

Academic Optimism, Hope and Zest for Work as Predictors of Teacher Self-efficacy and Perceived Success*

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Abstract

This study explores the predictive influence of primary school teachers' academic optimism, hope and zest for work on perceptions of their self-efficacy and success. A total of 600 teachers were selected through stratified sampling from 27 primary schools in central districts of Ankara, Turkey, to form the research sample. Inter-variable exploratory correlations were identified using the Pearson product-moment correlation coefficient, and path analysis was used to examine the direct and indirect predictive powers of these factors on teacher self-efficacy and perceived success. The research findings reveal positive and significant relationships among teacher self-efficacy, perceived success, academic optimism, hope and zest for work and that these factors positively predict teacher self-efficacy. Furthermore, academic optimism, hope and zest for work positively predict teachers' perceived success. These factors were also shown to indirectly predict self-efficacy through perceived success. Discussion of the findings is provided within the context of improving teachers' self-efficacy and positive psychological state.

Keywords: Self-efficacy • Perceived success • Academic optimism • Hope • Zest for work

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In recent years, positive psychology concepts such as self-efficacy, psychological well-being, performance, stress, burnout, depression and anxiety have been a major focus of research (Meyers, Woerkom, & Bakker, 2013; Peterson, 2009; Seear & Vella-Brodrick, 2013). To Seligman (2002), positive psychology aims to better the quality of life rather than solve existing problems; likewise, Kurz (2006) stated that positive psychology focuses on proper concentration of competences and capacities rather than problems. Positive psychology is an aggregate term that covers well-being, satisfaction, happiness, emotional satisfaction, optimism, faith and zest for work, which all concern subjective positive experiences (Hoy & Tarter, 2011; Seligman, 2002; Seligman & Csikszentmihalyi, 2000). Specifically, self-efficacy is believed to be a positive feature that should be explored in educational research (Hoy & Tarter, 2011).

The self-efficacy level is considered as an important indicator of a successful teaching career. Previous research has uncovered a positive relationship between self-efficacy and success (Bandura, 1977, 1993; Mills, Pajares, & Heron, 2007; Zeldin, Britner, & Pajares, 2008). Bandura (1993) further stated that teachers' mission to set proper learning environments is highly dependent on their teaching capability and self-efficacy. The literature indicates a relationship between self-efficacy and attitude toward the teaching profession (Duban & Gökçekan, 2012; Özdemir, 2008), educational leadership (Çalık, Sezgin, Kavgacı, & Kılınc, 2012; Kurt, 2009), student success (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Usher & Pajares, 2006) and job-related stress and burnout (Schwarzer & Hallum, 2008).

In addition to self-efficacy and perceived success, positive beliefs are also considered to influence the professional success of teachers. Within this context, this study focuses on academic optimism, hope and zest for work and how they may be linked to teacher self-efficacy and perceived success. Research findings show a correlation between academic optimism and organizational commitment (Çoban & Demirtaş, 2011; Kurz, 2006) and student success (Fahy, Wu, & Hoy, 2010; Hoy, Tarter, & Hoy, 2006; McGuigan & Hoy, 2006; Smith & Hoy, 2007). In addition, hope was found to be related to anxiety (Nolan & Stitzlein, 2011), life satisfaction (Brdar & Kashdan, 2010; Chan, 2009; Park, Peterson, & Seligman, 2004; Peterson, Ruch, Beermann, Park, & Seligman, 2007; Peterson, Park, Hall, & Seligman, 2009) and organizational commitment (Bullough & Hall-Kenyon, 2012). Conversely, little research

has focused on zest for work, though one study identified a negative relation between this factor and job stress (Josephson & Vingard, 2007). Several studies investigated the same variables as in this research. The literature also disclosed a relationship between efficacy and academic optimism (Akhtar, Ghayas, & Adil, 2013; Chemers, Watson, & May, 2000; Hulbert & Morrison, 2006; McGuigan & Hoy, 2006; Robinson & Snipes, 2009), efficacy and hope (Bryant & Cvengors, 2004; Kumarakulasingam, 2002; Lackaye, Margalit, Ziv, & Ziman, 2006; Robinson & Snipes, 2009; Sari, 2011), as well as optimism and hope (Amy, Peterson, Tice, Bolling, & Koenig, 2004; Bryant & Cvengros, 2004; Peleg, Barag, Harel, Rochberg, & Hoofien, 2009; Robinson & Snipes, 2009; Shorey, Little, Snyder, Kluck, & Robitschek, 2007; Steinberg, 2007).

Various studies have also reported a positive relationship between academic optimism and both student (Hoy et al., 2006; Smith & Hoy, 2007) and school success (McGuigan & Hoy, 2007). Furthermore, some studies highlight that the higher the level of teacher hope, the better the school success (Snyder, Feldman, Shorey, & Rand, 2002). Nonetheless, there is no published work on the relation between zest for work and success or performance, though several studies confirm that self-efficacy enhances teacher performance and student success (Bandura et al., 1996; Caprara, Barbaranelli, Steca, & Malone, 2006; Usher & Pajares, 2006). While self-efficacy impacts success, it is also shaped by an individual's previous success or perceived success (Bandura, 1977). Correspondingly, as with the aforementioned literature, it could be interpreted that success is an outcome of academic optimism, hope and zest for work and that level of self-efficacy can be predicted through perceived success. Examining all of these variables in a single study should result in contributions toward the understanding of the concurrent interactions among them.

Self-efficacy

Bandura (1977) coined the concept of self-efficacy and defined it as the belief in oneself to successfully manage one's own behaviours to achieve desired outcomes. Similarly, Senemoğlu (2000) defined self-efficacy as one's judgment about ability and capacity to cope with different situations and to perform a specific task. Social cognitive theory emphasizes the crucial role that self-efficacy plays on human behaviour. Self-efficacy is not entirely bound to one's belief in his/her own abilities; rather, one's faith in accomplishing a task is founded on believing in it. These beliefs impact individuals'

action plans (Zeldin et al., 2008). Bandura (2012) considers self-efficacy as a variable that directly influences the behaviours of individuals.

Research has long outlined a positive relationship between teachers' perceived self-capacity about teaching learners and supportive teacher behaviours geared toward student achievement (Goddard & Goddard, 2001). Teachers' evaluation of their competences enables positive changes in students (Gibson & Dembo, 1984). Teacher self-efficacy motivates and encourages providing effective learning environment and an efficient academic process for student achievement (Bandura, 1993). The relationship between teacher efficacy and student achievement indirectly reveals itself, as the efficacy of teachers affects numerous teaching behaviours that support student achievement (Goddard & Goddard, 2001). Despite these distinctive features of success, self-efficacy cannot help students who lack knowledge and skills to perform sufficiently under any level of self-efficacy (Shunk & Pajares, 2002). If only the component of expectation and capacity is missing, it will not lead to target performance (Bandura, 1977). Teachers' collective efficacy perceptions are positively related to student learning and success. To Shunk (2012), self-efficacy impacts selection processes, efforts, determination and success.

Teacher-perceived Success

Success varies depending on how it is perceived (Demirtaş & Çınar, 2004); accordingly, what is understood by a successful teacher matters. Şeker, Deniz and Görgen (2005) list the characteristics of a good teacher as having field competences, skills related to how to teach, classroom management skills, planning, assessment skills, skills of technology use, as well as communication and guidance skills. Çelikten, Şanal and Yeni (2005) identify a recently adapted model with characteristics of being clever and well-educated, that attaches importance to social life with a professional stance. Worries about the future of education are generally related to those willing to become involved in the field of education; therefore, it is important to understand the factors affecting teachers' perceived success, either positively or negatively (Bresnahan, 1997).

Academic Optimism

Seligman (1998), among the positive psychologists who first examined optimism, proposed that optimism is as important as ability and motivation. As

stated by Carver and Scheirer (2002), optimism is the positive expectation of something that is forthcoming. It represents a state of cognition, emotion and motivation regarding the future (Peterson & Park, 2004). Faith in the future poses a powerful impact on current trends, and achievable goals affect the actions of an individual. Optimistic people look on the bright side of life and keep their hope in difficult times, as they believe that they can overcome such challenges (Schueller & Seligman, 2008). Academic optimism is not the same as educational optimism, where educational optimism (e.g. optimism for life) is related to personal tendencies such as general attitudes and a positive perception of the future, and academic optimism is specific to teaching and learning (Beard & Hoy, 2010). Academic optimism was developed by Hoy et al. (2006) and is a more recent structure than educational optimism. Academic optimism covers academic self-efficacy, trust and academic significance at the individual and organizational level (Hoy & Tarter, 2011).

Academic self-efficacy is defined as one's belief in successfully displaying behaviours to produce necessary outcomes (Bandura, 1977). Simply stated, self-efficacy is the self-assessment of one's perceived capacity to conduct a task (Hoy & Miskel, (2001). *Academic emphasis* is the extent to which schools are seeking academic perfection and their degree of academic pressure (Beard, Hoy, & Hoy, 2010; Hoy et al., 2006). For example, teachers' focus on creating a compelling but positive academic environment for students can be seen as academic emphasis (Hoy, Hoy, & Kurz, 2008). Academic emphasis is an organizational feature that affects student success and forms a pressure framework based on the top-level student success (Smith & Hoy, 2007). *Trust* is the student success component of academic optimism (Hoy et al., 2006), and has a complex structure that makes it hard to clearly identify (Tschannen-Moran & Hoy, 1998). In general terms, it can be defined as an expectation or common belief wherein individuals or groups act in favour of related parties (Hoy & Tschannen-Moran, 1999). Goddard, Tschannen-Moran and Hoy (2001) define trust as an essential notion that contributes to student learning in school organizations. The trust within a school is strongly related to school efficiency and positive school climate (Tschannen-Moran & Hoy, 1998).

Hope

Hope refers to a belief-based emotion that a desired outcome will be produced (Snyder, 1989). It enables people to set goals, consider necessary tools to reach

these goals, and to seek a driving force to attain these goals. Hope is experienced when all practical means toward the goals are exhausted (Snyder et al., 2002). It not only emerges as a passive emotional phenomenon in the darkest situations, but is a process of actively pursuing one's goals. Hence, hope is conceptualized as a goal-directed cognitive process (Snyder et al., 1991) that concerns the production of clear goals, competence to organize plans, and pathways to achieve these goals and capability to act accordingly (Snyder, 1989, 1995, 2005; Snyder et al., 1991).

Goals differ in terms of time, certainty and value (Snyder, Rand, & Signom, 2002). Regardless of their dimension, time or distance, goals facilitate continuity of attention to the process if necessary importance and value for human life persists (Snyder, 2005). *Pathway thinking* refers to perception regarding the existence of one or more routes to attain the desired goals (Snyder, 2005). Within this perspective, individuals actively establish certain routes or plans to achieve these goals, though some of these plans might not succeed. Nevertheless, people with hope construct a variety of plans to overcome potential challenges in the way of reaching their goals (Snyder et al., 2002). *Agency thinking* is the self-perception of capability to pursue necessary routes and plans to achieve their goals. This component is the motivational aspect of hope, and requires goal-directed route planning and mental energy (Snyder, 1994). This component offers the necessary energy to form a link to a positive goal (Snyder, 1989).

Zest for Work

Zest, as a new concept in educational management, is grounded in positive psychology and can be linked to all types of professions in addition to job and life satisfaction (Hoy & Tarter, 2011). Lent and Brown (2006) describe job satisfaction as the state of being content or emotionally positive concerning work or professional experience. Conversely, life satisfaction is the feeling of general well-being, with previous studies finding that teachers' job and life satisfaction are positively interrelated (Lent et al., 2011). Peterson and Seligman (2004) identify zest as approaching life with hope, energy and excitement in their classification of the features of good character. To Park and Peterson (2010), zest means living life adventurously and feeling oneself active and alive, rather than performing actions unwillingly or incompletely.

Zest for work differs from job satisfaction in that zest includes vitality. Vitality is associated with positive feelings such as happiness, interest and enthusiasm but is distinguished from feeling good or happy, as it includes high degrees of activity or energy (Weinstein & Ryan, 2009). Josephson and Vingard (2007) explain that zest for work stems from a zest for life and is defined as a degree of enthusiasm and satisfaction for one's current state of work. Zest for work can be interpreted as a broader concept than job satisfaction, as it integrates enthusiasm and stronger feelings than job satisfaction.

As previously mentioned, numerous studies relate self-efficacy, perceived success, academic optimism and zest for work with additional concepts. Some studies have combined these concepts in different variations; however, the literature lacks a single piece of research that examines all the concepts together, particularly in terms of positive psychology and the inclusion of zest for work. Studies on positive psychology are important to establishing a new educational perspective (Hoy & Tarter, 2011); hence, this study is believed to contribute to the literature analysing the relationship among self-efficacy, perceived success, academic optimism, hope and zest for work.

Teachers' establishment of self-efficacy (specifically, high self-efficacy levels) and perceived success can inspire student success, the success of educational processes, and facilitate accomplishment of desired educational outcomes (Bandura, 1977, 1993; Mills et al., 2007; Zeldin et al., 2008). Given this fact, decision makers in education need to consider the factors affecting teacher self-efficacy. This study, then, might be of practical help to decision makers, school heads and teachers, as the results might provide direction to identify whether some positive psychological variables (e.g. academic optimism, hope and zest for work) are predictors of teachers' perceived success and self-efficacy or not. As such, this study seeks answers to the following questions:

1. Are there significant relationships among primary school teachers' perceptions of self-efficacy, success, academic optimism, hope and zest for work?
2. Are teacher academic optimism, hope and zest for work significant predictors of teacher self-efficacy and perceived success?

Method

Model

The research design was a correlational study identifying the direct predictive powers of independent variables (academic optimism, hope and zest for work) on the dependent variables (teacher self-efficacy and perceived success). This study also investigated the indirect predictive powers of independent variables on teacher self-efficacy through perceived success. Fraenkel and Wallen (2009) explain that even though correlational studies do not provide evidence for causality, implications of a cause-effect relationship could be obtained through application of advanced statistical techniques. A structural equation model was used in this study to define indirect or direct predictive factors for teacher self-efficacy and perceived success, because, as Büyüköztürk (2010) stated, a structural equation model combines predictive structural relations between regression model variables and latent factor structures of factor analysis in a single analysis. In addition, path analysis was applied to variables within the structural equation modelling.

Population and Sampling

The research population consisted of primary school teachers working in the central districts of Ankara. Stratified sampling was applied, and schools were classified as low, middle or high socio-economic levels, with nine schools randomly selected from each level to form a total sample of 27 schools. While the schools were grouped according to their individual socio-economic levels, the socio-economic level of the school's location was also taken as a reference. The sampling was composed of 63.7% ($n = 382$) female and 36.3% ($n = 218$) male teachers. Forty percent of teachers ($n = 240$) were classroom, 60% ($n = 360$) were subject teachers. The percentage of teachers aged 21–30 was 13.7% ($n = 141$), 31–40 was 39.5% ($n = 237$), 41–50 was 27.7% ($n = 166$) and 51 or above over was 9.3% ($n = 56$). Moreover, teachers with 1–5 years of experience

was 13.7% ($n = 82$), with 6–10 years was 23.7% ($n = 142$), with 11–15 years was 23.3% ($n = 140$), with 16–20 years was 19.8% ($n = 119$), and those with 21 or more years of experience was 19.5% ($n = 117$) of the sample. The number of service years in their current school was 1–5 years for 71.7% ($n = 430$), 6–10 years for 18.8% ($n = 113$) and 11 or more years for 9.5% ($n = 57$) of teachers in the sample.

Data Collection Tools

The data collection tools used in this study are as follows: Teachers' Sense of Efficacy Scale (TSES), developed by Tschannen-Moran and Hoy (2001) and adapted to Turkish by Çapa, Çakıroğlu and Sarıkaya (2005); Perceived Success Scale (PSS) developed by the researcher based on 12 items compiled from the perceived characteristics of successful teachers listed by Demirtaş and Çınar (2004); Teacher Academic Optimism Scale (TAOS), developed by Hoy et al. (2006); The Hope Scale (HS), developed by Snyder et al. (1991) and adapted to Turkish by Akman and Korkut (1993); and finally, Zest for Work Scale (ZWS), developed by the researcher.

Confirmatory factor analysis (CFA) results for the scales used in the research are given in Table 1.

Teachers' Sense of Efficacy Scale (TSES): This study included TSES, developed by Tschannen-Moran and Hoy (2001) and adapted to Turkish by Çapa et al. (2005), with the aim of assessing teacher self-efficacy. The scale has 24 items on a nine-point Likert-type scale. The three subscales are (1) self-efficacy on student engagement, using eight items (sample item: How much can you do to motivate students who show low interest in school work?); (2) on instructional practices, using eight items (sample item: To what extent can you provide an alternative explanation or example when students are confused?); and (3) on classroom management, using eight items (sample item: How much can you do to control disruptive behavior in the classroom?). The items were assessed with options that ranged from 'None at all = 1' to 'A great deal

Table 1
CFA Results of Scales

| Scales | χ^2 | df | (χ^2 / df) | RMSEA | CFI | GFI | AGFI | RMR | NFI |
|--------|----------|----|-------------------|-------|------|------|------|-------|------|
| TSES | 74.07 | 74 | 1.01 | 0.003 | 1.00 | 0.92 | 0.89 | 0.027 | 0.95 |
| PSS | 61.22 | 44 | 1.39 | 0.057 | 0.98 | 0.92 | 0.87 | 0.029 | 0.93 |
| TAOS | 32.94 | 19 | 1.73 | 0.073 | 0.96 | 0.94 | 0.89 | 0.035 | 0.91 |
| HS | 16.20 | 13 | 1.25 | 0.048 | 0.99 | 0.96 | 0.92 | 0.018 | 0.94 |
| ZWS | 29.62 | 14 | 2.12 | 0.081 | 0.97 | 0.94 | 0.89 | 0.035 | 0.95 |

= 9'. There was no reversely scored item on the scale, so high scores of each factor confirm the high degree of self-efficacy. The validity and reliability of the scale conducted by Tschannen-Moran and Hoy (2001) identifies the validity value for student participation as 0.81, for instructional practices as 0.86 and 0.86 for classroom management. The Cronbach's Alpha coefficient was found as 0.90 for all items. According to the validity and reliability study conducted by Çapa et al., validity value was 0.82 for student engagement, 0.86 for instructional practices and .084 for classroom management. The Cronbach's Alpha coefficient for all items was 0.93.

According to the Exploratory Factor Analysis (EFA), items are comprised of three factors; however, the weight of some items is not properly distributed. Hence, these items were removed from the scale and 14 items remained for use. EFA results for the remaining 14 items displayed a grouping of three factors of self-efficacy: (1) on student participation, (2) on instructional practices and (3) on classroom management. The Cronbach's Alpha coefficient for self-efficacy on student participation was 0.79; for self-efficacy on instructional practices, 0.80; and for self-efficacy on classroom management, 0.86; The scale as a whole had a .90 coefficient. In addition, the three-factor structure was found to explain 61.87% of the total variance. The three-factor structure of TSES was verified by CFA and revealed that this three-factor model had an acceptable level of goodness of fit index ($\chi^2 / df = 1.01$, RMSEA = 0.0027, CFI = 1.00, GFI = 0.92).

Perceived Success Scale (PSS): The researcher developed a scale by considering some perceived characteristics of a successful teacher defined in a study by Demirtaş and Çınar (2004). The five-point Likert type scale had 12 items (sample item: I think I am an expert in the field.), and the grading for the items was on a scale from 'I do not agree at all = 1' to 'I completely agree = 5'. No items were reversely scored, so high scores are interpreted as participants' having high levels of perceived success. Based on the EFA and CFA results applied on PSS, there was no need to remove any items. The variance identified for PSS was 43.11% and the Cronbach's Alpha coefficient was 0.85. EFA revealed a single factor structure for the items, and CFA was carried out to confirm that the single-factor model of PSS displayed an acceptable level of goodness of fit index ($\chi^2 / df = 1.39$, RMSEA = 0.057, CFI = 0.98, GFI = 0.92).

Teacher Academic Optimism Scale (TAOS): The study included TAOS, developed by Hoy et al. (2006), to assess the academic optimism levels

of teachers. The five-point Likert type scale had 11 items with the following three subscales: (1) academic emphasis, using four items (sample item: I give my students challenging work.); (2) teacher trust for students and parents, using four items (sample item: I trust the parents of my students.); and (3) teacher efficacy, using three items (sample item: To what extent can you craft good questions for your students?). The grading for the items offered options ranging from 'Never = 1' to 'Always = 5'. There was no reversely scored item, so high scores signal high levels of academic optimism. The validity and reliability of the study displayed a pattern of internal validity for academic emphasis as 0.83, 0.85 for self-efficacy and 0.87 for trust. The researcher adapted the scale into Turkish.

Having analysed the items, items 9 and 11 were removed, resulting in a final scale comprised of nine items. The variance identified for TAOS was 37.29%, with Cronbach's Alpha coefficient of 0.76. In line with the scale's EFA results, these items form a single factor. This is also in line with the study by Yıldız (2011). CFA revealed that the single-factor model displayed an acceptable level of goodness of fit index ($\chi^2 / sd = 1.73$, RMSEA = 0.073, CFI = 0.96, GFI = 0.94).

The Hope Scale (HS): This scale was originally developed by Snyder et al. (1991) and adapted into Turkish by Akman and Korkut (1993), is composed of 12 items and uses a four-point Likert-type scale with The following two subscales: (1) pathways, using items (sample item: I can think of many ways to get the things in life that are most important to me.) and (2) agency, using four items (sample item: I energetically pursue my goals.). Moreover, there were four filler items (sample item: I am easily downed in an argument.). The grading for the item scales ranged from 'Definitely false = 1' to 'Definitely true = 4'. There was no reversely scored item, so high scores are interpreted as high levels of hope. The internal validity of this scale was found to vary between 0.70 and 0.80. The two-factor original scale had four fillers, four items each for subscales of agency and pathway (Snyder et al., 1991), while the Turkish adaptation by Akman and Korkut had one factor. Akman and Korkut identified the internal validity as 0.65.

No items were removed from the scale. The variance identified for HS was 39.48%, with Cronbach's Alpha coefficient of 0.78. EFA results outlined a single-factor scale are parallel to those of the analysis by Akman and Korkut (1993). The single-factor model of HS displayed an acceptable level of goodness of fit index according to the CFA ($\chi^2 / df = 1.25$, RMSEA = 0.048, CFI = 0.99, GFI = 0.96).

Zest for Work Scale (ZWS): This scale was developed by the researcher to assess teachers' zest for work (sample item: I'd rather be involved in the task than observe it.). It is theoretically based on the 240-item character assessment scale by Peterson, Park and Seligman (2005), which was originally developed to assess the character strengths. The original one-factor scale using a five-point Likert-type scale assessed zest for life using four items (sample item: I want to fully participate in life, not just view it from the sidelines.). Items were answered using options that ranged from 'Very much unlike me = 1' to 'Very much like me = 5'. There was no reversely scored item, so high scores are interpreted as high levels of zest for work. The validity and reliability research conducted by Peterson et al. (2005) identified the Cronbach's Alpha coefficient as 0.82.

After the analyses, item number eight was removed and the remaining nine items were assessed. The variance stated for ZWS was 54.24%, with Cronbach's Alpha coefficient of 0.89. EFA illustrated a single factor for the scale items. To verify this single factor, CFA displayed an acceptable level of goodness of fit index ($\chi^2 / df = 2.12$, RMSEA = 0.081, CFI = 0.97, GFI = 0.94).

Data Analysis

Initially, the data set was analysed concerning the missing and outlier values and found that there were no erroneously coded data. Furthermore, in the missing value analysis, very few missing items were randomly assigned through the expectation-maximization (EM) algorithm. The Pearson product-moment correlation coefficient was used to identify the relationships among primary school teachers' perceptions of self-efficacy, perceived success, academic optimism, hope and zest for work, while the correlation coefficient uncovered the level and direction of relationships

between variables (Büyüköztürk, 2011). The research utilized a path analysis technique within the framework of structural equation modelling to examine the direct and indirect prediction of independent over dependent variables and several goodness of fit indices were analysed. Accordingly, Byrne (1998) and Jöreskog and Sörbom (1993) declared the most commonly fit indices as χ^2 , GFI, AGFI, CFI, RMSEA and AIC. As χ^2 is sensitive to sample size, it should be used with other fit indices. The criteria for fit indices included χ^2 / df being less than 5, GFI being more than 0.90, CFI being more than 0.95 and RMSEA being 0.06 or less.

Results

Relationships between Variables

The relationships among teachers' levels of self-efficacy, perceived success, academic optimism, hope and zest for work are displayed in Table 2.

Table 2 illustrates that all variables are related in a positive and significant direction. Except for the relation between the self-efficacy and its subscales and between these subscales, the highest level of relation is observed between perceived success and academic optimism ($r = 0.63$, $p < .01$), while the lowest level of relation is between self-efficacy on classroom management and zest for work ($r = 0.36$, $p < 0.01$). There are positive and significant relationships among teachers' perceptions of self-efficacy and success ($r = 0.60$, $p < 0.01$), academic optimism ($r = 0.56$, $p < 0.01$), hope ($r = 0.51$, $p < 0.01$) and zest for work ($r = 0.50$, $p < 0.01$). In addition, positive and significant relations are seen among teachers' perceptions of perceived success and academic optimism ($r = 0.63$, $p < 0.01$), hope ($r = 0.57$, $p < 0.01$) and zest for work ($r = 0.61$, $p < 0.01$). According to Table 2, teachers' perceptions of academic optimism and hope ($r = 0.44$, $p < 0.01$) and zest for work ($r = 0.54$, $p < 0.01$) display positive and significant relationships.

Table 2
Relationships between Self-efficacy, Perceived Success, Academic Optimism, Hope and Zest for Work ($n = 600$)

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------------|------|--------|--------|--------|--------|--------|--------|--------|
| 1. Self-efficacy (Total) | 1.00 | 0.86** | 0.84** | 0.87** | 0.60** | 0.56** | 0.51** | 0.50** |
| 2. Student engagement | | 1.00 | 0.64** | 0.59** | 0.56** | 0.54** | 0.45** | 0.52** |
| 3. Instructional practices | | | 1.00 | 0.56** | 0.56** | 0.46** | 0.47** | 0.42** |
| 4. Classroom management | | | | 1.00 | 0.44** | 0.44** | 0.38** | 0.36** |
| 5. Perceived success | | | | | 1.00 | 0.63** | 0.57** | 0.61** |
| 6. Academic optimism | | | | | | 1.00 | 0.44** | 0.54** |
| 7. Hope | | | | | | | 1.00 | 0.51** |
| 8. Zest for work | | | | | | | | 1.00 |

** $p < .01$

Level and Direction of Predictor Variables

Path analysis was performed to identify the level and direction of predictor variables (academic optimism, hope and zest for work) on the dependent variables (primary school teachers' self-efficacy and perceived success). Path analysis facilitated observing the direct and indirect prediction power (i.e. prediction effects) of independent variables over dependent variables. The level of goodness of fit index concerning the research model is shown in Table 3.

Table 3
Fit Indices Concerning the Model

| χ^2 | df | (χ^2 / df) | RM-SEA | CFI | NFI | GFI | AGFI | RMR |
|----------|----|-----------------|--------|------|------|------|------|------|
| 27.77 | 8 | 3.47 | 0.06 | 0.99 | 0.99 | 0.99 | 0.95 | 0.01 |

efficacy and perceived success levels by academic optimism, hope and zest for work are illustrated in Figure 1.

Predictive powers of independent variables over teacher self-efficacy and perceived success are shown in Table 4.

The standardized path coefficients in Table 4 demonstrate that the best predictive variable for perceived success is academic optimism ($\beta = 0.37$), followed by hope ($\beta = 0.28$) and zest for work ($\beta = 0.26$). Teachers' self-efficacy is predicted by perceived success ($\beta = 0.31$), academic optimism ($\beta = 0.27$), hope ($\beta = 0.20$) and zest for work ($\beta = 0.14$). Academic optimism, hope and zest for work explain 55% of the variance concerning perceived success, while academic optimism, hope, zest for

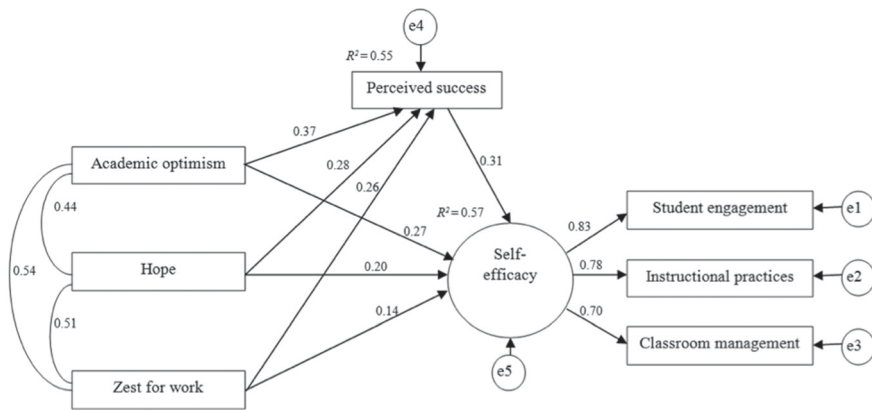


Figure 1: Standardized path coefficients.

The model displayed an acceptable level of goodness of fit index ($\chi^2 / df = 3.47 < 5$, RMSEA = 0.06, CFI = 0.99, NFI = 0.99, GFI = 0.99, AGFI = 0.95, RMR = 0.01).

Standardized path coefficients regarding the predicted variables of primary school teachers' self-

work and perceived success explain 57% of the variance pertaining to teacher self-efficacy.

Direct, indirect and total predictive effects of independent variables on self-efficacy are shown in Table 5.

Table 4
Predictive Powers of Independent Variables on Teacher Self-efficacy and Perceived Success

| Dependent Variable | Independent Variable | Standardized Prediction (Estimate) | Standard Error (SE) | Critical Ratio (CR) | Significance Value (p) |
|--------------------|----------------------|------------------------------------|---------------------|---------------------|------------------------|
| Self-efficacy | ← Academic optimism | 0.27 | 0.04 | 6.11 | ** |
| | ← Hope | 0.20 | 0.04 | 4.85 | ** |
| | ← Zest for work | 0.14 | 0.03 | 3.12 | ** |
| | ← Perceived success | 0.31 | 0.05 | 6.24 | ** |
| Perceived success | ← Academic optimism | 0.37 | 0.03 | 10.94 | ** |
| | ← Hope | 0.28 | 0.04 | 8.63 | ** |
| | ← Zest for work | 0.26 | 0.02 | 7.60 | ** |

** p < 0.01

Table 5
Direct, Indirect and Total Predictive Effects of Independent Variables on Self-efficacy

| Variables | Prediction* | | |
|-------------------|-------------|----------|-------|
| | Direct | Indirect | Total |
| Academic optimism | 0.27 | 0.12 | 0.39 |
| Hope | 0.20 | 0.09 | 0.29 |
| Zest for work | 0.14 | 0.08 | 0.22 |
| Perceived success | 0.31 | - | 0.31 |

* Standardized path coefficients

Table 5 reveals that academic optimism ($\beta = 0.12$), hope ($\beta = 0.09$) and zest for work ($\beta = 0.08$) indirectly predict self-efficacy through perceived success. When direct predictive power through self-efficacy and indirect predictive power through perceived success are examined, then total predictive powers through self-efficacy are achieved as academic optimism ($\beta = 0.39$), perceived success ($\beta = 0.31$), hope ($\beta = 0.29$) and zest for work ($\beta = 0.22$).

Discussion and Conclusion

The findings show a positive and significant relationship between teacher self-efficacy, perceived success, academic optimism, hope and zest for work. In a similar vein, related literature shows a positive relation between self-efficacy and optimism (Akhtar et al., 2013; Chemers et al., 2000; Hulbert & Morrison, 2006; McGuigan & Hoy, 2006; Robinson & Snipes, 2009); therefore, findings of this study on the relationship between self-efficacy and academic optimism are consistent with the previous research. The findings suggest that the higher teachers' academic optimism levels are, the higher their self-efficacy levels get.

A positive relationship between self-efficacy and hope has been identified in previous literature (Bryant & Cvangors, 2004; Kumarakulasingam, 2002; Lackaye, Margalit, Ziv, & Ziman, 2006; Robinson & Snipes, 2009; Sari, 2011); similarly, this study confirms this positive relationship. Consistency between the findings of this research and those of previous studies is observed, as the higher teachers' hope levels are, the higher self-efficacy levels can develop.

Following a detailed scan of literature, no single study on the relation between teacher self-efficacy and zest for work was found; nonetheless, the structure of zest for work includes job satisfaction and integrates enthusiasm and excitement for job satisfaction (Hoy & Tarter, 2011). Several studies highlight a positive relationship between teacher self-efficacy and job satisfaction (Caprara et al., 2006; Klassen & Chiu,

2010), and this study ascertains a similar positive relationship between teacher self-efficacy levels and zest for work. Within this perspective, findings of this research are in line with previous literature; however, further research on the relation between self-efficacy and zest for work is required for more detailed and in-depth information.

Teacher self-efficacy motivates teachers to create an effective environment and teaching processes for student success (Bandura, 1993). Teacher self-efficacy, as an important variable, influences job performance and success of students in a positive direction (Bandura et al., 1996; Caprara et al., 2006; Usher & Pajares, 2006). This study echoes such a positive relation, where high levels of teacher self-efficacy increase their perceived success. Similarly, the study by Judge and Bono (2001) confirmed the positive relation between teacher self-efficacy and job performance.

This study also examined the relationship between academic optimism, hope and zest for work and clarified a positive correlation between teacher academic optimism and hope. Numerous studies have stated a positive relationship between optimism and hope (Amy et al., 2004; Bryant & Cvangors, 2004; Peleg et al., 2009; Robinson & Snipes, 2009; Shorey et al., 2007; Steinberg, 2007), so, as this study observed, teacher academic optimism similarly increases levels of hope. Moreover, this study identified a positive relationship between teachers' levels of academic optimism, hope and zest for work. Youssef and Luthans (2007) had similar findings, such as a significant and positive relationship between hope and academic optimism, in addition to job satisfaction and happiness at work. The study by Robinson and Snipes (2009) showed a positive relationship between hope, optimism and life satisfaction, which also supports the findings of this study.

Teacher self-efficacy and perceived success levels are vital to attaining student success as an ultimate educational priority (Caprara et al., 2006). Therefore, this study focused on academic optimism, hope and zest for work, which are related to teacher self-efficacy and perceived success and ultimately concluded that there is a positive and significant relationship between teacher self-efficacy and perceived success and academic optimism, hope and zest for work. A deeper examination, including further individual and organizational variables, would produce more detailed information. Zest for work, as a relatively new concept to the educational process, needs more attention before it can contribute to the literature.

According to the path analysis results, all the independent variables (academic optimism, hope and zest for work) positively and significantly predicted teacher self-efficacy and perceived success. Karadems (2006) also stated a positive association between academic optimism and self-efficacy, as do several other studies (Karadems, Kafetsios, & Sideridis, 2007). Moreover, numerous studies detect a positive effect of self-efficacy on job satisfaction (Caprara et al., 2006; Lent & Brown, 2006). In this sense, research findings can be considered consistent. In addition, Rand (2009) pointed out a positive relation between hope and optimism and these two variables positively influence the academic performance.

The findings display that academic optimism, hope and zest for work indirectly and positively predict self-efficacy through perceived success, while perceived success directly predicts self-efficacy. In support of these findings, success is believed to formulate self-efficacy (Bandura, 1977). Studies have also related success to optimism (Hoy et al., 2006; McGuigan & Hoy, 2007; Smith & Hoy, 2007), to hope (Snyder et al., 2002) and to self-efficacy (Bandura et al., 1996; Caprara et al., 2006; Usher & Pajares, 2006). In this respect, the findings of this research are in line with those in the previous literature in which it shows academic optimism, hope and zest for work as positive predictors of perceived success, in addition to academic optimism, hope and zest for work's indirect prediction of self-efficacy through perceived success.

Teacher self-efficacy and perceived success are highly vital to job performance, school success and student success as ultimate goals of education (Bandura, 1977, 1993; Judge & Bono, 2001; Mills et al., 2007; Zeldin et al., 2008). High levels of teacher self-efficacy could lead to improvement in students' academic and social skills. Teachers with high levels of self-efficacy, perceived success and

self-confidence are likely to be more supportive and reassuring toward students throughout the learning and development process; hence, educational policy makers and school heads should implement initiatives that will enhance teacher self-efficacy. This study concludes that teachers' academic optimism, hope and zest for work positively influence their self-efficacy and perceived success. In accordance with these findings, school-based practices to progress teachers' levels of academic optimism, hope and zest for work need to be emphasized for improved student success and educational quality.

This study addressed the positive psychology concepts of academic optimism, hope and zest for work, though other positive psychology concepts that could affect teacher self-efficacy and perceived success are also believed to contribute to the field. Also of note, academic optimism, hope and zest for work are seen to be clearly related to variables such as leadership styles, school climate and culture, so future studies that include these topics should also contribute to the field. Positive psychology concentrates on positive feelings—rather than drawbacks—and aims to improve the quality of work and life. Individuals with a positive psychological state are likely to be healthy, happy, flexible and productive. Studies on the relationship between concepts of positive psychology and individual as well as organizational variables might help to investigate the positive psychology dimensions of school organizations. Moreover, studies conducted on different educational levels or that use a sample group of schools with different socio-economic levels should be addressed. As a final note, this study considers the notions examined at the cognitive perception level, so practice-oriented future research is necessary to advance the field to a greater extent.

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