be undertaken to examine the factors such as school culture, school health, teacher organizational commitment, organizational citizenship as well as school size and socio-economic status of students which may potentially affect teacher sense of academic optimism. The correlations and predictive relationships were used to explain the relationships between school climate and teacher academic optimism as this study conducted a correlation and a standard multiple regression analysis. Future studies

should then use path models to examine the causal relationships between teacher sense of academic optimism and school climate or other constructs.

Results of this study may well be used for school community members including teachers, students, principals, and parents to build a school climate which nourishes teacher sense of academic optimism. Teacher sense of academic optimism, as a covering construct for teacher sense of self efficacy, teacher trust in parents and students, and teacher academic emphasis, is closely related to achieving a higher level of student learning (Woolfolk Hoy et al., 2008). Thus, in-service training activities organized for promoting teacher professionalism may well benefit from research on relationships between teacher sense of academic optimism and other constructs as well as research on factors influencing teacher sense of academic optimism.

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