



THE RELATIONSHIPS BETWEEN THE INFORMAL COMMUNICATION LEVELS IN SCHOOLS AND THE PSYCHOLOGICAL CAPITAL OF THE TEACHERSⁱ

Mehmet Ustun¹,
Aynur B. Bostanci²ⁱⁱ

¹Teacher,
Ministry of National Education,
İzmir, Turkey

²Assoc. Dr.,
Usak University,
Uşak, Turkey

Abstract:

Aim of this study is to investigate the relationship between the informal communication skills in schools and the psychological capital of the teachers. This study employs correlation survey model. The research population is comprised of 1871 teachers assigned to all schools within the Torbalı district of İzmir province, Turkey, in the 2020-2021 academic year. The research sample is comprised of 396 teachers selected through convenience sampling. In this study, "Informal Communication Scale" is used to identify the perceptions of teachers regarding the informal communication levels in their schools, and "Psychological Capital Scale" is used to identify their psychological capital levels. Since we observed that the distribution of the data in the research was normal, we employed multiple regression data analysis techniques of one-way analysis of variance (ANOVA) and Pearson Product-Moment Correlation Coefficient. As per the findings of the analysis, the perception of the teachers regarding the informal communication in schools is at a high level. We observe a significant difference between the perception of the teachers regarding the informal communication with regard to the variant of the school level that they are assigned. When compared with the primary school teachers, secondary school teachers think that the informal communication in their schools is realized at a higher level. According to the findings of the other demographical data employed in the study, while the perception of the teachers regarding the informal communication varies according to their seniority, it does not vary according to the variables of gender, the number of teachers in the assigned school and the approximate term of tenure at the same school. Our findings suggest that the other variable in the

ⁱ OKULLARDAKİ İNFORMAL İLETİŞİM DÜZEYLERİ İLE ÖĞRETMENLERİN PSİKOLOJİK SERMAYELERİ ARASINDAKİ İLİŞKİ

ⁱ Correspondence: email aynur.bozkurt@usak.edu.tr; mehmetustun09@yahoo.com

study, the psychological capital of the teachers is at a very high level. The psychological levels of the teachers do not reflect a significant difference when compared with the variables of the assigned school's level and gender. However, according to the findings based on the other demographical variables, the psychological capital levels of the teachers vary. According to this study, there is a positively medium correlation between the perceptions of the teachers regarding the informal communication in schools and their psychological capital levels. Based on these findings, we deduce that the if the informal communication in schools' increases, the psychological capital levels of the teachers' increase. According to another finding of this study, the recreational levels of the informal communication significantly predict the psychological capitals of the teachers. Nevertheless, we observe that the friendship, influence and information dimensions regarding the informal communication in schools do not predict the psychological capitals of the teachers.

Keywords: in-school communication, self-efficacy, optimism, psychological resilience, psychological capital

1. Introduction

Many contemporary organizations attempt at efficiently blending together the formal communication channels formed under the framework of certain specified rules with the informal communication channels that can arise at any moment and that are not structured in any form (Eskin, Bacaksız & Yıldırım, 2012). Schools are organizations in which human relations are prevalent. As a matter of fact, in-school relations realized through the informal communication in the schools are the indicators of the school culture (Hoy & Miskel, 2012). Formal communication is consistently established between the school administrators and the teachers for continuous academic activities in school (Doğan, Uğurlu & Karabulut, 2014). When formal communication is insufficient, collaboration between the teachers is ensured through informal communication. Informal communication supports the school to attain its goals (Arslan & Afat, 2019). Organizational communication forms the basis of providing information to both the organization and the individual, of motivating the individuals, of serving both the individual and the organizational goals and of a common understanding between the employees and the managers (Karaçor & Şahin, 2005). Informal communication is more favored in schools, since informal communication: increases success; ensures free expression of ideas, ensures safety and foresight, strengthens school culture and increases the ratio of shared social life (Himmetoğlu, Ayduğ & Bayrak, 2020). It is thought that one of the effects brought by establishing positive relationships, forming relationships among employees based on trust and collaboration and creating an environment of support and understanding in schools is the psychological capital of the teachers. The notion that the existing potentials of the employees should be revealed in the direction of the organizational goals and that their hopes and requirements should be realized through

organizational administration renders the concept of psychological capital concept important in the process of organization management (Yalçın, 2019). Seligman states that positive psychology practices also aim at giving importance to validating positive feelings within the organization. It has been demonstrated that psychological capital can prove beneficial in bringing up the organizational activity to its climax by ensuring positive contributions of the positive feelings and emotions of the employees of the organization to the organization outputs (Şen, Mert & Eroğluer, 2019). It has been thought that this is also because the teachers require a peaceful environment in which they are accepted and valued to be committed to their occupation. It has been posited that a teacher with high morale will do his or her work with great ambition (Arslan & Afat, 2019). Within this scope, we predict that there is a correlation with the informal communication to be established in school environment and the psychological capital of the teachers. In case the informal communication in schools is be used actively, we expect an increase in the level of the psychological capital of the teachers. With an actively used informal communication in a school, the psychological capital of the teachers can increase with the developing feeling of belonging and commitment to school. In such a case, this will contribute to teachers in adopting the school goals and in rallying around these goals. Nonetheless, we observe that the correlation of the concepts of the informal communication in schools and the psychological capital is not discussed sufficiently. Since we predict that the teachers realize their levels of possession of self-efficacy, optimism, hope and resilience regarding their psychological capital in schools through informal communication, we deem it is proper to study these two concepts together. Within this scope, this study attempts to reveal how the levels of informal communication in school can affect the psychological capitals of the teachers. In this sense, we shall explain the study variables to achieve a better understanding of them.

2. Literature Review

2.1. Informal Communication

Organizational communication is the basic way to form attachments between employees in a correct manner and to implement the work between departments in coordination. Communication within an organization occurs in formal and informal manners (Eğimli & Bitirim, 2008; Mert, Bekmezci & Eroğluer, 2019). The organizations who better understood the importance of communication have come up with new communication tactics, especially with the employees of their organization, and as a result, they have understood that in some cases, informal communication is more valid and effective when compared to formal communication, and thus they have begun to use informal communication more actively (Subramanian 2006 cited in Erdoğan, Kırılmaz & Arslanoğlu, 2018). Previously, some thought that informal communication had a negative impact on the organization, but due to the advances in communication technologies and to the fact of competition, informal communication progresses in an organization at a pace that cannot be stopped in order to meet the requirements of both the organizational

activities and the individual. Implementation of a mutual collaboration amongst the employees in an organizational environment depends on their communication. Informal communication is born spontaneously out of the social and information requirements of employees to communicate without the hierarchical structure of an organization (Mert, Bekmezci & Erođluer, 2019). In this context, informal communication is defined as the form of communication that arises out of informal groupings within an organization and that is not organized by the organization itself (Karciođlu, Timurođlu & ınar, 2009). Informal communication does not employ the previously identified channels and is nor realized within a certain plan and program. It arises spontaneously among the employees. Herewith mentioned informal communication has an important in the realization of the goals of an organization (Solmaz, 2006; zmen, Trk, etin & zer, 2013).

The reasons why informal communication channels appear within an organization are: the strict use of formal communication, refusal of the managers to share important information with their subordinates, mistrust towards the organization and concern for the future, changes in management and organization, groupings within the organization, the necessity felt by employees to establish social relationships (Mert, Bekmezci & Erođluer, 2019; Sarı, 2019). The channels of informal communication are limited in sharing information, yet it is constantly in use to share experiences, establish collaborations, to form the basis of new opinions and for informal conferences. When informal communication is used efficiently, it can become an active channel of management for the managers. Organization managers can contribute to the productivity through organizational activity by developing policies in which they fill the lacking areas in formal communication using informal communication channels (Arabacı, Snkr & ŐimŐek, 2012). Also, since informal communication occurs naturally, and thus meets the needs and the social and job satisfaction requirements of the employees, it can be more efficient than formal communication (Solmaz, 2006; Mert, Bekmezci & Erođluer, 2019). Informal communication ensures organizational contributions to the outputs, since it lightens the load of formal communication, allows for rapid acquisition of information within an organization, develops unity and solidarity amongst employees, refreshes the employee morale and renders group works active by the created collaborations. Meanwhile, from the aspect of managers, it allows them to get over with the work easily. Therefore, the managers must be able to multiply the effects that are beneficial on behalf of the organization by evaluating the process of informal communication (BektaŐ & Erdem, 2015; Eskin Bacaksız & Yıldıırım, 2012; Karciođlu, Timurođlu & ınar, 2009).

Informal communication can be defined as rumor, gossip, being a talebearer and virtual communication. Rumor and gossip appear amongst the employees if the formal communication channels do not encompass adequate information the employees require. Rumors and gossip may cause positive or negative results for the organization. While participating in the organizational activities, an employee becomes a talebearer, knowingly or unknowingly, by transferring the systematically acquired informal information. Talebearer employees help feed intraorganizational rumors and gossip.

Using only the existing talebearers in the organization, the managers use it as a means of control to gather information on the employees and their employment status. With the advancing technology, the modern communication channels -namely, virtual communication- came to be used as a means of informal communication (Akyürek, 2020; Bektaş & Erdem, 2015; Eğinli & Bitirim, 2008; Ulukan, 2017). Since informal communication channels cannot be controlled, they may sometimes cause delays in the work, disruption of the employee morale, and furthermore, negative attitudes among employees regarding innovations. All these negativities hinder the progress of organizational activities and the operation of a sound organizational communication. Despite the fact that informal communication serves as a mirror to an organization by reflecting the malfunctioning parts of its traditional structure, in order to alleviate its negative effects of informal communication channels, the communications must be shaped according to the information requirements of them. The possible effects of rumors and gossip occurring within the organization must be analyzed based on the aspects of product and service quality, employee motivation and productivity strength, and the necessary precautions must be taken (Eroğlu 2005; Solmaz, 2006).

2.2. Psychological Capital

Psychological capital can be defined as the positive psychological development of an individual. Psychological capital is seen as a psychological resource to increase employee performance and to render organizations highly successful. In this sense, psychological capital can be expressed as the positive convictions, conceptions and ideas of the employees regarding life and job (Demir, 2018; Karadal & Özsungur, 2017). Luthans et al. state that this concept is an effectual approach in revealing the abilities of the employees, in supporting their personal development and in positively motivating them. Since psychological capital is thought to have positive effect on the employee and the organization outputs, they become the reason why psychological capital is at the center of organizations. According to this idea, the organizational psychological capital that acts as a psychological resource is a power that must be possessed, improved and managed in organizational structuring (Töremen & Demir, 2016). Psychological capital defines a psychological state that transcends intellectual capital and has positivity in its focus (Çetin, Hazır & Basım, 2013). According to the results of the positive organizational behavior, psychological capital in an organization focuses on what is suitable and beneficial on behalf of the employees, instead of foregrounding the problematic and erroneous side of the employees. It forms a connection between the attitudes and behaviors of members of an organization on the organization outputs (Özkan & Omay, 2019).

In contrast with the economic, intellectual and social capital, psychological capital is a concept that express what an employee aspires to be, more than what he or she is. Accordingly, this concept reflects the sum total of the abilities of an employee that are possessing the confidence to exhibit the required performance to achieve success (self-efficacy), the vision to attain positive outcomes both in the future and in the now

(optimism), the determination to attain goals and to achieve results (hope) and the persistence when surrounded by problems and troubles (psychological resilience). Psychological capital states the positive psychological development state of an individual, rather than a fixed state (Ocak & Güler, 2017). Positive psychology draws attention to dysfunctions and powerlessness of individual along with the reliable sides and virtues of individuals with a positive outlook (Seligman 1998 cited in Çetin, Hazır & Basım, 2013). In 2004, Fred Luthans et al. analyzed the economic, social and individual capitals and created the concept of psychological capital by forming its characteristics based on their findings that draws attention to the positive powers of individuals. Thereby, they have found out the psychological capital is measurable, improvable and manageable. In 2005, they have declared that psychological capital is a concept related with the gaining of competitive advantage of individuals in the towards the established goals, beyond the social and individual capital (Erkmen & Esen, 2012).

In the studies done by Luthans et al. (2007), positive psychological capital has four sub-dimensions (Anık & Tösten, 2019; Kelekçi & Yılmaz, 2015; Saraçoğlu & Aslan, 2019; Tösten & Özgan, 2014) that can be explained as such: self-efficacy is the belief of an individual in his or her abilities to overcome situations as expected from himself or herself. The concept of self-efficacy refers to the individual's belief in his or her self-competence while performing hard and ambiguous tasks and struggling against obstacles that require special qualities to overcome them -signifying the belief what an individual can achieve through his or her abilities, not through his or her competencies (Çetin, Hazır & Basım, 2013). Employees with high self-efficacy are found out to possess more innovative and correct abilities. These individuals play an active role in future jobs and can find alternatives to business (Kaya & Zerenler, 2014). The concept of optimism is related with the individual's expectations from the future -in general terms, expecting good things from the future (Keser & Kocabaş 2014; Kavuklu & Kanbur, 2018; Göçen, 2019). Trust arises from an optional collaboration and from the positive outcomes of that collaboration. Studies reveal that trust reduces conflict in an organization, and thereby creates a comfortable and harmonious environment, playing an important role in the success of the organization (Baykal & Gürbüz, 2016). Psychological resilience is the ability to overcome the event that creates ambiguity and to reach success. Individuals with higher levels of resilience are those who can achieve to become themselves again and return to their essence under negative conditions. (Kavuklu & Kanbur, 2018; Keser & Kocabaş, 2014). Psychological resilience is expressed through the ability to adapt the adverse situations and to continue with the struggle (Sadeghi, 2020). Luthans and Youssef (2004) state that since there will be a necessity to concentrate on intellectual thoughts as a consequence of the ability to struggle with the hardships faced in the process of advancing to individual goals, hope directs an individual to become productive. Hope is being goal-oriented -a positive condition that ensures motivation to make plans to reach goals. Individuals with high hopes have the desire and the motivation to reach their goals and can proactively identify the alternative means to reach goals (Akçay, 2012; Yalçın, 2019).

3. Research Objective

Psychological capital levels of an individual can be enhanced and thereby, a performance increase through strong job satisfaction can be achieved (Luthens et al., 2004 cited in Kelekçi & Yılmaz, 2015). Also, in schools, the administrators must organize trainings and activities to increase the psychological capital of the teachers. A peaceful environment will be created, since the commitment of teachers to their schools and their jobs will increase. In schools with more hopeful, resilient and optimistic teachers, it will be much easier to struggle the hardships in school. The dimensions of the psychological capital, self-efficacy, optimism, hope and psychological resilience– have different impacts on intraorganizational life: whereas the employees with high levels of self-efficacy can work determinately to achieve their goals and have high performance focus, the employees with high levels of hope display a positive attitude regarding the future to be shaped through their work, and the employees with high levels of resilience can resist against both the risks and the problems (Avey, Reichard, Luthans & Mhatre, 2011). Accordingly, the psychological capital of the teachers shall affect the continuation of success of schools. This could be achieved with the informal communication in schools. An efficiently used informal communication environment in schools will increase the levels of belonging to school and commitment, and ensure that they adopt the goals of the school. Again, with increasing morale and both the social and job satisfaction of the teacher, with sharing of information and collaboration, it is expected that the self-efficacy, optimism, hope, trust and resilience qualities related with the psychological capital of the teachers to rise. However, the discussion on the relationships between the concepts of informal communication in schools and the psychological capital is insufficient. This study attempts to reveal how the levels of informal communication levels in school influence the psychological capital of teachers. There are studies in the body of literature that analyze rumors and gossip from the aspect of the concept of informal communication according to the opinions of teacher (Han, 2019), that analyze the correlation of communication environment in schools and organizational trust (Kıyılıoğlu, 2019), and studies that reveal the correlation of informal communication levels and organizational cynicism (Arslan, 2018). Again, there is research on psychological capital from the aspects of organizational stress management (Çetinkaya, 2020), organizational citizenship (Kabasin, 2019), characteristics and assertiveness of teachers (Şahin, 2020), shared leadership (Çobanoğlu, 2019; Şarbay & Bostancı, 2017), organizational power resources (Bulut, 2019), organizational commitment levels (Korkmaz, 2014), ethical leadership perception (Eser, 2018) and authentic leadership (Keser, 2013). However, there is no research that deals with the informal communication and the psychological capital of teachers. This study addresses the correlation between the informal communication skills in schools and the psychological capital of the teachers. The goal of this study is the create awareness regarding the subject in question in school administrators and teachers in accordance with the findings of the research and proposed suggestions.

With this goal, this study does a research on the correlation of informal communication levels in schools and psychological capital of teachers. Within this scope, answers to following questions are sought in the study:

- 1) What is the level of informal communication in schools?
- 2) Do the levels of informal communication in schools differ according to the assigned school level, gender, seniority, graduation status, the number of assigned teachers in school and the term of tenure at school?
- 3) What are the levels of perception of psychological capital?
- 4) Do the levels of perception of psychological capital of teachers differ according to the assigned school level, seniority, graduation status, the number of assigned teachers in school and the term of tenure at school?
- 5) Is there a significant correlation between the teacher's perception of informal communication of teachers and their levels of psychological capital?
- 6) Do the informal communication perceptions in school predict the psychological capital levels of teachers?

4. Material and Methods

In this section of the research, we will provide information regarding the research model, its population and sample, data collection and analysis.

4.1. Research Model

Since the study is performed to identify the correlation of informal communication perceptions in schools and the levels of psychological capital of teachers, the research is realized through correlation design. Correlation design aims at identifying whether there is joint change in two or more variables, and if there is, the level of this change (Karasar, 2005)

4.2. Population and Sampling

The research population is comprised of teachers assigned to all schools within the Torbalı district of İzmir province, Turkey, in the 2020-2021 academic year. The research population is comprised of 1871 teachers. Theoretical sampling size table is used for the selection of sample selection. The sampling size taken into consideration is selected from the table to achieve 95% confidence level, $\alpha=.05$ significance and 5% tolerance (Balci, 2011). From this aspect, the research sample is comprised of 396 teachers selected through convenience sampling. The scales are applied by the researcher especially to the teachers in the conveniently accessed schools. No scale was deemed invalid in the study and thus, no elimination was performed. Table 1 shows the frequency and percentile distribution of the demographic data regarding gender, assigned school level, seniority, graduation status, the number of teachers in school and their term of tenure at the very same school.

Table 1: Demographic Information of Research Sample

| Demographic information | | N | % |
|------------------------------|---------------------|-----|------|
| Gender | Female | 201 | 50.8 |
| | Male | 195 | 49.2 |
| Seniority | 1-10 years | 113 | 28.5 |
| | 11-20 years | 177 | 44.7 |
| | 21 years and above | 106 | 26.8 |
| Number of teachers in school | 1-30 persons | 167 | 42.2 |
| | 31 persons and more | 229 | 57.8 |
| Graduation Status | Undergraduate | 327 | 82.6 |
| | Graduate | 69 | 17.4 |
| Assigned School Level | Primary | 132 | 33.3 |
| | Secondary | 134 | 33.8 |
| | High School | 130 | 32.8 |
| Term of tenure at school | 1-3 years | 174 | 43.9 |
| | 4-6 years | 132 | 33.3 |
| | 7 years and above | 90 | 22.7 |
| Total | | 396 | 100 |

When gender of the teachers who participated into survey in Table 1 is examined, it can be seen that the number of female teachers is 201 (50.8%) and the number of male teachers is 195 (49.2%). From the aspect of the seniority of teachers, the number of teachers with 1-10 years of seniority is 113 (28.5%), the number of teachers with 11-20 years of seniority is 177 (44.7%) and the number of teachers with 21 years and above seniority is 106 (26.8%). The number of teachers who have 1-30 teachers in their assigned schools is 167 (42.2%), the number of teachers who have 31 and more teachers in their assigned schools is 229 (57.8). From the aspect of graduation status, the number of teachers with undergraduate education is 327 (82.6%), and the number of teachers with graduate education is 69 (17.4%). When we look at the levels of the schools that these teachers are assigned, we see 132 primary (33.3%), 134 secondary (33.8%) and 130 high school (32.8%) teachers. When the distribution of teachers according to their tenure at the same school is examined, we determine the number of teachers who are working at the same school for 1-3 years is 174 (43.9%), for 4-6 years is 132 (33.3%) and for 7 years and above is 90 (22.7%).

4.3.Data Gathering Tools

The study employs “Informal Communication Scale” to identify the perceptions of the teachers regarding the levels of informal communication in their assigned schools, and to determine their psychological capital levels, “Psychological Capital Scale” is used.

4.3.1 Informal Communication Scale

The perception levels of teachers regarding the informal communication in schools is measured by the “Informal Communication Scale” developed by Uğurlu (2012). This scale is formed of sub-dimensions of *friendship, fun, influence and information* and has 24 items in total. Scale is gradual, ranging from 1= Not at all to 5= Strongly Agree, in the

form of five point Likert grading scale. The Cronbach's Alpha reliability coefficient for the scale is found to be $\alpha = .81$ for *friendship* dimension, $\alpha = .82$ for *fun* dimension, $\alpha = .71$ for *influence* dimension, and $\alpha = .87$ for *information* dimension by Uğurlu (2012). The Cronbach's Alpha reliability coefficient for this study is $\alpha = .83$ for *friendship* dimension, $\alpha = .90$ for *fun* dimension, $\alpha = .70$ for *influence* dimension, and $\alpha = .93$ for *information* dimension. The total reliability coefficient of this scale is found to be .94. The Cronbach's Alpha reliability is coefficient of the scale is .70 and above, and thus, at desired value (Büyüköztürk, 2012; Seçer, 2013). In addition, it is understood that the reliability of Informal Communication Scale displays values close to that of the scale developed by Uğurlu (2012).

4.3.2 Psychological Capital Scale

The perception levels of teachers regarding their psychological capital were measured by the "Positive Psychological Capital Scale" developed by Tösten and Özgan (2014). The scale consists of six sub-dimensions of *self-efficacy*, *optimism*, *trust*, *extroversion*, *psychological resilience* and *hope*, and has 26 items. The scale is a five-point Likert scale (1= Not at all, 5= Strongly Agree). The Cronbach's Alpha Reliability Coefficients in the original form of the scale are $\alpha = .80$ for *self-efficacy* dimension, $\alpha = .80$ for *optimism* dimension, $\alpha = .83$ for *trust* dimension, $\alpha = .79$ for *extroversion* dimension, $\alpha = .77$ for *psychological resilience* dimension and $\alpha = .73$ for *hope* dimension (Tösten & Özgan 2014). In this research, the Cronbach Alpha Reliability Coefficients of our scale are $\alpha = .85$ for *self-efficacy* dimension, $\alpha = .88$ for *optimism* dimension, $\alpha = .82$ for *trust* dimension, $\alpha = .83$ for *extroversion* dimension, $\alpha = .88$ for *psychological resilience* dimension and $\alpha = .74$ for *hope* dimension. Again, the Cronbach's Alpha reliability coefficients of the scale are over .70, and are at desired value (Büyüköztürk, 2012).

4.4. Data Analysis

In this study, we examined the skewness and kurtosis coefficients to determine whether the data were normally distributed or not. It was observed that the skewness-kurtosis coefficients of the research variables based on the data collected with the "Informal Communication Scale" and the "Psychological Capital Scale" were between +2 and -2. Therefore, the data distribution is accepted as normal (Bursal, 2017). Table 2 displays the skewness and kurtosis test results of the data.

Table 2: Data on Normal Distribution of Data

| Dimensions | Skewness | Kurtosis |
|------------------------------|----------|----------|
| Friendship | -.396 | -.075 |
| Fun | -.340 | -.130 |
| Influence | .117 | -.139 |
| Information | -.326 | -.111 |
| Informal Communication Total | -.248 | .036 |
| Self-efficacy | -.411 | .127 |
| Optimism | -.583 | .070 |
| Trust | -.1104 | 1.777 |

| | | |
|-----------------------------|-------|------|
| Extroversion | -.546 | .068 |
| Resiliency | -.684 | .855 |
| Hope | -.631 | .680 |
| Psychological Capital Total | -.560 | .283 |

In accordance with the data present in Table 2, since the skewness and kurtosis coefficients in all dimensions of Informal Communication and Psychological Capital were between the desired values, t-Test, one-way analysis of variance (ANOVA) and Pearson Product-Moment Correlation Coefficient and multiple regression analysis techniques were used in the study. "Independent samples t-Test" was used to determine whether the relationship between teachers' perception levels of informal communication in schools and their perception levels towards psychological capital exhibit a significant difference in terms of gender, graduation status and the number of teachers in school. "One-way analysis of variance (ANOVA)" was applied to the data in order to determine whether the relationship between teachers' perception levels of informal communication in schools and their psychological capital levels differed in terms of the variables of assigned school level, years of seniority and years of tenure at the same school. In cases when differences between the groups displayed were significant, Tukey HSD test was employed to determine which group or groups caused the significant difference amongst the dimensions, and the significance level was deduced to be .05. The Pearson Product-Moment Correlation Coefficient was used to examine whether there is a significant correlation between teachers' perceptions of informal communication in schools and their psychological capital levels. Again, in order to analyze the multicollinearity problem among the research variables, VIF and tolerance values were examined. The VIF values ranged between 1.971 and 2.979 and the tolerance values were between .336 and .507. Since the tolerance values are greater than .02 and the VIF values are less than 10, it can be deduced that the problem of multicollinearity is not present (Seçer, 2013). Also, multiple regression analysis was applied to the data to determine whether teachers' perceptions of informal communication in schools predicted their psychological capital.

5. Findings

The findings as a result of the analysis of the data acquired through this study that aims to provide answers to the main problem and the sub-problems of the research, and their interpretation, can be found in Table 3 below, displaying the descriptive statistics of perception levels regarding informal communication in schools.

Table 3: Descriptive Statistics of the Perceptions of Informal Communication Levels in Schools

| Variables | \bar{X} | Ss | Level |
|------------------------|-----------|--------|--------|
| Friendship | 3.73 | .66119 | High |
| Fun | 3.68 | .78860 | High |
| Influence | 2.99 | .74350 | Medium |
| Information | 3.48 | .82075 | High |
| Informal communication | 3.52 | .63951 | High |

Examination of Table 3 reveals that the perception levels of teachers regarding informal communication in schools are high in friendship dimension ($\bar{X}= 3.73$), high in fun dimension ($\bar{X}= 3.68$), medium in influencing dimension ($\bar{X}= 2.99$), and high in information dimension ($\bar{X}= 3.48$). It can be seen that the perceptions of teachers regarding informal communication levels in general ($\bar{X}= 3.52$), are also at a high level. Table 4 displays the findings on teachers' perceptions of informal communication in schools from the aspect of the school level variable.

Table 4: ANOVA Test Results for Teachers' Informal Communication Level in Schools Based on School Level

| Informal communication | School Level | N | \bar{X} | SD | Source of Variance | Sum of Squares | df | Mean Square | F | p | Difference |
|------------------------|----------------|-----|-----------|--------|--------------------|----------------|-----|-------------|-------|------|------------|
| Friendship | Primary(1) | 132 | 3.68 | .66003 | Between groups | .516 | 2 | .258 | .589 | .555 | - |
| | Secondary(2) | 134 | 3.75 | .62028 | Within groups | 172.166 | 393 | .438 | | | |
| | High School(3) | 130 | 3.76 | .70395 | Total | 172.682 | 395 | | | | |
| Fun | Primary(1) | 132 | 3.58 | .80527 | Between groups | 4.993 | 2 | 2.497 | 4.077 | .018 | 1-2 |
| | Secondary(2) | 134 | 3.82 | .74828 | Within groups | 240.654 | 393 | .612 | | | |
| | High School(3) | 130 | 3.66 | .79356 | Total | 245.647 | 395 | | | | |
| Influence | Primary(1) | 132 | 2.98 | .72237 | Between groups | .097 | 2 | .049 | .088 | .916 | - |
| | Secondary(2) | 134 | 3.01 | .73213 | Within groups | 218.255 | 393 | .555 | | | |
| | High School(3) | 130 | 2.99 | .78062 | Total | 218.352 | 395 | | | | |
| Information | Primary(1) | 132 | 3.52 | .84411 | Between groups | 1.756 | 2 | .878 | 1.305 | .272 | - |
| | Secondary(2) | 134 | 3.53 | .75394 | Within groups | 264.330 | 393 | .673 | | | |
| | High School(3) | 130 | 3.38 | .85991 | Total | 266.086 | 395 | | | | |

As it can be seen in Table 4, one-way analysis of variance was applied to determine whether perceptions of teachers' regarding the realization of friendship [$F_{(2-393)} = .589$; $p > 0.05$], fun [$F_{(2-393)} = 4.077$; $p > 0.05$], influence [$F_{(2-393)} = .088$; $p > 0.05$] and information [$F_{(2-393)} = 1.305$; $p > 0.05$] dimensions of informal communication in schools varied with according to the assigned schools' level variable.

According to the results of the analysis, a statistically significant difference was found between the average scores of primary and secondary school teachers in the fun sub-dimension of informal communication. Secondary school teachers think that the sub-dimension of having fun in their schools occurs at a higher level than primary school teachers. In terms of friendship, influence and information dimensions, there is no significant difference in terms of average opinion scores among primary, secondary and high school teachers from the aspect of their assigned schools' level. Perceptions of informal communication in schools are as follows according to other demographic variables in the study.

In terms of gender variable, there is no significant difference between female and male teachers' perceptions regarding informal communication levels in schools, from the aspects of friendship [$t_{(396)} = -1.284, p > .05$], fun [$t_{(396)} = 1.247, p > .05$], influence [$t_{(396)} = -1.759, p > .05$], information [$t_{(396)} = .429, p > .05$] dimensions, and from the aspect of sum total of informal communication levels [$t_{(396)} = -.622, p > .05$].

In terms of seniority variable, no significant difference is observed among teachers' perceptions regarding informal communication levels in schools from the aspects of friendship [$F_{(2-393)} = .802; p > 0.05$], fun [$F_{(2-393)} = 1.932; p > 0.05$], influence [$F_{(2-393)} = 1.831; p > 0.05$] dimensions, and from the aspect of sum total of informal communication levels [$F_{(2-393)} = 2.376; p > 0.05$]. However, a statistically significant difference was found in the information dimension of teachers' perceptions of informal communication levels in schools [$F_{(2-393)} = .802; p < 0.05$]. The significant difference lies between the teachers with 1-10 years of seniority and those with 21 years or more seniority. When compared with teachers with a professional seniority of 21 years or more, the teachers with 1-10 years of seniority have higher perceptions of the information dimension of informal communication in schools.

In terms of graduation status variable, whether they have undergraduate or graduate level education, no significant difference is observed among teachers' perceptions regarding informal communication levels in schools from the aspects of friendship [$t_{(396)} = -1.635, p > .05$], fun [$t_{(396)} = -.936, p > .05$], influence [$t_{(396)} = .396, p > .05$] and information [$t_{(396)} = .197, p > .05$] dimensions, and from the aspect of sum total of informal communication levels [$t_{(396)} = -.784, p > .05$].

In terms of the variable of the number of teachers in the school, no significant difference is found between teachers who have 1-30 teachers assigned to their schools and those who have 31 or more teachers assigned to their schools in their perceptions regarding informal communication levels in schools from the aspects of friendship [$t_{(396)} = -.673, p > .05$], fun [$t_{(396)} = -.045, p > .05$], influence [$t_{(396)} = -.237, p > .05$] and information [$t_{(396)} = .803, p > .05$] dimensions, and from the aspect of sum total of informal communication levels [$t_{(396)} = .034, p > .05$].

In terms of the variable of tenure at the same school, no significant difference is found between teachers who have a tenure of 1-3 years, 4-6 years and 7 years or above in their current school, regarding informal communication levels in schools from the aspects of friendship [$F_{(2-393)} = 1.518; p > 0.05$], fun [$F_{(2-393)} = 2.463; p > 0.05$], influence [$F_{(2-393)} = .109; p >$

0.05] and information [$F_{(2-393)} = .022$; $p > 0.05$] dimensions, and from the aspect of sum total of informal communication levels [$F_{(2-393)} = .747$; $p > 0.05$]. Descriptive statistics of teachers' perception levels of their psychological capital are given in Table 5.

Table 5: Descriptive Statistics on Perceptions of Teachers Regarding Their Psychological Capital Level

| Variables | \bar{X} | SD | Level |
|-----------------------|-----------|--------|-----------|
| Self-efficacy | 4.26 | .53223 | Very high |
| Optimism | 4.07 | .68119 | High |
| Trust | 4.56 | .46905 | Very high |
| Extroversion | 4.27 | .57624 | Very high |
| Resilience | 4.23 | .59650 | Very high |
| Hope | 4.29 | .57035 | Very high |
| Psychological Capital | 4.27 | .47051 | Very high |

As it can be seen from Table 5, whereas the perception levels of teachers regarding their psychological capital are very high in self-efficacy ($\bar{X} = 4.26$), trust ($\bar{X} = 4.56$), extroversion ($\bar{X} = 4.27$), psychological resilience ($\bar{X} = 4.23$) and hope ($\bar{X} = 4.29$) dimensions of psychological capital, and high in optimism ($\bar{X} = 4.07$) dimension of psychological capital. It can be seen that the perceptions of teachers regarding psychological capital levels in general ($\bar{X} = 4.27$) are also at a very high level. Table 6 shows the findings regarding teachers' perceptions of psychological capital levels based on the school level variable.

As seen in Table 6, one-way analysis of variance was applied to determine whether teachers' possessed levels self-efficacy [$F_{(2-393)} = .428$; $p > 0.05$], optimism [$F_{(2-393)} = 2.268$; $p > 0.05$], trust [$F_{(2-393)} = .038$; $p > 0.05$], extroversion [$F_{(2-393)} = .504$; $p > 0.05$], psychological resilience [$F_{(2-393)} = .078$; $p > 0.05$] and hope [$F_{(2-393)} = .006$; $p > 0.05$] dimensions of psychological capital varied with the assigned schools' level variable, and no difference was observed between the mean scores of the teachers. In addition, the psychological capital levels with regard to demographic variables of teachers are as follows.

Table 6: ANOVA Test Results for Teachers' Psychological Capital Levels Based on the School Level Variable

| Psychological Capital | School Level | N | \bar{X} | SD | Source of Variance | KT | df | KO | F | p | Difference |
|-----------------------|-----------------|-----|-----------|--------|-----------------------|---------|-----|-------|-------|------|------------|
| Self-efficacy | Primary (1) | 132 | 4.24 | .49418 | Between groups | .243 | 2 | | | | |
| | Secondary(2) | 134 | 4.24 | .47342 | Within groups | 111.649 | 393 | .122 | | | |
| | High School (3) | 130 | 4.29 | .62163 | Total | 111.892 | 395 | .284 | .428 | .652 | - |
| | | | | | | | | | | | |
| Optimism | Primary (1) | 132 | 4.17 | .66455 | Between groups | 2.092 | 2 | | | | |
| | Secondary(2) | 134 | 4.05 | .68008 | Within groups | 181.197 | 393 | 1.046 | | | |
| | High School (3) | 130 | 4.99 | .69231 | Total | 183.288 | 395 | .461 | 2.268 | .105 | - |
| | | | | | | | | | | | |
| Trust | Primary (1) | 132 | 4.56 | .50838 | Between groups | .017 | 2 | | | | |
| | Secondary(2) | 134 | 4.55 | .44550 | Within groups | 86.886 | 393 | .008 | | | |
| | High School (3) | 130 | 4.56 | .45437 | Total | 86.903 | 395 | .221 | .038 | .963 | - |
| | | | | | | | | | | | |
| Extraversion | Primary (1) | 132 | 4.23 | .62114 | Between groups | .336 | 2 | | | | |
| | Secondary(2) | 134 | 4.29 | .52981 | Within groups | 130.824 | 393 | .168 | | | |
| | High School (3) | 130 | 4.28 | .57701 | Total | 131.159 | 395 | .333 | .504 | .605 | - |
| | | | | | | | | | | | |
| Resiliency | Primary (1) | 132 | 4.22 | .57957 | Between groups | .056 | 2 | | | | |
| | Secondary(2) | 134 | 4.22 | .62972 | Within groups | 140.488 | 393 | .028 | | | |
| | High School (3) | 130 | 4.25 | .58233 | Total | 140.544 | 395 | .357 | .078 | .925 | - |
| | | | | | | | | | | | |
| Hope | Primary (1) | 132 | 4.29 | .53548 | Between groups | .004 | 2 | | | | |
| | Secondary(2) | 134 | 4.29 | .57103 | Within groups | 128.489 | 393 | .002 | | | |
| | High School (3) | 130 | 4.29 | .60719 | Total | 128.492 | 395 | .327 | .006 | .994 | - |
| | | | | | | | | | | | |

In terms of gender variable, teachers' psychological capital levels do not differ significantly from the aspects of self-efficacy [$t_{(396)} = -1.306$, $p > .05$], optimism [$t_{(396)} = .278$, $p > .05$], trust [$t_{(396)} = -.785$, $p > .05$], extroversion [$t_{(396)} = -1.591$, $p > .05$] and hope [$t_{(396)} = .052$, $p > .05$] dimensions of psychological capital. In the psychological resilience [$t_{(396)} = -2.786$, $p < .05$] dimension, a significant difference was found between the psychological capital levels of female and male teachers. In this context, it can be said that male teachers have higher levels of psychological resilience than female teachers. It is understood that there is no significant difference in terms of gender between teachers' perceptions of the sum total of psychological capital [$t_{(396)} = -1.311$, $p > .05$].

In terms of seniority variable, it was observed that there was no significant difference between the teachers with seniority of 1-10 years, 11-20 years and 21 years and above with regard to the teachers' perceptions of psychological capital levels from the aspects of optimism [$F_{(2-393)} = 2.782$; $p > 0.05$], extraversion [$F_{(2-393)} = 1.529$; $p > 0.05$], psychological resilience [$F_{(2-393)} = 1.080$; $p > 0.05$] and hope [$F_{(2-393)} = 1.802$; $p > 0.05$] dimensions of psychological levels. From the aspect of self-efficacy dimension of psychological capital [$F_{(2-393)} = 4.017$; $p < 0.05$], significant differences were observed between the teachers with seniority of 21 years and above and with those with a seniority of 1-10 and 11-20 years. A significant difference was also found in the aspect of confidence [$F_{(2-393)} = 6.896$; $p < 0.05$] dimension of psychological capital between the teachers with seniority of 21 years and above with those with a seniority of 11-20 years. Yet, from the aspect of sum total of psychological capital levels [$F_{(2-393)} = 3.027$; $p > 0.05$], it was determined that the psychological capital levels of the teachers with 1-10 years of seniority, 11-20 years and 21 years and above did not differ significantly.

In terms of graduation status variable, whether the teachers hold associate, undergraduate or graduate degrees, no significant difference was found in teachers' perceptions of their psychological capital levels from the aspects of self-efficacy [$t_{(396)} = -.189$, $p > .05$], optimism [$t_{(396)} = -.186$, $p > .05$], trust [$t_{(396)} = -1.177$, $p > .05$], extroversion [$t_{(396)} = -1.821$, $p > .05$], and psychological resilience [$t_{(396)} = -1.753$, $p > .05$] dimensions of psychological capital, and from the aspect of sum total of psychological capital levels [$t_{(396)} = -1.499$, $p > .05$]. From the aspect of the dimension of hope [$t_{(396)} = -2.723$, $p < .05$], a significant difference was found: it can be said that teachers with graduate degree have higher levels of psychological capital in its hope dimension than the teachers with associate and undergraduate degrees.

In terms of the number of teachers in the school variable, from the aspect of self-efficacy [$t_{(396)} = .804$, $p > .05$] and hope [$t_{(396)} = 1.579$, $p > .05$] dimensions of psychological capital, no significant difference was found between the teachers assigned to schools with 1-30 teachers and those with 31 or more teachers in their perceptions of psychological capital levels. From the aspect of optimism [$t_{(396)} = 3.402$, $p < .05$], trust [$t_{(396)} = 2.063$, $p < .05$], extroversion [$t_{(396)} = 2.383$, $p < .05$], psychological resilience [$t_{(396)} = 2.182$, $p < .05$] dimensions of psychological capital and from the aspect of sum total of psychological capital [$t_{(396)} = 2.733$, $p < .05$], the psychological capital levels of the teachers assigned to schools with 1-30 teachers are higher than those in schools with 31 and above teachers.

In terms of tenure at same school variable, no significant difference was found among teachers with tenure of 1-3 years, 4-6 years and 7 years or above in their current school regarding teachers' perceptions of psychological capital levels from the aspects of optimism [$F_{(2-393)} = .623$, $p > 0.05$], trust [$F_{(2-393)} = .524$, $p > 0.05$], extroversion [$F_{(2-393)} = 1.329$, $p > 0.05$], psychological resilience [$F_{(2-393)} = .064$, $p > 0.05$], and hope [$F_{(2-393)} = .201$, $p > 0.05$] dimensions of psychological capital and from the aspect of sum total of psychological capital [$F_{(2-393)} = .756$, $p > 0.05$]. On the other hand, from the aspect of self-efficacy dimension of psychological capital [$F_{(2-393)} = 3.656$, $p < 0.05$], a significant difference was found between the teachers who worked at the same school for 1-3 years and those who

worked at the same school for 4-6 years. It can be said that teachers who have worked at the same school for 4-6 years possess a higher level of self-efficacy dimension of psychological capital compared to teachers who have worked at the same school for 1-3 years. Table 7 displays the correlation analysis results to determine the correlation of informal communication levels in school and the psychological capital of teachers.

Table 7: The Correlation of Teachers' Perceptions of Informal Communication Levels in Schools and Their Psychological Capital

| Psychological Capital Informal Communication | Self-Efficacy | Optimism | Trust | Extraversion | Resiliency | Hope | Psychological Capital |
|---|---------------|----------|--------|--------------|------------|--------|-----------------------|
| Friendship | .187** | .246** | .117* | .217** | .190** | .167** | .240** |
| Fun | .212** | .367** | .159** | .274** | .277** | .264** | .332** |
| Influence | .113* | .186** | .057 | .102* | .165** | .152** | .166** |
| Information | .191** | .301** | .114** | .185** | .233** | .237** | .268** |
| Informal Communication | .212** | .328** | .135** | .234** | .256** | .244** | .310** |

* Correlation is significant at 0.05 level. ** Correlation is significant at 0.01 level.

As can be understood from Table 7, there are significant correlations between teachers' perceptions of the informal communication level in schools and their psychological capital levels. A significant, positive and low-degree correlation was found between the levels self-efficacy ($r = .187$), optimism ($r = .246$), trust ($r = .117$), extroversion ($r = .217$), psychological resilience ($r = .190$) and hope ($r = .167$) with the friendship dimension of informal communication in schools. Again, while there is a low-degree but significant positive, correlation between the fun dimension of informal communication in schools and the levels of self-efficacy ($r = .212$), trust ($r = .159$), extroversion ($r = .274$), resilience ($r = .277$) and hope ($r = .264$), this aspect has a moderate-degree significant positive correlation with optimism ($r = .367$). While there is a significant positive correlation between the influence dimension of informal communication in schools and the teachers' levels of self-efficacy ($r = .113$), optimism ($r = .186$), extroversion ($r = .102$), resilience ($r = .165$) and hope ($r = .152$), there is no such significant correlation with trust. While there is a low-degree but significant positive correlation with teachers' perceptions of the information dimension of informal communication in schools and their levels of self-efficacy ($r = .191$), trust ($r = .114$), extroversion ($r = .185$), psychological resilience ($r = .233$) and hope ($r = .237$), there is only a moderate-degree positive correlation between their optimism levels ($r = .301$) and their perception. The correlation table results reveal that there is a low-degree but positive correlation between teachers' perceptions of informal communication in schools regarding friendship ($r = .240$), influence ($r = .166$) and information ($r = .268$) dimensions of informal communication and their psychological capital levels, yet, there is a moderate-degree positive correlation between their perceptions of fun ($r = .332$) dimension and their psychological capital levels. There is a low-degree positive correlation between teachers' perceptions of the sum total of

informal communication in schools and their psychological capital levels ($r = .310$). Based on these results, it can be said that as the informal communication increases in schools, the psychological capital levels of teachers also increase. Table 8 shows the findings regarding teachers' perceptions of informal communication levels in schools and their predictive status regarding their psychological capital.

Table 8: Results of Regression Analysis on Perceptions Towards Informal Communication Levels in Schools and Predictive Status of Teachers' Regarding Their Psychological Capital

| Predicted Variable: Psychological Capital | | | | | | | |
|---|-----------------------|------------|----------------|--------|------|---------|--------|
| Predictor Variable | B | Std. Error | β (Beta) | t | p | Partial | Paired |
| Constant | 3.559 | .132 | | 26.995 | .000 | | |
| Friendship | -.023 | .053 | -.033 | -.436 | .663 | -.022 | -.021 |
| Fun | .187 | .049 | .313 | 3.815 | .000 | .189 | .181 |
| Influence | -.049 | .042 | -.078 | -1.173 | .242 | -.059 | -.056 |
| Information | .074 | .043 | .129 | 1.727 | .085 | .087 | .082 |
| R: .343 | R ² = .118 | | | | | | |
| F(4-392) = 13,058 | P = .000 | | | | | | |

According to the results of the regression analysis in Table 8, it is understood that fun level of informal communication in schools significantly predicts the psychological capital of the teachers. Fun level of informal communication in schools explains approximately 12% of the variance in teachers' psychological capital ($R = .343$, $R^2 = .118$, $p < .01$). When the predictor variable, the dimensions of informal communication in schools, the t values predicting psychological capital are examined, it is seen that the fun level of informal communication in schools significantly predicts teachers' psychological capital. One-unit increase in fun level in schools increases teachers' psychological capital by 0.31 units. On the other hand, it is seen that friendship, influence and information dimensions regarding informal communication in schools do not predict teachers' psychological capital.

6. Results and Discussion

This research was conducted to determine the relationship between the informal communication levels in schools and the psychological capital of teachers. According to the results of the study, the perception levels of teachers regarding informal communication in schools are high in the friendship, fun and information dimensions of informal communication; yet it is at a medium level in the influence dimension. According to these results, it can be said that teachers think that they have informal communication that meets the social and organizational needs of their schools. These results obtained regarding the informal communication levels in schools are consistent with the studies conducted by Afat and Arslan (2019). According to the research findings of Afat and Arslan (2019), they communicate at "high" level in friendship, fun and

information sub-dimensions and at “medium” level in influence sub-dimension. The results that they have obtained supports the result obtained from this research.

As a result of the research, it is seen that there is a significant difference between teachers' perceptions of fun dimension of informal communication in schools in terms of their assigned schools' level variable. No significant difference was found between the perceptions of teachers working in primary, secondary and high schools in friendship, influence and information dimensions of informal communication in schools. Secondary school teachers think that the sub-dimension of having fun in their schools occurs at a higher level than primary school teachers. In their study, Ay and Uğurlu (2016) found that teachers' informal communication differed significantly in their information and influence dimensions based on the school level variable.

According to the results obtained from other demographic data used in this study, it is observed that there are no significant differences between the perceptions of informal communication in schools based on gender variable. In consideration of the results of the studies in the literature conducted by Afat and Arslan (2019), Ay and Uğurlu (2016), Bayırlı (2012), Kurt (2014), Polat (2014) and Tunçeli (2013) teachers are generally concerned about informal communication in schools. There is no significant difference between the perceptions based on gender variable. Since communication is a necessity in schools that have human as their inputs and outputs and since there is no gender-based difference in informal communication, this can be regarded as usual -after all, informal communication occurs spontaneously in the environment and it is not formal. While there is no significant difference in the perceptions of teachers in terms of years of seniority from the aspects of friendship, fun, influence dimensions and informal communication towards informal communication in schools, a significant difference was found in the information sub-dimension. Accordingly, a significant difference in the information sub-dimension is found between the teachers with 1-10 years of seniority and the teachers with a professional seniority of 21 years or above. According to this result, the perceptions of teachers with seniority of 1-10 years regarding the information sub-dimension of informal communication in schools are higher than that of teachers with a professional seniority of 21 years or above. The means of informal communication are not only limited to sharing information, but they are also used continuously and intensively to convey experiences, to learn about innovations and share them, to collaborate, to provide a basis for new opinions and to exchange views (Thompson 2003 cited in Arabacı, Sünkür & Şimşek 2012). Accordingly, it is understood that teachers who have just started their first decade of their professional seniority renew themselves faster and apply what they learn faster, since they are idealistic towards their profession, they are energetic, dynamic, excited and their burnout levels are low. Again, in the study, it is seen that there is no difference between teachers' perceptions of informal communication levels in schools based on graduation status variable. From this study, it is understood that the informal communication levels in schools do not differ significantly in terms of the number of teachers in the school, where they work and the approximate term of tenure in the same school.

Another conclusion of the study is that the other variable, the psychological capital of the teachers is at a very high level. While teachers' levels of psychological capital in the self-efficacy, trust, extroversion, resilience and hope sub-dimensions are very high, in the optimism sub-dimension it is observed as high. The fact that teachers' levels of psychological capital and its sub-dimensions are respectively very high and high, it can be said these are so, since teachers are: self-confident in order to successfully fulfill their duties; optimistic in terms of developing positive attitudes towards the time period they belong and towards the future; hopeful with strength and enthusiasm to achieve their goals; and resilient on their way to reach their goals and success under adverse conditions. The findings of Anık and Tösten (2019), Arslantaş and Şahin (2017), Bostancı, Çelik and Kahraman (2017), Çimen (2015), Demir and Yıldırım (2019), Şarbay and Bostancı (2018), Tösten (2015), Kelekçi and Yılmaz (2015) and Yalçın (2019) support these conclusions, revealing high level of teachers' psychological capital in their research. The results of the study by Kaya, Balay and Demirci (2014) differ, having found out that teachers' psychological capital levels were moderate in some sub-dimensions. There is no significant difference between the psychological capital levels of the teachers based on the school level variable. Tösten's Turkey-wide study (2015) found out that psychological capital does not lead to significant differences with respect to the school level variable. Similarly, Kelekçi and Yılmaz (2015) concluded that there was no significant difference between teachers' opinions based on school level variable in terms of psychological capital and its sub-dimensions. In difference from the results obtained from this study, Bostancı, Çelik and Kahraman (2017) and Yalçın (2017) conclude that school level variable causes a significant difference in teachers' perceptions of psychological capital levels.

According to the results obtained from other demographic variables in the study, no significant difference was found in the opinions of the teachers who participated into this study in terms of their psychological capital levels and their perceptions of psychological capital in general, in terms of gender variable and in terms of self-efficacy, optimism, trust, extroversion and hope sub-dimensions. In the resilience sub-dimension, a significant difference was found between male and female teachers. Male teachers' average opinion scores on general psychological capital level and sub-dimensions of self-efficacy, trust, extroversion and resilience are higher than female teachers. In this context, it can be said that male teachers' resilience against the difficulties they encounter in schools are higher than female teachers. In the studies conducted by Altinkurt, Ertürk and Yılmaz (2015), Demir and Yıldırım (2019), Kaya, Balay, and Demirci (2014) and Kelekçi and Yılmaz (2015) it was concluded that teachers' perceptions of psychological capital did not differ based on gender. In the literature, different results were obtained in terms of the variable in-question. In studies by Atış (2020), Çetinkaya (2019), Demirtaş and Küçük (2019), Okur (2019) and Yalçın (2017), it was found that teachers' perceptions of psychological capital differ according to gender. In psychological capital in general and all its sub-dimensions, female teachers' average opinion scores are lower than males. As a result, it might be possible to say that the situation contradicts the general belief that women are more possessive.

When observed from seniority, teachers' psychological capital perception levels display a significant difference in self-efficacy and trust dimensions. While the observed differences in the self-efficacy sub-dimension were between teachers with a seniority of 21 years or above and those with a seniority of 1-10 and 11-20 years, the differences in the trust sub-dimension were between the teachers with a seniority of 21 years or more and those with 11-20 years. From the aspect of the sum total of psychological capital and its sub-dimensions of optimism, extroversion, resilience and hope, the observed perception levels did not differ significantly among teachers. According to this result, as the years of seniority of teachers' increase, their psychological capital levels also increase. In their studies, Akman (2016), Bostancı, Çelik and Kahraman (2017), Çetinkaya (2019), Demirtaş and Küçük (2019), Kaya, Balay and Demirci (2014) and Tösten (2015) and have identified that the level of psychological capital significantly differed when compared from the professional seniority aspect. Altinkurt, Ertürk and Yılmaz (2015), Büyükgöze and Kavak (2017), Şarbay and Bostancı (2018) and Yalçın (2017) conclude that teachers' perceptions of their psychological capital do not differ according to their seniority.

While the psychological capital levels of the teachers participating in the study did not differ significantly in terms of the graduation status variable, the sum total of psychological capital and its sub-dimensions of self-efficacy, optimism, trust, extroversion and psychological resilience, a significant difference was found in the hope sub-dimension among the teachers with associate, undergraduate and graduate degrees. According to the results, it can be said that teachers with a graduate degree have higher levels of hope than teachers with associate degrees and undergraduate degrees. It might be that teachers with a graduate degree have high motivation for the future and cause these results. In their research, Demir (2019), Kaya, Balay and Demirci (2014) and Kılıç (2019) reached similar results to this study. Anık (2018), Şarbay and Bostancı (2018), Kelekçi (2015) and Yüksel (2015) found no significant difference in terms of the graduation status variable for teachers' psychological capital levels in their research. In terms of number of teachers at school variable in the study, while the levels of teachers in psychological capital did not differ significantly in self-efficacy and hope sub-dimensions of psychological capital, they differ in optimism, trust, extroversion, psychological resilience sub-dimensions and also in the sum total of psychological capital. This difference is observed between teachers assigned to schools with 1-30 teachers and those in schools with 31 or more teachers. Also, it has been observed that the psychological capital levels of teachers assigned to schools with 1-30 teachers are higher. The reason for this is that in schools with fewer teachers, organizational harmony, sincerity and sharing among teachers is higher, and therefore, it can be thought that within these schools, a more comfortable and harmonious environment is created, and thereby, there is less friction. The lower levels of psychological capital in schools with teachers of 31 and above can be explained by the more formal level of communication and relationships in these schools. According to the results of the studies conducted by Çetinkaya (2019), Şarbay and Bostancı (2018) and Yüksel (2015), the perception of teachers' psychological capital levels does not differ in terms of number of teachers in

school variable. Again, in this study, it is observed that based on tenure at the same school variable, the psychological capital levels of teachers and their optimism, trust, extraversion, psychological resilience and hope sub-dimensions and the sum total of psychological capital, there is no significant difference between teachers with a tenure term of 1-3 years, 4-6 years and 7 years or more in their current school. When seen from the self-efficacy sub-dimension, it is understood that teachers who have worked at the same school for 4-6 years have a higher psychological capital level than those who have worked at the same school for 1-3 years. The reason for the lower perception levels of teachers with 1-3 years of tenure in the same school when compared with teachers with 4-6 years can be seen as a result of the process of adaptation to the functioning of a new school environment in the first few years and that teachers who are new to a school observe its functioning from a distance. Çetinkaya (2019) and Çimen (2015) reaches a similar conclusion with this study.

When the results obtained on the correlation of the perceptions of informal communication levels in schools and the psychological capital levels of teachers from this study are examined, it can be seen that while there is a low-degree positive correlation between teachers' perceptions of informal communication in schools from the aspects of friendship, influence, and information and their psychological capital levels, there is a moderate-degree positive correlation between their perceptions of fun dimension and their psychological capital levels. There is a moderate-degree positive correlation between teachers' perceptions of the sum total of informal communication in schools and their psychological capital levels. Based on these results, it can be said that as the informal communication increases in schools, the psychological capital levels of teachers also increase. According to another result of the study, fun level of informal communication in schools significantly predicts teachers' psychological capital. However, it is also observed that friendship, influence and information dimensions of informal communication in schools do not predict teachers' psychological capital.

7. Recommendations

In line with the results obtained from the research, we make the following suggestions. The functionality of schools can be increased through information and seminars on how informal communication can be used more effectively, on its damages to schools and on its benefits and consequences, to be provided by competent people, for the benefit of administrators and teachers in the current system. With the support of school administrators, more social and cultural activities can be planned with teachers in order to improve informal communication and increase its positive effects. It is understood that the level of fun of informal communication in schools significantly predicts teachers' psychological capital. For this reason, administrators should provide working conditions in which teachers' informal relationships are increased and relationships within the school are strengthened. The examination of literature reveals that studies on schools

regarding the variables of this research are insufficient. Further and similar research should be encouraged.

Conflict of Interest Statement

There is no conflict of interest between the authors.

About the Authors

Mehmet Ustun is vice school administrator at secondary school in Torbalı, Izmir, Turkey.

Aynur B. Bostanci is Associate Professor Dr., Department of Educational Administration, Faculty of Education, Usak University in Usak, Turkey.

References

- Akçay, V. H. (2012). The relationship between positive psychological capital and job satisfaction. *Journal of Kahramanmaraş Sütcü Imam University Faculty of Economics and Administrative Sciences*, 2(1), 123-140.
- Akman, Y. (2016). The investigation of teachers' perceptions of psychological capital according to various variables. *Dicle University Journal of Ziya Gökalp Faculty of Education*, (28), 268-277.
- Akyürek, M. (2020). Investigation of gossip and rumor in schools. *IZU Journal of Education*, 2(4), 174-190.
- Altinkurt, Y., Ertürk, A., & Yılmaz, İ. (2015). The relationship between psychological capital and burnout levels of teachers. *Journal of Teacher Education and Educators*, 4(2), 166-187.
- Anık, S. (2018). *Investigation of teachers perceptions on positive psychological capital and the problem solving skills* (Unpublished Masters Thesis). Siirt University, Social Sciences Institute, Siirt.
- Anık, S., & Tösten, R. (2019). Investigation of teachers perceptions on positive psychological capital and the problem solving skills. *Electronic Journal of Social Sciences*, 18(69), 332-342.
- Arabacı, İ., Sünkür, M. & Şimşek, F. (2012). Teachers' views regarding gossip and rumour mechanism: A qualitative study. *Educational Administration: Theory and Practice*, 2 (2), 171-190.
- Arslan, N. & Afat, N. (2019). The relationship between teachers' informational communication levels and organizational cinism. *Istanbul Sabahattin Zaim University Journal of Faculty of Education*, 2(1), 218-246.
- Atış, D. (2020). *Teachers' views on the relationship between school effectiveness and positive psychological capital* (Unpublished Doctorate Thesis). Anadolu University, Graduate School of Educational Sciences, Eskişehir.

- Avey, J. B., Reichard, R. J., Luthans, F. & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22(2), 127-152.
- Ay, D. & Uğurlu, C. T. (2016). Teacher's interpersonal self-efficacy and their level of informal communication: a quantitative study. *Inonu University Journal of the Graduate School of Education*, 3 (5), 28-47.
- Bacaksız, F. E. & Yıldırım, A. (2013). Development of the gossip and rumor attitude scale. *Journal of Anatolia Nursing and Health Sciences*, 16(1), 36-42.
- Balçı, A. (2011). *Sosyal bilimlerde araştırma yöntem teknik ve ilkeler*. Ankara: Pegem Akademi Yayınları.
- Bayırlı, A. (2012). *An analysis of primary school teachers attitudes and beliefs on classroom control and organizational communication levels* (Unpublished Masters Thesis). Selcuk University, Educational Sciences Institute, Konya.
- Baykal, Ş. & Gürbüz, S. (2016). Investigation of the social capital and interpersonal trust with social network analysis. *The Journal of Human and Work*, 3(2), 77-91.
- Bektaş, M. & Erdem, R. (2015). Informal communication process in organizations: A conceptual framework. *Afyon Kocatepe University Journal of Economics and Administrative Sciences*, 17(1).125-139.
- Bostancı, A. B., Çelik, K. & Kahraman, Ü. (2017). The relationship between psychological capital of teachers and DNA profiles of schools. *Adnan Menderes University Faculty of Education Journal of Education Sciences*, 8 (2), 140-156.
- Bulut, S. (2019). *Organizational power resources and psychological capital relations in schools* (Unpublished Masters Thesis). Onsekiz Mart University, Educational Sciences Institute, Çanakkale.
- Bursal, M. (2017). *SPSS ile temel veri analizleri*. Ankara: Anı Yayıncılık.
- Büyükgoze, H., & Kavak, Y. (2017). The relationship of perceived organizational support and psychological capital: an investigation among high school teachers. *Educational Administration: Theory and Practice*, 23(1), 1-32.
- Büyüköztürk, Ş. (2012). *Sosyal bilimler için veri analizi el kitabı: İstatistik, araştırma deseni, SPSS uygulamaları ve yorum*. Ankara: Pegem Akademi Yayınları.
- Çetin, F., Hazır, K. & Basım, H. (2013). The interaction between supportive organizational culture and psychological capital: the mediating role of locus of control. *Hacettepe University Journal of Economics and Administrative Sciences*, 31 (1), 31-52.
- Çetinkaya, M. Y. (2019). *The relationship between organizational psychological capital and organizational stress management* (Unpublished Masters Thesis). Harran University Social Sciences Institute, Şanlıurfa.
- Çimen, İ. (2015). *Examining the factors related to teachers' perception of psychological capital* (Unpublished Masters Thesis). Gaziantep University, Educational Sciences Institute, Gaziantep.
- Çobanoğlu, N. (2019). *Investigation of positive psychological capital and shared leadership in primary and secondary schools in terms of some variables and relationship between them*

- (Unpublished Doctorate Thesis). Gaziantep University, Educational Sciences Institute, Gaziantep.
- Demir, S. (2018). The relationship between psychological capital and stress, anxiety, burnout, job satisfaction, and job involvement. *Eurasian Journal of Educational Research*, 18 (75), 137-154.
- Demirtaş, Z. & Küçük, Ö. (2019). Relationship between school principals' toxic leadership behaviors and teachers' organizational silence. *PAU Journal of Education*, 47, 41-58.
- Doğan, S., Uğurlu, C., Yıldırım, T. & Karabulut, E. (2014). Evaluation of the communication process between school administrators and teachers according to teachers' opinions. *Turkish Journal of Education*, 3 (1) , 34-47.
- Eğimli, A. T. & Bitirim, S. (2008). Barrier in front of the corporate success: toxic communication. *Journal of Selcuk Communication*, 5(3), 124-140.
- Erdoğan, M., Kırılmaz, H. & Arslanoğlu, A. (2018). Impact of informal communication on ethical climate perception: A public hospital sample. *Health Care Academician Journal*, 5 (2), 109-118.
- Erkmen, T. & Esen, E. (2012). Categorical investigation of researches in psychological capital between 2003-2011 years. *Mustafa Kemal University Journal of Social Sciences Institute*, 9(19), 89-103.
- Eroğlu, E.(2005). Determination of behavioral patterns of managers towards gossip and rumor. *MANAS Journal of Social Studies*, 13:203-218.
- Eser, İ. (2018). *An analysis of the effects of mediative role of positive psychological capital on the relationship between ethical leadership perceptions and work engagement of teachers'* (Unpublished Doctorate Thesis). Gaziantep University, Educational Sciences Institute, Gaziantep.
- Göçen, A. (2019). Teachers' life meaning, psychological capital and gender's effect on their psychological well-being. *Cumhuriyet International Journal of Education*, 8(1),135-153.
- Han, B. (2019). *Investigating rumor and gossip as types of informal communication in schools according to teacher views* (Unpublished Doctorate Thesis). Dicle University Educational Sciences Institute, Diyarbakır.
- Himmetoğlu, B., Ayduğ, D., & Bayrak, C. (2020). School administrators' opinions on rumor and gossip network as an informal communication type in schools. *Cukurova University Faculty of Education Journal*, 49(1), 45-72.
- Hoy, W. K. & Miskel, C. G. (2012). *Eğitim Yönetimi, Teori, Araştırma ve Uygulama*. (S. Turan, Çev.). Ankara: Nobel Yayıncılık
- Kabasin, O. (2019). *Investigation of the relationship between teachers 'perceptions of psychological citizenship behavior* (Unpublished Masters Thesis). Gaziantep University, Educational Sciences Institute, Gaziantep.
- Karaçor, S. & Şahin, A. (2004). Örgütsel iletişim kurma yöntemleri ve karşılaşılan iletişim engellerine yönelik bir araştırma. *The Journal of Social Economic Research*, 4 (8) , 96-117.

- Karadal, H. & Özşungur, F. (2017). An examination of the relationship between service innovation behavior and psychological capital and ethical leadership: a sample of Adana. *International Journal of Management Economics and Business*, 13 (13) , 663-672.
- Karasar, N. (2005). *Bilimsel araştırma yöntemi*. Ankara: Nobel Yayın Dağıtım.
- Karcıoğlu, F., Timuroğlu, M. F. & Çınar, O. (2009). The relationship between organizatonal communication and job satisfaction: An application. *Yönetim Dergisi: İstanbul Üniversitesi İşletme Fakültesi İşletme İktisadı Enstitüsü*, 20 (63), 59-76
- Kavuklu, H. & Kanbur, A. (2018). A different capital adventure: examining psychological capital in terms of demographic variables. *Business and Organization Research (International Conference) (12th-14th September 2018) Safranbolu/Karabuk*
- Kaya, A., Balay, R. & Demirci, Z. (2014). Ortaöğretimde görev yapan öğretmenlerin psikolojik sermaye düzeylerinin incelenmesi (Şanlıurfa İli örneği). *Electronic Journal of Social Sciences*, 13 (48), 47-68.
- Kaya, D. & Zerenler, M. (2014). *Çalışma hayatında psikolojik sermaye, mesleki bağlılık ve kariyer planlamasına genel bakış* (1. Baskı). Ankara: Nobel Yayın Dağıtım.
- Kelekçi, H. (2015). *The relationship between teachers' positive psychological capital and efficacy beliefs* (Unpublished Masters Thesis). Dumlupınar University, Institute of Education Sciences. Kütahya.
- Kelekçi, H. & Yılmaz, K. (2015). Relationship between positive psychological capital efficacy beliefs of teachers. *Mersin University Journal of the Faculty of Education*, 11(3).992-1007.
- Keser, S. (2013). *The comparison of elementary school administrators' authentic leadership and psychological capital features* (Unpublished Masters Thesis). Yıldız Teknik University, Social Sciences Institute, İstanbul.
- Keser, S. & Kocabaş, İ. (2014). The comparison of elementary school administrators' authentic leadership and psychological capital features. *Educational Administration: Theory and Practice*, 20(1), 1-22.
- Kılıç, E. (2019). *Teachers perceptions of positive psychological capital some work attitudes (job performance, job satisfaction, organizational commitment)* (Unpublished Masters Thesis), Çağ University, Social Sciences Institute, Mersin.
- Kıylioğlu, E. (2019). *Investigation of the relationship between communication environment and organizational trust in schools* (Msc. Thesis). Sabahattin Zaim University Social Sciences Institute, İstanbul.
- Korkmaz, O. (2014). *The relationship between the psychological capital perception of teachers and their level of organizational commitment* (Unpublished Masters Thesis). Zirve University, Social Sciences Institute, Gaziantep.
- Kurt, F. (2014). *The effect of intra-company communication perceptions of teachers working in secondary schools on institutional prestige perceptions: A research* (Unpublished Masters Thesis). Okan University, Social Sciences Institute, Kocaeli.

- Mert, İ., Bekmezci, M & Erođluer, K. (2019). The effect of informal communication on organizational commitment. *Gumushane University E-Journal of Faculty of Communication*,7 (1) , 1-27.
- Ocak, M. & Güler, M. (2017). The effects of psychological capital on burnout: An empirical research. *Erciyes University Journal of Faculty of Economics and Administrative Sciences*, 49: 117 – 134.
- Okur, A. (2015). *Evaluation of the interaction of positive psychological capital, political behavior and organizational cynism in public organizations: An application in Erzurum Vocational and Technical Anatolian High Schools* (Unpublished Masters Thesis). Atatürk University, Social Sciences Institute, Erzurum.
- Özkan, O. S. & Omay, T. (2019). Mediating role of person-organization fit in the effect of psychological capital on individual performance: a research on the academicians in foundation universities. *Journal of Business Research*, 11(2),743-757.
- Özmen, P., Türk, Y. Z., Çetin, M. & Özer, M.(2013). Örgütsel iletişimin önemi. 7. *Ulusal Sağlık Ve Hastane İdaresi Kongresi (27-29Eylül 2013)*. Selçuk Üniversitesi. Konya.
- Polat, E. Ç. (2014). *The relationship between organizational cynicism and effective intra-organizational communication: Analysing from the point of teachers' views* (Unpublished Masters Thesis). Erciyes University, Institute of Education Sciences, Kayseri.
- Sadeghi, E. (2020). Benlik saygısı, stresle başa çıkma tarzı ve psikolojik dayanıklılık. *Psikoloji Araştırmaları Sempozyumu*, (27 Haziran 2020). Üsküdar Üniversitesi. İstanbul
- Şahin, G. (2020). *The role of the teachers 'positive psychological capacity in the relationship between personality and assertiveness* (Unpublished Doctorate Thesis). Hacettepe University, Educational Sciences Institute, Ankara.
- Saraçođlu, T. & Aslan, H. (2019). *Örgütsel özdeşleşme: psikolojik sermaye ve örgütsel desteğin rolü*. Ankara: Akademisyen Yayınevi.
- Şarbay, B. & Bostancı, A. B. (2018). The relationship between shared leadership practises in schools and teachers 'psychological capitals. *Anatolian Journal of Educational Leadership and Instruction* , 6 (2) , 1-21.
- Sarı, B. (2019). *The effects of organizational silence on informal communication: A public hospital case* (Unpublished Masters Thesis). Sakarya University, Graduate School of Business, Sakarya.
- Seçer, İ. (2015). *SPSS ve lisrel ile pratik veri analizi: Analiz ve raporlaştırma*. Ankara: Anı Yayıncılık.
- Şen, C., Mert, İ. & Erođluer, K.(2019). The volatility of employees' psychological capital sub-dimensions with demographic features. *Afyon Kocatepe University Journal of Social Science*, 21 (4) , 1171-1192.
- Solmaz, B. (2006). Rumor and gossip management. *Selçuk University The Journal of Institute of Social Sciences*, 16:565-575.
- Töremen, F. & Demir, S. (2016). The effects of psychological capital on teachers' intentions to leave. *Mustafa Kemal University Journal of Social Sciences Institute*, 13(34), 166-179.

- Tösten, R. & Özgan, H. (2014). The scale of positive psychological capital: A reliability and validity study. *EKEV Academy Journal*, 59: 429-442.
- Tösten, R. (2015). *Examination of teachers' perceptions on positive psychological capital* (Unpublished Doctorate Thesis). Gaziantep University, Educational Sciences Institute, Gaziantep.
- Tösten, R., Arslantaş, H. İ. & Şahin, G. (2017). The impact of teachers' positive psychological capital on burnout. *YYU Journal of Education Faculty*, 14(1), 726-744.
- Tunçeli, H. İ. (2013). The relationship between candidate teachers' communication skills and their attitudes towards teaching profession (Sakarya university sample). *Pegem Journal of Education & Instruction*, 3(3), 51-58.
- Uğurlu, C. T. (2014). A study of reliability and validity of informal communication scale. *Inonu University Journal of The Faculty of Education*, 15 (3), 83-100.
- Ulukan, H. (2017). *Effect of administrative styles on informal communication channels at school of physical education and sports* (Unpublished Doctorate Thesis). Sakarya University, Educational Sciences Institute, Sakarya.
- Yalçın, D. (2019). Investigation of positive psychological capital levels of teachers. *Anadolu University Journal of Social Sciences*, 19 (1) , 13-26.
- Yüksel, H. (2015). *The relationship between organizational cynicism and commitment: An investigation about the primary and middle school teachers* (Unpublished Masters Thesis). Dokuz Eylül University, Educational Sciences Institute, İzmir.

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).