

Psychological Capital and Authentic Leadership Behavior on Leadership Effectiveness in Secondary Schools of Wollega Zones

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Abstract: The purpose of this study was to survey the contribution of psychological capital and authentic leadership behavior for leaders work effectiveness using concurrent research design. To examine these phenomena, three zones were included from four Wollega zones by simple random sampling technique. Schools and teachers also were randomly selected while leaders were selected by availability sampling technique. Accordingly, 78 school leaders and 206 teachers were included in the sample. Close and open-ended 360-degree self and observer rating questionnaires as well as interview were used to collect the data. After validation of the instrument, descriptive statistics, correlation and multiple regression analyses were computed. The result revealed significant positive correlation between leaders' psychological capital and authentic leadership behaviors with leadership effectiveness. Leaders' psychological capital and authentic leadership behaviors were significantly predicted leadership effectiveness as reported by self-rated but not significantly predicted as observer rated. The result of stepwise regression analysis shows, self-awareness and balanced process from psychological capital, while hope and resilience from authentic leadership behavior were the most contributors for leadership effectiveness. Thus, it was concluded that this study helps to know the contribution of psychological capital and authentic leadership behavior to leadership effectiveness. It also helps secondary school principals and teachers to identify psychological capital and authentic leadership behavior qualities expected from them. Hence it was recommended that Zonal educational bureaus have to plan in consultation with Wollega University, behavioral science department to get awareness training on these constructs for their school leaders to be effective in their performance.

Keywords: Authentic leadership behavior; Leadership effectiveness; Psychological capital

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1. Introduction

The concept of psychological capital is expected as one of the essential dimensions of human capital to benefit the human issues in the organizations, and it gained prominence as an important construct in leadership research (Lather and Kaur, 2015). Psychological capital is a relatively emerging personality variable in positive organizational behavior (Luthans, Avolio, Walumbwa and Li, 2005). The concept of psychological capital (PsyCap) has attracted a great deal of interest from academics and practitioners to be linked to behavior and performance at different levels.

Psychological capital is an individual's "positive appraisal of circumstances and likelihood for success based on motivated effort and perseverance" (Luthans, Avolio, Avey, and Norman, 2007: 550). It is the ability of a leader to endure any challenging situation with persistence and patience to reach the targets and goals in order to succeed in one's plan (Avey, Luthans and Jensen, 2009). Psychological capital resources provides individuals with positivity, which also meets with the criteria of positive organizational behavior which in turn responsible for the development of individuals and helps them achieve a competitive advantage (Venkatesh and Blaskovich, 2012).

Psychological capital is also effective leaders' positive psychological state of development. Leaders who are equipped with psychological capital are effective; they can mobilize and influence the staff in a clear and compelling vision for the future of the school (Bjugstad, Thach, Thompson, and Morris, 2006). They analyze their environment, individual student needs, strengths and weaknesses of staff members, aspects of the instructional programs and do the right things to optimize productivity or service to the stakeholders (Cicero, Pierro and Knippenberg, 2007). Thus, school leaders who are familiar with psychological resources influence on student progress, wellbeing and success. Moreover, they regularly proactive, put first thing first, plan and evaluate teaching practice to ensure whether the students' needs meet, align student needs with the professional learning and development of teaching staff and build strong relationships with other educational and community institutions to increase opportunities for students' success (Schmidt, 2020).

Moreover, leaders equipped with psychological resources are optimistic about their purpose and take risks when there is change and challenge that result in personal growth. Hence, they do not back down from a challenge, but willing to lead the way as an inspirational leader to be effective (Lotich, 2016).

Psychological capital consists of four positive psychological resources namely: self-efficacy—confidence in one's ability to succeed in specific situations, optimism—positivity toward current and future success, hope—perseverance to accomplish a goal, and resilience—ability to sustain and to bounce back when confronted with adversity (Luthans, Avey, Avolio, Norman and Combs, 2006). The figure below summarizes for more clarification.

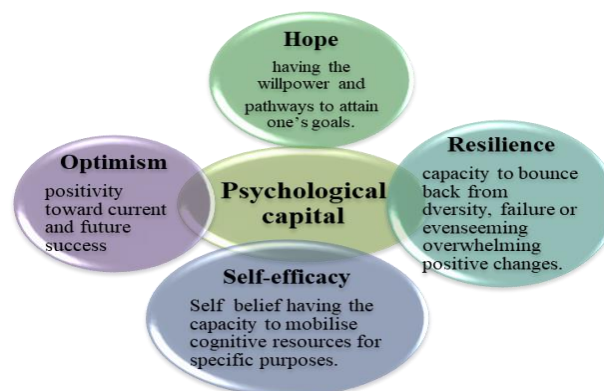


Fig1. Dimensions of Psychological capital

These psychological capital are multiplicative and synergistic; so when leaders have four of them, the positive effects are greater than the sum of each individual effect. This is because; it forms a higher order, core construct that can strongly predict attitude and performance of individuals (Luthans *et al.*, 2007).

Studies have shown that self-efficacy, hope, optimism, resilience and other positive psychological attributes are positively related to job performance. Besides, the positive relationship between psychological capital and job performance appears to be distinct across different domains of psychological attributes (Luthans *et al.*, 2005). On the study conducted in Chinese team leaders, Zhong (2007) noted that psychological capital exerts a positive influence on followers' commitment and job performance. Leaders with high psychological capital are rated as more trustworthy by employees as well as more authentic (Walumbwa, Luthans, Avey and Oke, 2011). Therefore, leaders' psychological capital not only improves their followers' psychological capital, but it also has positive effect on organizational outcome.

Correspondingly, a meta-analysis (Avey, Reichard, Luthans and Mhatre, 2011) found PsyCap as having a strong positive relationship with desirable attitudes and performance as well as psychological wellbeing of the staff; but negatively related with cynicism, stress and anxiety (Avey, Luthans and Jensen, 2009). This is because leaders who have greater positive psychological capital resources will not only more personally engaged at work, but will provide more support to their followers, which in turn will enhance their followers engagement. As leaders instruct and supervise their followers, they also offer them information and resource in daily activity which in turn positively influence members' psychological state of attitude and behavior. Leaders with rich psychological capital tend to be more hopeful and motivated to succeed, and more likely to set up more challenging goals (Chen, Wen, Kong, Niu and Hua, 2017).

Stronger leaders are more active in exploring solutions to overcome obstacles and are more willing to make an effort to succeed (Avey *et al.*, 2011). At the same time, it is much easier for them to recover from adversity and failure. This implies that they have positive expectations toward the work environment resulting in a more positive attitude and outstanding job performance, which in turn positively influence followers and make them experience more positive psychological capacity. Subsequently, this will affect workers' work attitude and work behavior through improving their psychological capital (Dinh *et al.*, 2014).

Research studies have emphasized human dimension like characters of a leader rather than the attitude, action, or skill of a leader. In this regard, a new leadership topic that has recently received attention is authentic leadership. Authentic leadership is characterized by positive, genuine and transparent and now recognized as a positive approach to organizational leadership (Walumbwa, Avolio, Gardner, Wernsing and Peterson, 2008).

Authenticity refers to honest, stable, and high self-esteem (Kernis, 2003). As explained by Begley (2001), authentic leadership is a symbol for professionally effective, morally sound, and deliberately reflective practices in education. This leadership implies a genuine type of leadership and a hopeful, open, visionary and creative response to social situations. It is characterized by self-awareness, openness, accepting others' inputs, values and motives. Authentic leadership behavior is composed of four dimensions namely: self-awareness, being ethical/moral, relational transparency and balanced processing (Ilies, Frederick and Jennifer, 2005). The following figure summarizes for more clarification.



Figure 2. Dimension of authentic leadership behavior

The figure displays that an authentic leaders have the qualities of self-awareness, being ethical or moral, balance their manner and transparent in their action.

Authentic leadership theory is firmly rooted in the concept of self-regulation (Gardner, Cogliser, Davis and Dickens, 2011) to align actions with their true values and intentions. Authenticity implies that one acts in accordance with the true self, expressing oneself in ways that are consistent with inner thoughts and feelings (Michie and Gooty, 2005). As conceptualized within the emerging field of positive psychology (Seligman, 2002), authenticity is owning one's personal experiences and behaving in accordance with the true self (Walumbwa *et al.*, 2008). Thus, authentic leadership is a process by which leaders are deeply aware of how they think and behave of the context in which they operate (Gardner, Avolio, Luthans, May and Walumbwa, 2005).

Authentic leaders are effective and genuine mission oriented who put the mission of the organization ahead of their own self-interest. They do the job in pursuit of results regardless of their own power, money or ego (Kruse, 2013). Furthermore, authentic leaders share the information needed to make decisions, accept others' inputs, and disclose their personal values, motives, and sentiments. Such characteristics enable the staff to accurately assess the competence and morality of their authentic leader's actions (Walumbwa, Wang, Wang, Schaubroeck and Avolio, 2010).

Thus, if the authentic leader displays the characteristics of psychological capital, the staff member will also display these characteristics and the joint interaction effect will lead to productivity. Therefore, school principal with authentic leadership behavior could be influential to cultivate teachers' psychological capital. The following figure shows conceptual framework of authentic leaders' behavior, psychological capital and leaders' effectiveness.

Conceptual framework of the study

A conceptual framework is a written or visual representation of an expected relationship between variables of the study. This conceptual framework was developed based on a literature review of existing studies about the topic as it helps to identify and clarify the central aspects of a study and connect aspects that influence the research (Ravitch and Riggan, 2016). Accordingly, the conceptual framework of this study was illustrated using the figure below.

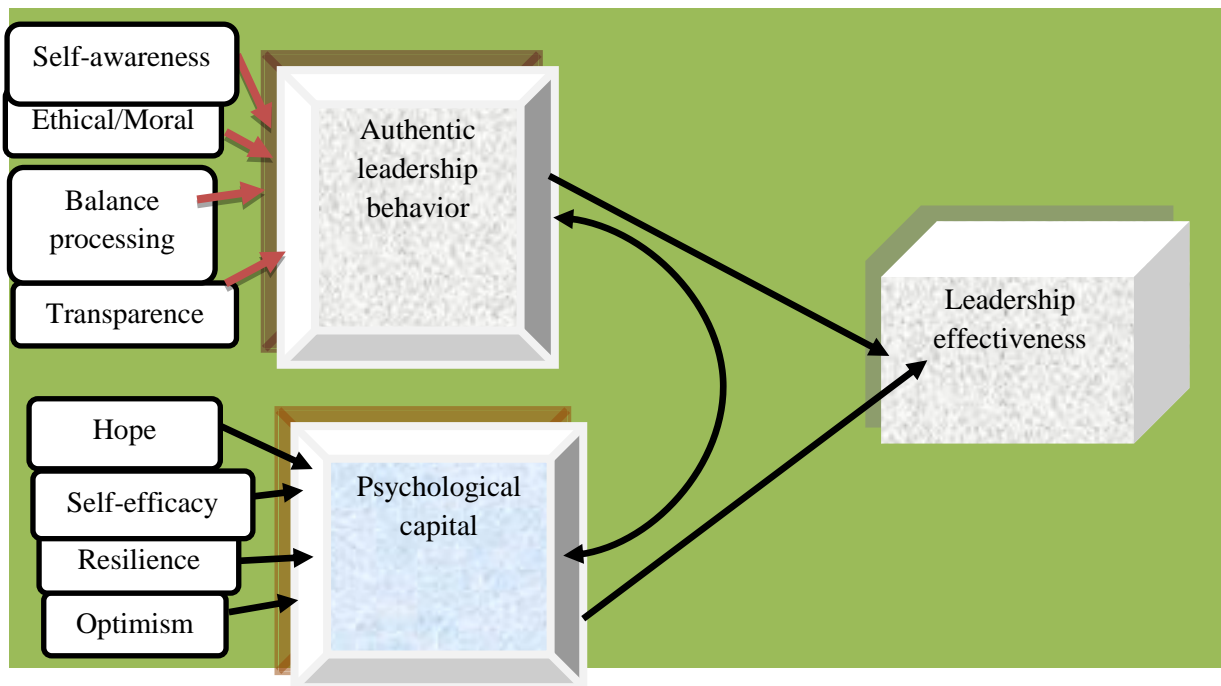


Figure 3. Conceptual framework of the study

As it was indicated in Figure 3, self-awareness, being ethical, balancing process and transparency are qualities of authentic leadership behavior, while hope, self- efficacy, resilience and optimism are resources of psychological capital. Thus, leaders who are authentic and develop psychological capital qualities contribute a lot to leadership effectiveness. Moreover, there is a strong relationship between authentic behavior and psychological capital variables that can result in effective outcome. This is due to the fact that high psychological capital leaders are considered trustworthy by their employees that can be manifested in authentic leadership behavior. Thus, a school leader who is equipped with these resources becomes an effective leader. However, confirming this viewpoint requires more empirical research. Thus, the researcher attempts to conduct the study to determine the influence of psychological capital and authentic leadership behavior on leaders' work effectiveness.

Despite the fact that psychological capital plays the key role when fit with authentic leadership behavior, organizations often frame the development of leadership in terms of "competencies," or the behavioral skills and areas of knowledge required in specific job. However, focusing on competencies alone is not satisfactory as it dismisses the role of authenticity and psychological capital resources. Moreover, in spite of the concept of psychological capital that equipped principals with resources and confidence to make them competitive to bring success for their school, there is no local empirical evidence which shows the influence of psychological capital on school leaders' performance as to the knowledge of the researcher.

Psychological capital asset leaders will bring competitive advantage to their organization and can strengthen their staff members' capacity which in turn makes the entire organization more successful. Psychological capital with authenticity can be used as a way to monitor and regulate the extent of organization leaders and the degree of their subordinates' potential development. These can help leaders to sort out complex challenges, create new paradigms, and respond to changing conditions. This capacity is especially important for effective leaders who set the tone and act as a model for others. A leader's ability to engage with a range of perspectives and create a climate for change is essential to a successful workplace. Moreover, psychological capital helps leaders respond effectively to the pressure, chronic demands, and responsibilities of authority (Ofori and Rehman, 2008).

Psychological capital improves school leaders' leadership effectiveness which in turn positively affects teachers work performance that can also influence students' academic achievement. The

primary task of school principal is making his school different through determining how to influence and motivate teachers to be engaged and involved at school to improve the performance of their students. Improving student performance needs commitment of teachers and this commitment is enhanced through leadership activities like planning, motivating, encouraging, leading and so on. As a result, principals have faced challenges of dealing with such teachers' and students' work stress and burnout. Thus, to overcome these challenging stresses, leaders have to be equipped with psychological resources and authenticity, which are the application of human strengths and psychological capacities to combat stress as the value of psychological capital is equal to that of financial, human and social capital.

Authentic school leaders are regarded as role models for their staff, who imitate their leaders. In such a way, they become an influential source of information for their staff and thus have a great impact on the staffs' attitude and behavior. If leaders display high levels of psychological capital, their followers will more readily pursue positive outcomes. These staff will therefore be more likely to develop positive and optimistic job expectations to maintain stronger motivation for success (Rego, Sousa, Marques and Cunha, 2011). Their expectations and motivation may help them build positive psychological capacities such as confidence, optimism, and resilience.

Authentic leadership is viewed as one method of enhancing leaders' psychological capital Luthans and Avolio (2003) as authentic leaders are confident, hopeful, optimistic, and resilient. Walumbwa *et al.*, (2008) have also proposed that authentic leadership can influence employees' attitudes through the psychological processes of identification, hope, positive emotions, optimism, and trust. As leadership is the process of influencing others; developing authentic capacity in others is also a significant function of authentic leaders (Whitehead and Brown, 2011). Similarly, Peterson and Luthans (2003) also claim that the environment of stress, pressure and uncertainty, organization requires innovative management with the aim to provide hope, trust, optimism and flexibility. To accommodate this requirement authentic leadership, behavior is considered as essential.

However, there is little attention to the role of psychological capital and authentic leadership effectiveness in organizations or schools. In addition, how psychological capital and authentic leadership behavior are correlated and how these variables individually or jointly predict leaders effectiveness in secondary schools are not yet investigated as far as the knowledge of the researcher is concerned. As a result, the literature lacks adequate conceptual and empirical explanation on these variables as it has not been extensively discussed. Therefore, the researcher tries to fill the gap by identifying how the school principals have authentic quality of leadership and how far they are equipped with psychological capital to influence their followers. Moreover, it also identifies the prediction power of psychological capital on school leaders' effectiveness.

In line with this, the researcher raised the following research questions that were treated in this study.

1. To what extent secondary school principals' psychological capital and authentic leadership behaviours were correlated?
2. To what extent does secondary school principals' psychological capital contribute to leadership effectiveness?
3. To what extent does principals' authentic leadership behaviour accounted for the variance of school leadership effectiveness?
4. What are the psychological capital and authentic leadership qualities expected from effective secondary school principals?
5. Which variable mostly contributes to the school principals' leadership effectiveness among authentic leadership behaviour sub-variables?
6. Which variable mostly contributes to the school principals' leadership effectiveness from psychological capital sub-variables?

The objective the study was examining secondary school leaders' authentic leadership behavior and psychological capital on school leaders' leadership effectiveness. Based on this objective, the result of this study may contribute to the effectiveness of the school performance through giving awareness on

psychological capital and authentic leadership qualities to facilitate positive and healthy interaction between staff and leaders. Leaders themselves also check out and identify whether they are equipped with these leadership qualities and improve their capacity of leading. Furthermore, policy maker may consider psychological capital and authentic leadership behavior in hiring educational leaders. To manage the study within a given time bound effectively, the study was geographically delimited to secondary schools in Wollega zones while conceptually it is delimited to psychological capital and authentic leadership behavior as they are the newly emerging variables that may have positive effect on leader effectiveness.

2. Research Methods

2.1. Design of the Study

Concurrent research design with mixed method approach was used for this study. In concurrent research design both quantitative and qualitative data were simultaneously collected and used for triangulation. This is because quantitative and qualitative method of data analysis used as complementary for the research process and helps to have a complete and more efficient result of the study.

The variables included in the study were; as independent variables-psychological capital and authentic leadership behavior while as dependent variable leaders effectiveness was considered.

All Secondary school principals, department heads and teachers of Wollega zones were the population of the study. From four zones, three of them (i.e., East Wollega, Horo Wollega, and west Wollega zones) were selected by simple random sampling techniques and included in the study. From these zones, proportional number of secondary schools were randomly selected. Accordingly, 6 secondary schools from East Wollega zone: Nekemte Preparatory School, Biftu Naqamte Secondary School, Dallo Secondary School, Arjo Gudatu Secondary School, Diga Secondary School and Sire Secondary School were selected. From Horo Wollega zone, 5 secondary schools: shambu preparatory school, Shambu secondary school, Fincha'a secondary school, Dengoro secondary school, and Kombolcha secondary school were considered. From West Wollega Zone, 4 secondary schools: Gimbi preparatory school, Gimbi secondary school, Haru secondary school and Abdisa Aga Secondary school were selected and totally 15 secondary schools were included.

A survey questionnaire and interview were prepared for psychological capital, authentic leadership behavior and leadership performance effectiveness. Questionnaire was used for school leaders (principals, vice principals and department heads) and teachers. To probe more ideas on the variables of the study, interview was also conducted with 4 selected schools principals and 3 department heads. To measure authentic leadership behavior Northouse (2010), 16 item questions were adapted. This scale has four subscales namely self-awareness, ethical/moral, balance processing and transparence each of them having 4 measuring items. For instance, for self-awareness, 'I accept the feelings I have about myself'; for ethical/moral, 'I do not allow group pressure to control me'; for balance processing, 'I do not emphasize my own point of view at the expense of others'; and for transparence, 'I let others know who I truly am as a person'. To measure psychological capital, 12 items of German self-report scale (CPC-12) measuring PsyCap (Lorenz, Beer, Pütz and Heinitz, 2016) were employed. This scale also has four sub-scales each having 3 measuring items. These were hope, measured using items like: Right now, I see myself as being pretty successful'; for self-efficacy, 'I can solve most problems if I invest the necessary effort'; for resilience, 'It's okay if there are people who don't like me'; and for optimism, 'I am looking forward to the life ahead of me'. Leadership effectiveness has 13 items of Multi-rater or 360 degree (Fleenor, McCauley, and Brutus, 1996) leadership questionnaire. These questions were self-rated by principals and department heads, while rated by teachers as observer rated. All items were 5 Likert scales from (1) not at all to (5) always. The questions were reviewed and adapted through pilot study and the reliability of the instruments was described in the result section.

The respondents were assured confidentiality that their information was secured and promised anonymity that none of the individual participants' score exposed publically. Moreover, sensitive issues like personal affairs, religious and political issues were excluded to protect the respondents from any risk.

To maintain confidentiality, privacy, and strict anonymity, no identification of information was stated. Questionnaire was distributed to the respondents after they were informed about the purpose of the questionnaires. Interviews were also conducted after briefing the objective of the study to the participants for their informed consents. To examine the practical use of the questionnaire, a try out test study was conducted on 32 respondents and the reliability of the items was checked using SPSS version 22 software statistical analysis. The data was statistically analyzed using the aforementioned statistical software. Then, descriptive statistics and Pearson product moment correlation was used to describe the data and to investigate the extent of the relationship between the variables, respectively. Furthermore, multiple hierarchal regression and stepwise regression analyses were also used to check the contribution of the independent variable to leadership performance effectiveness, while theme analysis was used to analyze the qualitative data collected through interview.

3. Results

The data were collected using questionnaires and interview from secondary school leaders: (principals, vice principals, department heads, and teachers). In total, 100 questionnaires for leaders and 240 for teachers were distributed. The response rate was 76 (76%) for school leaders and 206 (85.8%) for teachers. The questionnaire was used to collect data on demographic information, psychological capital, authentic leadership behavior and leadership effectiveness. Hence, the variables were analyzed and interpreted based on the research question mentioned above.

From the total respondent of secondary school leaders, only 7 (9.2 %) were females self-rated and 34 (16.5%) were observer rated, while 69 (90.8%) were male self-rated and 172 (83.5%) were observer rated. This shows number of secondary school female leaders as well as teachers was very small compared to male leaders and teachers. Out of the total sample secondary school leaders, 20 (26.3%) were directors, 19 (25%) were vice directors and 37 (48.7 %) were department heads. Qualification wise, 61 (80.3 %) self-rated and 147 (83.5) observer rated were BA holders; 14 (18.4%) self-rated and 29 (16.5) observer rated were MA/MSc graduates. This indicates that most secondary school leaders and teachers were BA holders. With regard to work experience, 12 (15.8%) served less than 2 years, 22 (28.9%) served for 3 to 5 years, 15 (19.7%) served for 6 to 9 years, and 27 (35.5%) of them served for 10 years and above. From this analysis, it is possible to see that 42 (55.2%) of them were serving for 6 years and above. Finally, age wise, 25 (32.9 %) of them were in the age range of 20-30, 42 (55.3%) of them were in the age range of 31 -40, while 9 (11.8%) of them were in the age range of 41 to 50. This reveals that most of them, 67 (88.2%) of them were in the adult age interval of 20 to 40.

The internal consistency of scales as measured by Cronbach's Alpha was .80 for authentic leadership behavior, .84 for leadership effectiveness and .88 for psychological capital. These show that the reliability for each items was high and acceptable as it is above 0.7. The validity of the instruments was also checked by the experts of the field. Hence it was believed that the questionnaires measure the constructs effectively. The coefficient of reliability for each sub scales of authentic leadership behavior and psychological capital were computed and found effective to measure the attribute.

3.1. Correlational Analysis

Pearson correlation coefficient analysis was implemented to measure the degree of linear association between the key variables.

Table 1. Self- rated Pearson product-moment correlations

Correlations as self-rated			
Variables	Authentic leadership behavior	Psychological capital	Leadership effectiveness
Authentic leadership behavior	1	.655**	.651**
Psychological capital		1	.737**
Leadership effectiveness			1

** . Correlation is significant at the 0.01 level (2-tailed).

Note. N= 76; **P < .01 level (2-tailed)

The correlation table reveals that school principals' authentic leadership behavior and psychological capital were significantly correlated to each other with the value of $r=.66$ $p < .01$. It also indicated that both principals' authentic leadership behavior and psychological capital were significantly correlated with leadership effectiveness with the value of $r=.65$ $p < .01$ and $r=.74$ $p < .01$ as self-rated, respectively.

Table 2. Observer- rated Pearson product-moment correlations

Correlations as observer rated			
Variables	Authentic leadership behavior	Psychological capital	Leadership effectiveness
Authentic leadership behavior	1	.56**	.52**
Psychological capital		1	.46**
Leadership effectiveness			1

** . Correlation is significant at the 0.01 level (2-tailed).

Note. N= 206; **P < .01 level (2-tailed)

From the correlation Table 2, it was shown that leadership effectiveness is moderately correlated with both authentic leadership behavior with the value $r=.56$ $p < .01$ and Psychological capital with the value of $r=.46$ $p < .01$ as observer rated. There is also significant correlation between principals' authentic leadership behavior and psychological capital with the value of $r=.52$ $p < .01$.

As indicated from correlations of self-rated and observer rated, both authentic leadership behavior and psychological capital were significantly correlated to leadership effectiveness. In addition, principals' authentic leadership behavior and psychological capital were also significantly correlated at the probability value of $p < .01$. However, regression analysis was used since correlation analysis has limitations as it cannot indicate the extent to which one variable is explained by a set of other variables.

3.2. Hierarchical Multiple Regression

Hierarchical multiple regression tests were used to check the variance authentic leadership behavior and psychological capital of leaders accounted to predict leadership effectiveness. The contribution of each variable psychological capital and authentic leadership behavior to leadership effectiveness was conducted after controlling one variable to see the effect of the other variable alone. Stepwise regression analysis also computed to see variables that most contribute to leadership effectiveness from sub-scales of psychological capital and authentic leadership behavior variables.

Table 3. Self-rated hierarchical regression of authentic leadership behavior to leadership effectiveness after controlling Psychological capital

Model	B	Std. error	Beta	R ²	Adjusted R ²	R ² change
(Constant)	21.908	3.101		.473	.467	.473
Psychological capital	.639	.068	.737			
(Constant)	14.712	3.807		.593	.581	.120
Psychological capital	.471	.086	.543			
Authentic leadership	.244	.082	.395			

Note: N=76; P < .05

Table 3 shows the result of hierarchical regression of authentic leadership behavior after controlling psychological capital. The adjusted R² changes from 53.7 % to 58 % F (2, 73) = 53.084 <.001. After controlling psychological capital, authentic leadership behavior variables alone accounted for 12% of variance in leadership effectiveness. It is significant but a small amount of contribution as indicated in Sig. F change (1, 73) = 8.916 < .032.

Table 4. Self-rated hierarchical regression of psychological capital to leadership effectiveness after controlling authentic leadership behavior

Model	B	Std. error	Beta	R ²	Adjusted R ²	R ² change
(Constant)	18.120	4.437		.424	.416	.424
Authentic leadership	.538	.073	.651			
(Constant)	14.712	3.807		.593	.581	.169
Authentic leadership	.244	.082	.395			
Psychological capital	.471	.086	.543			

Note: N=76; P < .05

Table 4 indicates the result of hierarchical regression of psychological capital after controlling authentic leadership behavior. The adjusted R² changes from 41.6 % to 58 % F (2, 73) = 50.083 < .001. Hence psychological capital alone significantly accounted for R² changed of 17 % variance in leadership effectiveness with F change (1, 73) = 30.224 < .001).

Table 5. Observer rated hierarchical regression of authentic leadership behavior to leadership effectiveness after controlling Psychological capital

Model	B	Std. error	Beta	R ²	Adjusted R ²	R ² change
(Constant)	15.034	1.985		.524	.522	.524
Psychological capital	.716	.048	.724			
(Constant)	9.698	1.892		.630	.626	.105
Psychological capital	.338	.065	.342			
Authentic leadership	.390	.052	.501			

Note: N=206; P < .05

Table 5 reveals the result of the hierarchical regression of authentic leadership behavior after controlling psychological capital. The adjusted R² changes from 52.2 % to 62.6% $F(2, 202) = 171.616 < .001$. After controlling psychological capital, authentic leadership behavior variables alone accounted for 10.5% of variance in leadership effectiveness. It is a significant contribution as indicated in Sig. F change $(1, 202) = 57.325 < .001$

Table 6. Observer rated Hierarchical regression of Psychological capital to leadership effectiveness after controlling authentic leadership behavior

Model	B	Std. error	Beta	R ²	Adjusted R ²	R ² change
(Constant)	12.638	1.916		.581	.578	.581
Authentic leadership	.593	.035	.762			
(Constant)	9.698	1.892		.630	.626	.049
Authentic leadership	.390	.052	.501			
Psychological capital	.338	.065	.342			

Note: N=206; P < .05

Table 6 reveals the result of hierarchical regression of observer rated Psychological capital after controlling authentic leadership behavior. The adjusted R² changes from 57.8 % to 62.6 % $F(2, 202) = 171.616 < .001$. Hence Psychological capital alone not significantly accounted for R² changed of 5% variance in leadership effectiveness with F change $(1, 202) = 26.713 < .056$.

As observed from the result of self-rated and observer rated analysis, authentic leadership behavior alone accounts for 12 % and 10.5% respectively, while psychological capital alone contributed to leadership effectiveness - 17% from self-rated analysis and 5 % as observer rated.

A stepwise regression was used to identify the major contributors of leadership effectiveness using subscales of authentic leadership behavior as predictors based on self-report

Table 7. stepwise regression analysis of authentic leadership behavior sub scales

Variables	Beta	R ²	Adjusted R ²	R ² change
Self-awareness	.261**	.411	.403	.411
Moral/ethical conduct	.482***	.454	.439	.043

Note: N=76; **p < .01, ***p < .001

All four subscales of authentic leadership behavior, namely self-awareness, moral/ethical conduct, balance processing and relationship transparency were entered in a stepwise regression. From the four subscales, self-regulation (moral/ ethical conduct) and self-awareness were significant predictors of leadership effectiveness and accounted for 43.9 % of variance with $F(2, 73) = 30.319$, $p < .001$ as rated by school leaders.

Table 8. Stepwise regression analysis of psychological capital sub-scales

Variables	Beta	R ²	Adjusted R ²	R ² change
Hope	.551***	.501	.494	.501
Resilience	.287**	.558	.546	.058

Note: N=76; ***p <.001

All four subscales of psychological capital, namely hope, resilience, optimistic and self-efficacy were entered in a stepwise regression. However, hope and resilience were the only significant predictors of leadership effectiveness that accounted for 54.6 % of variance with $F(2, 73) = 46.150$, $p < .001$ as rated by school leaders.

3.3. Interview Results

For the interview questions raised for participants, the responses were analyzed thematically as follows.

An effective leader is a leader who has a sense of self-awareness, as self-awareness is understanding one's own desires, failings, habits, and everything else that helps to identify one's strengths and weaknesses areas. The more one knows about himself, the better he is adapting to life's changes, build stronger relationships with staff and become more confident in making sound decisions. Balancing the process of leading in an ethical manner is the essential quality of leadership as it enables a leader to influence followers transparently in a respectful manner. Moreover, being proactive and ready to act as to the context, helps to manage one's work effectively and easily without any difficulty.

A leader is said to be effective if he possesses psychological capital qualities like self-efficacy, hope, resilience and optimism. In reality, it may be difficult for a human being to be full-fledged of all psychological capital qualities to be self-efficient. However, it is advisable that being self-efficacy, a belief in one's own ability to lead self and then others with the hope of positively influencing staff feeling and fulfilling organizational objectives, may pave the way to be an effective leader. This is because life is full of hope and hope can initiate an individual to perform activities in a well manner. Hence, being self-confident and valuing oneself helps to be well informed about the situations, identifies one's staff's behaviour and well organized to solve problems immediately as they occur.

In addition to psychological capital qualities, an effective leader also has to be punctual, a hard worker and a model to his staff in taking initiation to facilitate the work to be done. Moreover, an effective leader has to plan duties in advance, monitor and evaluate his work plan continuously till the plan is under action. An effective leader is an interactive leader who believes in two-way communication to share his concepts and ideas with others and who consider his follower's ideas also. Giving feedback to coworkers and also accepting constructive comments from the staff to make the system of work transparent is also one of the qualities needed from an effective leader. An effective leader creates intimate relationships with all staff members, treats everybody equally and is trusted by staff members. Effective leader shares activities, delegates responsibilities, and participates staff members in decision making to manage the school properly. On top of this, being situational, flexible and predicting circumstances help a leader to be effective and ready to tackle problems.

4. Discussion

This study was conducted to investigate the relationship between psychological capital and authentic leadership behavior on leadership effectiveness in secondary schools of Wollega Zones. Based on the findings, the constructs used in the study in relation to the literature and the outcomes of the reliability testing were mentioned. Findings of the correlations, hierarchical regressions and stepwise regression have also been discussed. Lastly, the findings were complemented by the interview result and supported by the previous research findings.

To measure the degree of linear association between the key variables of interest, correlation analysis was implemented. Accordingly, Pearson correlation coefficient was used for the analysis and shows that both psychological capital and authentic leadership behavior were significantly and positively correlated to leadership effectiveness as self-rated but moderate as observer rated. Partly, this finding was supported by previous findings. For instance, Seek (2018) in his finding explained high correlation coefficient between authentic leadership and organizational effectiveness. In addition, Zamahani, Ghorbani and Rezaei (2011) claim that authenticity exhibited by the leader and the leader's level of positive psychological capacity were positively impacted performance, and evidenced the importance role of positive psychological capacity and authenticity of leaders to attain effectiveness which in turn facilitate achieving the organizational goals.

From the finding it was also indicated that leaders' psychological capital is positively and significantly correlated to leaders' authentic leadership behavior as self-rated but moderate as observer rated. This finding was supported by (Chen, 2017). In his finding he claimed that leaders' psychological capital is related to the Authentic Leadership behavior in that it allows leader to encourage the involvement and participation of their followers in the process of making decisions which enhance the trust of the group members to the leader. Particularly, when school leaders are authentic, they value honest and realistic relationships with their staff. Moreover, the positive implications of psychological capital for authentic leadership were empirically confirmed in the study of VanPutten (2009) and Peterson, Luthans, Avolio, Walumbwa and Zheng (2011). In their study, they explained that the components of psychological capital, such as resilience, hope, optimism, and self-efficacy or ability to deal with challenges contribute towards performance and authentic leadership behavior.

With respect to the result of regression analysis, the finding from self-report shows both authentic leadership behavior and psychological capital constructs significantly accounted for and contributed to some leadership effectiveness. This finding is also supported by previous finding. For instance, Hwang (2015) and Walumbwa *et al.* (2008) in their study found that authentic leadership directly affects organization effectiveness and they suggest the necessity of improving organizational effectiveness as a strategy for organizational survival.

With leadership behavior, Walumbwa *et al.* (2008) also stated that authentic leadership is a leadership behavior model that upholds a positive ethical climate and positive psychological capabilities to foster rational transparency and a balanced processing of information. It also encourages an internalized moral perspective and greater self-awareness promoting positive self-development between the leaders working with their employees. Moreover, in a study conducted on university students in the United States, among authentic leadership, ethical leadership, and transformational leadership, authentic leadership has been found to be the most significant influential of organizational effectiveness.

However, as the analysis form observers indicated, there was low contribution of leaders' psychological capital toward leadership effectiveness. The difference might be because of social desirability that leaders considered themselves as good persons and rate themselves positively, ignoring their weakness. Nevertheless, the behavior and the activity of the leaders can be manifested in the staff as leaders have been leading their staff through influencing and exerting power on them. Hence, the staff can genuinely rate and evaluate their leaders. This implies that leaders have limited psychological resources.

Stepwise, regression analysis was computed for the four sub scales of authentic leadership behavior and psychological capital. The result indicated that self-awareness and balancing process were significant contributors for leadership effectiveness, while hope and resilience from psychological capital sub scales. This may be due to the fact that hope tends to motivate individuals to approach the goal in which a person chooses to actively pursue positive outcomes. Hope is a basic condition of human action that motivates a human being in achieving the desired goals related to cognitive and emotional behavior (Stotland, 1969). Hope is a positive motivation based on successful interactions among goal oriented energy and pathways thinking (Snyder *et al.*, 1991). In addition, hope was found to mediate the association between personal image of authentic leadership and organizational effectiveness (Hwang and Lee, 2015). Hence, it is essential to promote hope of the staff in schools to improve school effectiveness as individuals with high hope are challenging themselves and concerned with success rather than failure. They are more likely to perceive possibility to achieve the goal maintaining a positive emotional state (Snyder, 1994; Seligman, 1995). On the other hand, resilience, the positive psychological capacity to ‘bounce back’ from adversity, uncertainty, failure, or even positive change, increase progress and responsibility as it is the capacity to work towards obtaining success withstanding failure (Luthans, 2002). Moreover, resilience is also marked by hope that strengthens and assists in overcoming uncertainty. Luthans *et al.* (2007) suggested that besides being the capability to adapt positively to positive outcomes as well as events, resiliency is also presented as the ability to rebound from the unfavorable incident.

Therefore, resiliency enables the leaders to challenge themselves to achieve, reach out through risk-takings, bounce back from crises, navigate through daily stressors, and overcome obstacles. In positive psychology, resilience is characterized by positive coping and adaptation in the face of significant risk or adversity (Masten and Reed, 2002.) Thus, high psychological capital individuals are more likely to bounce back from negative events and positively adapt themselves to the existing situations. Besides, high hope capacity enables one to derive multiple pathways to be successful as authentic leadership had significant effect on hope while hope had significant effect on organizational effectiveness (Seek, 2018).

Self-awareness and balancing process were significant contributors to leadership effectiveness. The previous result also indicated high association between self-awareness and balanced processing (Puls, Ludden, and Freemy, 2014). This might be because self-awareness is the most important element and the essential cornerstone of authentic leadership behavior that helps them to recognize how followers view their leadership, while balanced processing is the ‘heart of personal integrity and character’ that significantly influence a leader’s decision making and strategic actions (Ilies *et al.*, 2005). Self-awareness includes one’s values, cognitive identity and feelings that demonstrate an understanding of how a person derives meaning about the world that impacts oneself (Walumbwa *et al.*, 2008). Thus, self-awareness facilitates understanding of one’s own motives, strengths and weaknesses which in turn help to balance one’s thought and emotion before making any judgment to be effective in one’s leadership activity. Balanced processing is unbiased collection and interpretation of positive and negative self-related information. It is unbiased processing and the degree to which leader solicits sufficient opinions and viewpoints prior to making important decisions. Leaders with high self-awareness enhance their authenticity and effectiveness using both self-knowledge and reflected self-image (Walumbwa *et al.*, 2010), and analyze information before making any judgment in a balanced processing way.

From the interview response, self-efficacy, hope and resilience were the most preferred elements. This is because being self-efficacy/self-confident is believing in one’s own ability to lead others. Hence, it has to be considered as a primary one. However, more emphasis also given to hope and resilience as compared to other psychological capital sources. The reason behind may be that life is full of hope indicating futurity so that most of individuals are initiated and expect positive effect of life. Hope is confident expectation; it is the desire for something good in the future. Holy Bible also affirms that hope is a fundamental component of the life of the righteous (Holy Bible, 1976, Prov,

23:18). Without hope, life loses its meaning. Resilience is also preferred to other elements because it is the capacity to work towards obtaining success withstanding failure indicating that it is marked by hope the strength that assists in overcoming failure or uncertainty. Moreover, resilience is bouncing back to cope up and adapt to situations in a significant adversity or risk to be successful in ones work. Therefore, possessing hope and resilience positively affects mood and functioning toward effectiveness.

The essential qualities of effective leaders vary and they are diverse. Effective leaders are punctual, hard workers, and flexible. They serve as positive models for their staff and create trusting and open working environment. Such leaders foster greater pride in the organization and a strong spirit of cooperation and teamwork as well as more feelings of ownership and personal responsibility. Moreover, they encourage members to exchange ideas through handling conflict and guiding the group in goal setting and decision making to create a productive atmosphere. Furthermore, effective leaders make sure their actions are consistent with the wishes of the people they lead and have a clear idea of what others value and what they can do (Gordon, 2001).

According to the response from interview, among the characteristics of authentic leadership behavior, self-awareness, balance processing, transparency and moral/ethical conduct; all of the elements were mandatory to be effective leader. However, most respondents emphasize on self-awareness, balance processing and being moral/ethical conduct as primary to lead others. This is because knowing one's own strength and weakness, entertaining everybody uniformly without bias and discrimination in an ethical manner is obligatory to be effective leader.

5. Conclusions and Recommendation

Finding based on self-rated indicated that leaders' psychological capital is positively and significantly correlated to their authentic leadership behavior but moderate as observers rated. Though there is difference between self-raters and observer rates on the degree of the contribution, both reach consensus on the importance of these variables for effective leaders. Thus, from these points of view, it can be concluded that school leaders are expected to develop more authentic leadership behavior to enhance trust and realistic relationships between staff members and school leaders which in turn has a positive effect on performance. Hence, zonal educational bureaus have plan and get awareness training on these constructs for their school leaders.

School leaders' psychological capital contributes significantly to leadership effectiveness as self-rated but has low contribution as observers rated. The difference might be because of social desirability that leaders considered themselves as good leaders and rate themselves positively, ignoring their weakness. However, the staff can genuinely rate and evaluate their leaders as their leaders led and influence them through exerting power on them. Hence it can be concluded that leaders have limited psychological resources. Therefore, training leaders to increase their resourcefulness in psychological capital is mandatory.

In stepwise regression analysis result, self-awareness and balancing process from authentic leadership behavior significant contributors, while hope and resilience from psychological capital sub scales were significant contributors for leadership effectiveness. This shows that school leaders lack balance processing, transparency, self-efficacy (confidence), and optimism. Hence, training on these variables has to be conducted for school leaders as the variables contribute significantly to work effectiveness.

From interview response finding, among the qualities expected from effective school principals punctuality, hardworking, flexibility, positive model and who facilitate trusting and open working environment were included. This shows leaders with the above mentioned qualities foster greater pride in the organization and a stronger spirit of cooperation as well as more feelings of ownership and personal responsibility. Moreover, they encourage members to exchange ideas through handling conflict and guide the group in goal setting and decision making to create a productive atmosphere.

Thus, educational zonal offices have to consider these qualities when they higher principals to the school.

6. References

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