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The effect of educational attainment, length of work experience on the self-efficacy of teachers and employees

 Damianus Abun^{(a)*}  Sonny Bumanglag Asuncion^(b)  Janette R. Lazaro^(c)  Theogenia Magallanes^(d)  C. Catbagan Nimfa^(e)



^(a) Professor, School of Business and Administration, Divine Word College of Laoag, Ilocos Norte, Philippines

^(b,c,e) Professor, School of Art and Sciences, Divine Word College of Laoag, Ilocos Norte, Philippines.

^(d) President, Saint Benedic College of the Northern Luzon, Ilocos Sur, Philippines

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ABSTRACT

The study aims to determine the effect of educational attainment, length of work experience on self-efficacy and also to determine the difference of self-efficacy of employees based on the educational attainment and the length of work experience. To support the theories of the study, literature was reviewed. The study used a descriptive correlational research design and the questionnaires were used to gather the data. The population of the study was all employees of the Divine Word College of Laoag, Ilocos Norte, Philippines. The Multilinear regression analysis was used to determine the correlation and the analysis of variance (ANOVA) was used to determine the difference of self-efficacy among employees based on educational attainment and the length of work experience. The study found that the self-efficacy of employees was high and there is a correlation between educational attainment and self-efficacy and the length of work experience and self-efficacy. It is also found that there is a significant difference in self-efficacy among employees based on educational attainment and the length of work experience. Thus, based on the findings, then the hypotheses of the study are accepted.

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Introduction

Managing an organization requires knowledge of different elements of an organization. Understanding different key elements of an organization that contribute to organizational success are key to the success of an organization. Thus, the job of management is to find out these elements and understand how they affect the organization as a whole. Along with this concern, the human resource of the Divine Word College of Laoag of Laoag has been studying the different elements of organizations that affect the growth of the college. The results of these studies have been presented to the management and recommendations have been forwarded. The purpose of those studies was to open the mind of the management about issues that may have been undermined by the management but those issues might have been the reason why problems occur.

The current study focuses on self-efficacy and how this self-efficacy is related to other factors. A previous study was conducted on the effect of self-efficacy on work performance and how this self-efficacy is affected by the work environment (Abun, et.al, 2021). The present study examines the effect of educational background and working experience on self-efficacy. Though the topic of self-efficacy is the domain of psychology, however, we use the concept of psychology about self-efficacy to understand its implication on management. The study would like to understand if self-efficacy is the product of education and experience or not.

There have been no studies concerning the effect of educational background on self-efficacy and there have been few studies or limited studies on the effect of work experience on the self-efficacy of teachers. We can just mention two studies on the effect of work experience on self-efficacy such as Cunnien, et.al (2009) and Raelin, et.al (2015). Thus, the current study intends to study the effect of educational background and experience of teachers on their self-efficacy. It is assumed that the higher the educational

* Corresponding author. ORCID ID: 0000-0002-9693-1541

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attainment and the longer the work experience are, the stronger the self-efficacy becomes. The result of the study will help the management understand and determine a course of action on how to improve the teaching performance of teachers and consequently will improve the quality of education of the Divine Word College of Laoag.

The study will be divided into several parts. The first part is the rationale of the study which explains the background and the purpose of the study. The second part is the literature review which establishes the theories of the study based on the existing discussions on the current investigation. The third part is the research methodology that presents the research design, population, locale of the study, research instruments, research procedures, and statistical treatment of data. The fourth part is the data presentation and analysis which presents the data that was gathered through questionnaires and analyzed. The fifth part is the result and discussion that will explain the further implication of the study and its contribution to the existing discussion on the subject matter.

Literature Review

The purpose of the literature review is to refine the topic and frame research questions. It helps to establish an understanding of the current investigation based on the previous research and at the same time identify areas of controversy, contested claims and determine the research gaps (Institute for Academic Development, 2021). In other words, literature review helps the researcher to understand the existing researches and debates along with the current topic and consequently build the researcher's knowledge on the particular topic (Western Sydney University Library, 2017). The literature review will be presented thematically.

Theoretical and Conceptual Background

The Purpose of Education

Understanding the purpose of education, we need to review once again the different philosophies of education because different philosophies have different ideas about the purpose of education. Different purpose of education consequently results to a different approach to design the curriculum. In other words, the curriculum is designed according to the philosophy of education. Often time, different groups or schools of thoughts have different emphasis on education. For example, is idealism. It was the first school of thought that focused on ideas and according to this school of thought, the idea is everything and reality is in the mind. This philosophy results in a system of education that is oriented toward intellectual development as its main priority (Ozmon, 2012). For the idealists, knowledge is a matter of having ideas of the object he/she perceives, and therefore it is obtained through speculation and reasoning (Singh, 2007). This is emphasized by Immanuel Kant, that the development of reason and the development of character are of central importance to education (Bayrak, 2014). For Kant, human beings are rational beings and therefore education must be to enhance human rationality and the development of moral character because human beings are born good and it needs education to develop it (Kant, 1992). The view of Immanuel Kant about the purpose of education as a process of intellectual and moral development is also strengthened by another idealist in the person of Georg Wilhelm Friedrich Hegel. Hegel's philosophy of education is reflected in his concept of "Bildung". Bildung can be translated as "education" or "development or upbringing". According to him, the focus of education is the formation of the mind or spirit. It is an intellectual and spiritual formation that is regarded as a social and historical process (Wood, 1998).

If the idealists' orientation of education is for intellectual and moral development, while the realists look at education as the answer to the reality of life (Bawa, 2020). If the education is to be true, then it must conform to the reality of the society, or the environment and it must work. The realists argue that education must be rooted in the reality. Reality is the external world as a real world, not a world that exists in the mind and is the foundation of education (Bawa, 2020). The external world is a common point of reference for the educational enterprise. Thus, the test of the truth is its conformity to reality which means that if the ideas are true, then they must be true to reality or it must be working. Because of such philosophy, the realists opined that learning is a response to external stimuli and the purpose of education is for a good life or to prepare the learners for real and practical life (Duta, 2020). Therefore, education must equip the child with the necessary knowledge and practical skills to face the reality of life. The child should be taught how to solve problems of his/her adequately.

Though it may not be different from idealism and realism about the purpose of education, however, scholasticism or rational humanism emphasizes the purpose of education as a means for intellectual development. It argues that human beings are rational beings by nature and therefore the main business of men is to use his/her faculty to know the world where he/she lives and this world can be known through reason. In line with this concept, thus, the principal aim of education must be necessarily intellectual, to develop intellectual capability. The cultivation of intellectual development is not the means to an end but it is the end in itself or it is the *summum bonum*. To achieve this purpose, scholasticism applies the teaching strategy of *Lectio* and *disputatio* which involves reading the book or the idea of great thinkers and then debating or disputing the critical issues arising from the text. The purpose is to gain a deeper rational and critical understanding of the problems and the principles involved (Taylor, 1938, Copleston, 1946).

If other schools of thought such as idealism, realism, scholasticism focus on intellectual development, functionality, and moral development, however, pragmatism focuses on one thing which is functionality alone. If the knowledge is to be true, then it must work or it must be functional, it must be useful. Pragmatism contends that the meaning of an idea is determined by putting it into practice. Ideas that do not translate into activities of the world are valueless (Washington, 1905) and they are just mere information. Information becomes knowledge when it is useful to solve problems. Academic preparation and abstract thinking are important but

they have value only if they help solve real-life problems (Lawson, 2004). Thus, the purpose of education is to solve the real problems of life and therefore education must help the students to develop a problem-solving attitude of mind and teach them to be creative thinkers in solving any problems of society. In line with such a philosophy of education, the importance of the "activity" curriculum is put into the centre. Activities are important to make education lifelike and to make life yield the truth.

In the case of existentialism philosophy of education, existentialists argue that existence precedes essence which means that humans first exist and later define his life. Human beings are nothing at birth and in the process of existence, he fills up himself with knowledge. He/she is in the process of becoming and he/she is responsible for his/her existence and determines the direction of his/her own life. This is in line with the basic understanding of existentialism. Freedom is the essence of existence. Life has no pre-determined purpose by God or by nature (Guignon, 2013), no pre-determined universal standards to be followed (Lawless, 2005), and that human beings were not designed for any particular purpose and no pre-determined meaning of life (Duignan, 2011). These philosophies lead to a different philosophy of education. Existentialists believe that education should help the students to be able to exercise their agency and define the meaning of their own life. Knowledge, values concepts are personal enterprise and it is not the teachers who are the source of knowledge and knowledge and concepts only come after existence through direct experience.

Lastly, postmodernism education has a broader purpose of education as compared to idealism, realism, pragmatism, scholasticism, and existentialism. Postmodern education focuses on helping students to develop critical thinking, production of knowledge, development of the individual, social identify, and self-creation (Hossieni & Khalili, 2011). Postmodern education is the summary of all purposes of education because it is not only focusing on one element of the human person but encompasses all aspects of human life. The way how education should be delivered is similar to the critical pedagogy theory of Paulo Freire which questions all established concepts and practices. Postmodernism denies the universal or objective truth because the truth is subjective and particular to a group or society. This philosophy of education leads to a deconstructive approach to education which means to question all the established dogmas, teachings and start a new idea or new teaching. Developing critical thinking and creativity becomes the focus of postmodern education and at the same time teaches students to respect the diversity and cultures of other societies (Hossieni & Khalili, 2011, Burbules, 2009).

Based on the purposes of education as forwarded by the different schools of thought, we can summarize several purposes of education. Firstly, education is a process of developing intellectual capability through readings and critical thinking. Secondly, education is to prepare pupils or students for future life and therefore, they should be equipped with knowledge and skills. Education can only have meaning if it can be used for their life, to make their life better. Thirdly, education is a process of developing students spiritually and morally. Lastly, education is a process of preparing students to be independent and respect diversity and other cultures.

In short, education should be able to make the students believe in themselves that they can succeed and reach their goals because they have been equipped with critical ability, knowledge, skills, values to exercise their duties and responsibilities. In other words, one of the main purposes of education is building students' self-efficacy. At the end of their studies, students should have self-efficacy which makes them believe in themselves that they can organize and execute their plans to attain their goals (Artino, 2012).

In terms of the effect of educational background on work performance has been studied by many researchers and the result may not be conclusive. On one hand, the earliest study of Ariss and Timmins (1989) on the influence of educational background on the work performance among managers concluded that there is no significant relationship between managers' educational background and work performance. On the other hand, later studies found otherwise. Ng and Feldman (2009) studied the effect of educational background on job performance and the result showed that educational background is correlated to job performance. This finding is the same as the finding of Kasika (2015) which found a positive correlation between educational background and work performance. The study suggested that the higher the education becomes, the higher the performance is. These findings have been consistent with the earlier study of Beyhan (2008) about the impact of higher education on job preparedness and job performance among national police in Turkey. His study concluded that educational background is significantly correlated with job preparedness and job performance. However, there have been no studies related to the effect of educational attainment on the self-efficacy which is the reason of the current study.

Work Experience

To understand work experience, one needs to consult the dictionaries about the definition of work experience. Cambridge Dictionary defines work experience as "the jobs that someone has had, or the type of work they have done, in the past". The Oxford Learner's Dictionaries define work experience as "the work or jobs that you have done in your life so far". These two definitions refer to work experience as a past job that someone has performed. These definitions are the same as the definition of Longman Dictionary that defines work experience as "the works or jobs that you have done in your life so far". These definitions refer to general work experience which signifies the accumulation of experiences in different jobs (Lasisi, 2019). Fiedler, (1970), McCall, Lombardo, & Morrison, (1988) defined work experience as the job-relevant knowledge gained over time.

The debate on whether work experience or education is more important is relevant to call our attention to the importance of both issues. The ideas on the two issues are varied. Some place more important on experience, while others place more important on education. Though the earliest study for example concluded that work experience is not important for the successful performance of a job, it is only education (Fiedler, 1970). However, a later study disproved such a conclusion and argued that experience is important

for the successful performance of the job (Hunter & Hunter, 1984). Such change was caused by the environmental movement. The need for industries has changed and those changes require the adjustment of the requirement for employment. Nowadays, applying for employment requires a degree and related work experience and both are equally important. Education is important because it means that someone has the specialized skills or knowledge an employer is looking for. The degree is always the opening window for employment. But a degree alone is not enough without the experience. Work experience is also important because it tells the prospective employers about what a person can contribute to the organization. Work experience can provide a good match for a particular job (Mueller, 2020). It has been always the case ever since that employer or the Human Resource Department will always look at education and experience as the requirement for employment (Ash & Levine, 1985, Ford, Quionens, Seago & Sorra, 1992, Campion, Cheraskin, & Stevens, 1994). Having the two requirements are important for employment and job performance. Therefore, education and work experience are equally important in the work performance of employees. This is the main reason why work experience has been integrated into the school curriculum to equip the students not only with technical skills but also industries-related work experience for them to get enough experience to pursue future jobs (California Career Center, 2020). The purpose of work education experience (WEE) is to help students choose a career path based on their interests and aptitudes and allow the students to learn to work with others in ways that are successful and rewarding (California Department of Education, 2021).

Though the previous studies lack common agreement on the dimensions of work experience, however, there have been studies measuring the effect of work experience on work performance. For example, the earliest study measuring the effect of work experience on job performance found that work experience affected the level of productivity (Maranto & Rodgers, 1984). Later studies such as Quinones, et.al (1995) identified two dimensions of work experience such as measurement mode (amount, time, and type) and level of specificity (task, job, organizational) and its effect on the work performed. The study showed that the amount and the level are significantly correlated to job performance. Though the study of Dokko, et.al (2009) is not the same as the study of Quinones, et.al (1995), however, the results of their study indicated a similar finding, that prior experience and career history affect job performance. In a different context such as Indonesia, a similar study was also conducted by Putri (2020) and her study found a similar finding that work experience had a positive correlation with work performance, while job characteristics had a negative correlation with work performance.

In summary, based on those researches, we can be certain that work experience is considered important in enhancing employees' performance or productivity. In line with such, then we can argue that performances differences are also contributed by experience. The amount or the length of experience can contribute to the difference in output or productivity of each employee.

Self-Efficacy and Factors affecting Self-Efficacy

Self-efficacy is within the psychology domain and therefore the definition of self-efficacy should be taken from the authority of self-efficacy theory. Self-efficacy is one of the key concepts of social cognitive theory and it is part of social psychology. The well-known proponent of self-efficacy theory is Albert Bandura. Bandura (1977, 1986, 1997) defined self-efficacy as an "individual's belief in his/her capacity to perform certain behaviours to produce specific performance attainments". Having a high self-efficacy means that the person has high confidence in himself/herself that he/she can execute the tasks and believes in himself/herself that he/she will be able to achieve the goals. This is the type of a person who always says "I can do it". When they are given a task/responsibility, they always see it as a challenge and they rise to take the challenge and accomplish their goal.

According to Bandura (1977), self-efficacy affects psychological well-being, the way how we feel about ourselves, behaviour, and the motivation to perform a certain behaviour. Therefore, Bandura (1977) considered self-efficacy is a determining factor or predictor of success. It plays a major role in how one approaches and accomplishes the tasks to achieve the goals. When people have a high self-efficacy, they have a high interest and commitment in the tasks given to them, they view problems as a lesson to learn to be mastered and they are not easily giving up on the situation they are in. While those who have low self-efficacy tend to avoid difficult tasks because they believe that they could not do it and there is a tendency to lose confidence and expect negative outcomes of the situation (Bandura, 1997). Studies have found that self-efficacy serves as a motivation to perform a certain task. In other words, those who have high self-efficacy have a high motivation to accomplish the task and the goal (Schunk, 2008, Trautner & Schwinger, 2020). Those who have high self-efficacy have the motivation to persevere in solving problems they encounter (Voica, et.al, 2020).

Bandura (1977, 1977) has already identified several factors that affect self-efficacy. These factors include past personal experience (past performance), vicarious experience (modelling), social persuasions (verbal persuasions), and physiological factors. Experience refers to the mastery experience or successful experience in performing a certain task. In other words, past success raises the self-confidence of a person that he/she can do it again and past failure affects the self-belief of the person that he/she can do it. After personal experience is the experience of others or vicarious experience. Someone's experience raises the self-confidence of the one who observes such experience. When a person witnessed another person can perform a certain task, the person can assess or judge himself or herself that he/she can do it too. The individual can make a judgment about his/her capabilities. Besides past performance (past personal experience), vicarious experience (the experience of others), social persuasion or verbal persuasion also plays important role in developing self-efficacy. Getting positive feedback from other people about one's accomplishment raises the confidence of the person that he/she can do it. Recognition coming from other people or coming from the supervisors boost the self-confidence of the person that he/she is capable. Lastly, the physiological factors. Though the physiological factors are not a strong predictor of self-efficacy, however, it is still considered one of the factors that affect self-efficacy. It is considered the weakest

predictor because not all of the persons have the same interpretations of physical symptoms. A person who has low self-efficacy may interpret stomachache before public speaking as a hindrance for him/her to deliver his/her speech. In this case, sickness lowers one's self-efficacy. While a person who has high self-efficacy may interpret stomachache as normal and unrelated to his/her ability to continue his/her work. In other words, physical sickness does not affect his/her self-efficacy.

Besides the four factors as pointed out by Bandura (1977, 1997), other factors may affect self-efficacy such as self-regulation and social support (Sari, et.al, 2020), trauma, posttraumatic stress, and psychiatric (Chung, et.al, 2017), family support, good self-disciplined, friend/social environments (Bayramdurdyeva, (2019). Self-regulation refers to the ability of a person to manage his/her emotions, thoughts, and movement according to the goal that he/she wanted to achieve ((Kayacan & Selvi, 2017; Zimmerman & Schunk, 1989). Besides self-regulation, social support can affect self-efficacy as pointed out by the study of Wang, et.al (2015). Social support is related to the intimate contact among people which provides spiritual or material support when a person experience difficulties (Wang, et.al, 2015). The study also showed that self-efficacy is influenced by family support as found by the study of Olatunji, et.al (2020). The study argued that family support can bolster self-efficacy (Olatunji, et.al, 2020). Besides family support, self-efficacy can be enhanced by good-self –disciplined as indicated by the finding of Jung, et.al (2017). The study concluded that self-disciplined correlated to self-efficacy.

Conceptual Framework

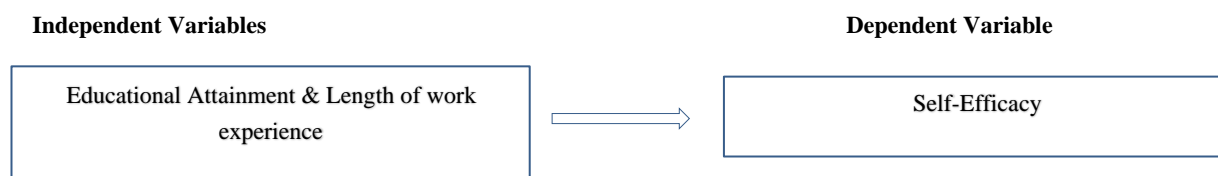


Figure 1: the conceptual framework reflects the correlation between educational attainment and length of work experience and self-efficacy. Educational attainment and work experience can affect the self-efficacy of the employees; *Source:* Schwarzer, R., & Jerusalem, M. (1995).

Statement of the problems

The study aims to determine the correlation between educational attainment and work experience and the self-efficacy of employees. It specifically seeks to answer the following questions:

1. What is the educational attainment of employees of Divine Word Colleges in the Ilocos Region?
2. What is the length of work experience of employees of Divine Word Colleges in the Ilocos Region?
3. What is the self-efficacy of employees of Divine Word Colleges in the Ilocos Region?
4. Is there a relationship between educational attainment, work experience, and employees' self-efficacy?
5. Is there a significant difference in the self-efficacy of employees grouped according to educational attainment?
6. Is there a significant difference in the self-efficacy of employees grouped according to the length of work experience?

Assumptions

The study assumes that educational attainment and work experience affect the self-efficacy of the employees. It is also assumed that self-efficacy can be measured and the questionnaires are valid.

Hypothesis

As pointed out by Bandura (1977) that there are factors affecting self-efficacy such as past performance experience, vicarious experience, verbal persuasions, and physiological factors. Based on the theory of Bandura (1977), the current study also hypothesizes that educational attainment and the length of work experience correlate to self-efficacy and there is a significant difference in the self-efficacy of employees grouped according to educational attainment and the length of work experience.

Scope and delimitation of the study

The study covers only the employees of the Divine Word College of Laoag, Ilocos Norte. It investigates only educational attainment and work experience and their effect on general self-efficacy.

Research and Methodology

As required by scientific research, the study must be following a specific method of investigation or research methodology. Wilkinson, (2000), Leedy, (1974) opined that research methodology is an established process for conducting the inquiry. It applies certain methods to determine, select, and analyze the data related to the concerned topic, Therefore, the current study applies certain methods of investigation such as research design, data gathering instruments method, the population of the study, the locale of the study, data gathering procedures, and the statistical treatment of data.

Research Design

The research design of the study is following the descriptive assessment and descriptive correlational research design. As pointed out by Ariola (2006) that a descriptive correlation study is intended to describe the relationship among variables without seeking to establish a causal connection. While descriptive research is simply to describe a population, a situation, or a phenomenon. It is also used to describe profiles, frequency distribution, describe characteristics of people, situations, or phenomena. In short, it answers the question of what, when, how, where, and not why question (McCombes, 2020).

The locale of the Study

The locale of the study was Divine Word Colleges of Laoag. This college is located in Laoag City, the capital of Ilocos Norte.

Population

The respondents of the study are the employees of the college. Since the number of employees is limited, therefore, the total enumeration sampling was used and thus all faculty and employees from the college were taken as respondents of the study.

Data Gathering instruments

The study adopted validated questionnaires of Schwarzer, R., & Jerusalem, M. (1995) on general self-efficacy (GSE).

Data Gathering Procedures

To preserve the integrity of scientific research, the data were gathered after the approval of the President of the college. The researcher sent a letter to the president and after the letters were approved, the questionnaires were distributed by the researcher’s representative. Then the researcher’s representative from the institution collected the data and submitted it to the researcher for tabulation.

Ethical Procedures

The study was carried out after the research ethics committee examined and approved the content of the paper if it does not violate ethical standards and if it does not cause harm to human life and the environment.

Statistical Treatment of Data

To analyze the data, a descriptive and inferential statistic was used. The percentage was used to determine the number of employees based on their educational attainment and work experience. The weighted mean was used to determine the level of employees’ self-efficacy, the length of work experience. Percentage and ranking were used to measure the educational attainment of employees. While Multilinear regression analysis or Mult r was used to measure the correlation between educational attainment, work experience, and employees’ self-efficacy and ANOVA was used to determine the difference of self-efficacy among faculty/employees based on educational attainment and the length of work experience. The following ranges of values with their descriptive interpretation will be used:

<i>Statistical Range</i>	<i>Descriptive Interpretation</i>
4.21-5.00	<i>strongly agree/ Very High/Very long</i>
3.41-4.20	<i>Agree / High/long</i>
2.61-3.40	<i>somewhat agree/ Moderate/somewhat long</i>
1.81-2.60	<i>Disagree/Low/Not long</i>
1.00-1.80	<i>Strongly disagree/Very Low/not very long</i>

Data Presentation and Analysis

As a requirement of scientific study, it requires data to support the analysis. Thus, this part presents the data that was gathered through the research questionnaires. The data presentation follows the arrangement of the statement of the problems.

Problem 1: What is the educational attainment of employees of Divine Word Colleges in the Ilocos Region?

Table 1: Educational Attainment

		Frequency	Per cent
Valid	Bachelor Degree	107	71.33
	Masterate	31	20.67
	Doctorate	12	8.0
	Total	150	100.0

Source: Authors

As projected on the table, the data shows that the majority of employees (107) or 71.33 % of them are holding a bachelor degree. The second place is masterate degree holder or 31 or 20.67 %. The third place is a doctorate with a total number of 12 or 8.00 %.

Problem 2: What is the length of work experience of employees of Divine Word Colleges in the Ilocos Region?

Table 2: Length of Work Experience

		Frequency	Per cent
Valid	0 to 2 years	43	28.67
	3 to 6+years	42	28.00
	7 to 10+ years	24	16.00
	11 to 15+ years	15	10.00
	16+ years	26	17.33
	Total	150	100.0

Source: Questionnaires

Legend: 0-2+yrs: *Not very long*; 3-6+yrs: *Not long*; 7-10+yrs: *Somewhat long*; 11-15+yrs: *Long*; 16yrs above: *Very long*

As indicated by the data on the table, it reveals that the majority of the faculty and employees are not very long. The first place is employees who are just employed within 0-2 years which is considered not very long. There are 43 or 28.67 of them are newly hired. The second place is employees who have been employed within 3-6 years which is considered not long. There are 42 or 28.00 % of them are working or teaching within 3-6 years. The third group is employees who have been with the school for 7-10 years which is considered somewhat long. There are 24 of them or 16% of them have been working with the school for 7-10 years. The fourth group is those who have been working with the school for more than 16 years which is considered very long. There are 26 or 17.33 % of them have been working for more than 16 years. The last group is those who have been employed by the school for 11-15 years which is considered long. There are 15 o 10.00 of them have been in teaching for 11-15 years.

These data indicate that most of the employees/faculty of the Divine Word College of Laoag are new employees who have not been working long or very long with the school. It is only 17.33 % of them are working very long with the school.

Problem 3: What is the self-efficacy of employees of the Divine Word College of Laoag?

Table 3: The Self-Efficacy

Questions on Self-Efficacy	N	Mean	Std. Deviation
1. I will be able to achieve most of the goals that I have set for myself	150	3.8333	.89305
2. When facing difficult tasks, I am certain that I will accomplish them	150	3.9600	.88901
3. In general, I think that I can obtain outcomes that are important to me	150	3.8933	.92066
4. I believe I can succeed at most any endeavour to which I set my mind	150	3.9267	.83623
5. I will be able to successfully overcome many challenges	150	3.8867	.92349
6. I am confident that I can perform effectively on many different tasks	150	3.9067	.88497
7. Compared to other people, I can do most tasks very well	150	3.8267	.83342
8. Even when things are tough, I can perform quite well	150	3.8467	.79205
Overall Self Efficacy	150	3.8861	.74322
Valid N (listwise)	150		

Source: Schwarzer, R., & Jerusalem, M. (1995)

The self-efficacy data as presented on the table reveals that as a whole, the employees' self-efficacy gained a composite mean of 3.88 which is interpreted as "agree/high". This rating indicates that as a whole the self-efficacy of employees is not very high and it is also not very low, low or moderate but it is high. Even when the items are taken singly, they are all rated within the same level of mean rating with the same interpretation which is high. This suggests that employees agree that they believe they can achieve most of the goals that they have set for themselves (3.83), can accomplish a difficult task (3.96), can obtain an outcome that is important to them (3.89), can succeed at most any endeavour to which they set their mind (3.92), can overcome many challenges (3.88), can perform effectively on many different tasks (3.90), can do most tasks very well compare to other people (3.82), and can perform quite well when things are tough (3.84).

Problem 4: Is there a relationship between educational attainment, work experience, and employees' self-efficacy?

Table 4: Correlation educational attainment and self-efficacy

		Educational Attainment
Statement 1	Pearson Correlation	.241**
	Sig. (2-tailed)	.003
Statement 2	Pearson Correlation	.207*
	Sig. (2-tailed)	.011
Statement 3	Pearson Correlation	.254**
	Sig. (2-tailed)	.002
Statement 4	Pearson Correlation	.218**
	Sig. (2-tailed)	.007
Statement 5	Pearson Correlation	.141
	Sig. (2-tailed)	.084
Statement 6	Pearson Correlation	.219**
	Sig. (2-tailed)	.007
Statement 7	Pearson Correlation	.212**
	Sig. (2-tailed)	.009
Statement 8	Pearson Correlation	.262**
	Sig. (2-tailed)	.001
Overall Self Efficacy	Pearson Correlation	.256**
	Sig. (2-tailed)	.002
	N	150

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

**. Correlation is significant at the 0.05 level (2-tailed).*

Source: IBM SPSS Software

A correlation analysis was run to determine whether there is a significant relationship between the educational attainment of the employees and their self-efficacy. As a whole, the results show that there is a significant relationship between the educational attainment of the employees and their self-efficacy at .05 and .01 levels. Taking the item singly, the data reveals that 7 out of the 8 indicators or majority of the statements are correlated with educational attainment at .01 and .05 levels. However, statement number 5, "I will be able to successfully overcome many challenges" is not correlated with educational attainment. This means that educational attainment has nothing to do with their self-belief on their capability to overcome many challenges. Regardless of the statement of number 5, overall correlation coefficients indicated positive significant relationships between educational attainment and self-efficacy which suggest that the higher is the educational attainment, the self-efficacy also tends to be higher or increase, and lower educational attainment implies lower self-efficacy.

Table 5: Correlation between length of work experience and self-efficacy

		Length of Work Experience
Statement 1	Pearson Correlation	.334**
	Sig. (2-tailed)	.000
Statement 2	Pearson Correlation	.307**
	Sig. (2-tailed)	.000
Statement 3	Pearson Correlation	.352**
	Sig. (2-tailed)	.000
Statement 4	Pearson Correlation	.349**
	Sig. (2-tailed)	.000
Statement 5	Pearson Correlation	.314**
	Sig. (2-tailed)	.000
Statement 6	Pearson Correlation	.313**
	Sig. (2-tailed)	.000
Statement 7	Pearson Correlation	.322**
	Sig. (2-tailed)	.000
Statement 8	Pearson Correlation	.363**
	Sig. (2-tailed)	.000
Overall Self Efficacy	Pearson Correlation	.389**
	Sig. (2-tailed)	.000
	N	150

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

Source: IBM SPSS Software

A correlation analysis was run to determine whether there is a significant relationship between the length of work experience of the employees and their self-efficacy. The results show that overall, there is a significant relationship between the length of work experience of the employees and their self-efficacy. Even when the items are taken separately, it also shows that all the 8 indicators or statements are significantly correlated at .01 level with the length of work experience. This result suggests that the length of work experience improves the self-belief of the employees to achieve most of their goals, accomplish a difficult task, obtain outcomes that are important to them, succeed at most any endeavour, overcome many challenges, perform effectively on many different tasks, do most tasks very well, and perform quite well even when things get tough. This signifies that the longer the work experience is, the self-efficacy also tends to be higher; and the shorter the work experience is, the lower self-efficacy becomes.

Problem 5: Is there a significant difference in the self-efficacy of employees grouped according to educational attainment?

Table 5: The difference in Self Efficacy based on educational attainment

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Bachelor Degree	107	3.7827	.74956	.07246	3.6390	3.9264	2.00	5.00
Masterate	31	4.0255	.64492	.11583	3.7889	4.2620	3.00	5.00
Doctorate	12	4.4483	.65591	.18934	4.0316	4.8651	3.00	5.00
Total	150	3.8861	.74322	.06068	3.7662	4.0060	2.00	5.00

Source: IBM SPSS Software

The data about the difference between educational attainments indicates that the highest mean self-efficacy rating was obtained by the group of employees who belong to the doctorate level, while those comprising the group with bachelor's degrees and masterate revealed the lowest and the lower mean self-efficacy rating. This indicates that education matters in the improvement of self-efficacy. This is evidenced by the ANOVA (analysis of variance).

Table 6: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.539	2	2.770	5.304	.006
Within Groups	76.765	147	.522		
Total	82.305	149			

Source: IBM SPSS Software

The ANOVA analysis showed that there is a statistically significant difference ($F_{(2, 147)} = 5.304$), between the group means with a significance value of .006 which is below .05. Hence, there is a statistically significant difference in the mean self-efficacy of employees between groups based on educational attainment.

Table 7: Tukey HSD test on the Multiple comparisons of Self-Efficacy based on educational attainment

(I) Educational Attainment	(J) Educational Attainment	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Bachelor Degree	Masterate	-.24277	.14740	.229	-.5918	.1062
	Doctorate	-.66562*	.22000	.008	-1.1865	-.1447
Masterate	Bachelor Degree	.24277	.14740	.229	-.1062	.5918
	Doctorate	-.42285	.24569	.201	-1.0046	.1589
Doctorate	Bachelor Degree	.66562*	.22000	.008	.1447	1.1865
	Masterate	.42285	.24569	.201	-.1589	1.0046

*. The mean difference is significant at the 0.05 level.

Source: IBM SPSS Software

Based on the Tukey Post HSD test as projected on the table, it shows that there is a statistically significant difference between the self-efficacy of those with bachelor' degrees and doctorate, while no statistically significant difference exists between employees with bachelors' degrees and those with a masterate degree as well as between the masterate and doctorate level employees.

Problem 6: Is there a significant difference in the self-efficacy of employees grouped according to the length of work experience?

Table 8: Significant difference in the self-efficacy of employees grouped according to the length of work experience

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
0 to 2 years	43	3.6728	.70638	.10772	3.4554	3.8902	2.13	5.00
3 to 6+years	42	3.6436	.77700	.11989	3.4014	3.8857	2.00	5.00
7 to 10+ years	24	3.9700	.64251	.13115	3.6987	4.2413	3.00	5.00
11 to 15+ years	15	3.9760	.52403	.13530	3.6858	4.2662	3.00	5.00
16+ years	26	4.5015	.58958	.11563	4.2634	4.7397	3.00	5.00
Total	150	3.8861	.74322	.06068	3.7662	4.0060	2.00	5.00

Source: IBM SPSS software

The data indicates that employees with 16+ years of work experience obtained the highest mean self-efficacy rating; while those with 3 to 6+ years of work experience revealed the lowest mean self-efficacy rating. This is confirming the data on the correlation that the length of work experience affects self-efficacy and it suggests that the length of work experience matters in the level of self-efficacy. This is also validated through the analysis of variance or ANOVA.

Table 9: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.565	4	3.641	7.794	.000
Within Groups	67.740	145	.467		
Total	82.305	149			

Source: IBM SPSS Software

Based on the results of the ANOVA analysis, it reveals that there is a statistically significant difference ($F_{(4, 145)} = 307.794$), between the group means with a significance value of .000 which is below .05. Hence, which indicates that there is a statistically significant difference in the mean self-efficacy of employees between groups based on length of work experience. This data suggests that the length of work experience contributes to the level of self-efficacy of employees.

Table 10: Tukey HSD test on the Multiple comparisons of Self-Efficacy based on educational attainment

(I) Length of Work Experience	(J) Length of Work Experience	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 to 2 years	3 to 6+years	.02922	.14828	1.000	-.3804	.4388
	7 to 10+ years	-.29721	.17415	.433	-.7783	.1839
	11 to 15+ years	-.30321	.20496	.578	-.8694	.2630
	16+ years	-.82875*	.16980	.000	-1.2978	-.3597
3 to 6+years	0 to 2 years	-.02922	.14828	1.000	-.4388	.3804
	7 to 10+ years	-.32643	.17490	.340	-.8096	.1567
	11 to 15+ years	-.33243	.20559	.489	-.9004	.2355
	16+ years	-.85797*	.17056	.000	-1.3291	-.3868
7 to 10+ years	0 to 2 years	.29721	.17415	.433	-.1839	.7783
	3 to 6+years	.32643	.17490	.340	-.1567	.8096
	11 to 15+ years	-.00600	.22497	1.000	-.6275	.6155
	16+ years	-.53154	.19348	.052	-1.0660	.0029

<i>Table Cont'd</i>						
11 to 15+ years	0 to 2 years	.30321	.20496	.578	-.2630	.8694
	3 to 6+years	.33243	.20559	.489	-.2355	.9004
	7 to 10+ years	.00600	.22497	1.000	-.6155	.6275
	16+ years	-.52554	.22161	.129	-1.1377	.0866
16+ years	0 to 2 years	.82875*	.16980	.000	.3597	1.2978
	3 to 6+years	.85797*	.17056	.000	.3868	1.3291
	7 to 10+ years	.53154	.19348	.052	-.0029	1.0660
	11 to 15+ years	.52554	.22161	.129	-.0866	1.1377

***. The mean difference is significant at the 0.05 level.**

Source: IBM SPSS Software

Based on the results of the Tukey HSD test, it shows that there are statistically significant differences between the groups as a whole. There is a statistically significant difference in the self-efficacy of employees with 16+ years of work experience and those with 0 to 2+ years ($p=.000$, as well as those with 3 to 6+ years of work experience ($p=.000$).

Result and Discussion

There have been no studies yet measuring the correlation between educational attainment and self-efficacy, but there are few studies related to the effect of the length of work experience and self-efficacy. This is the purpose of this study to contribute to the discussion on the role of education in self-efficacy. The study found that there is a correlation between the educational level and self-efficacy and the length of work experience and the self-efficacy. It is found that the higher the educational attainment is and the longer the work experience is, the higher the self-efficacy becomes. Thus, these findings point out that the educational attainment and the length of work experience matter to the level of self-efficacy. Work experience particularly mastery work experience boost self-confidence to achieve goals (Cunnien, et.al. 2009). Cunnien, et.al (2009) pointed out that steady work experience has higher self-efficacy compared to the occasional and sporadic work experience. Therefore, one of the solutions to solve the self-efficacy efficacy problem is education and longer and steady exposure to work.

Determining the level of self-efficacy is a beginning step to solve employees' performance. The management needs to improve the level of self-efficacy of the employees because it is a contributing or predicting factor to the work performance of employees as Bandura (1977) argued that self-efficacy is a determining factor to the attainment of goals. The previous study of Abun, et.al (2021) confirmed that the self-efficacy of employees affects their work performance particularly task performance and contextual performance. Thus, in the school setting, the selection and recruitment process must take serious consideration about the educational attainment level and work experience as an important consideration in determining the acceptance of an employee or faculty for a teaching position. Besides, further educational development through graduate studies must be a program of the management to improve the self-efficacy of teachers. Besides educational development, it is also important for the management to have a policy on how to retain the faculty to stay longer with the institution.

The current study contributes to the enrichment of the current debate on the role of education and work experience in self-efficacy. There have been no studies on the role of education in the development of self-efficacy and this study contributes to filling the gap. This study provides a piece of evidence that education matters to the self-efficacy of employees or teachers.

Conclusion

The study aimed to determine the correlation between educational attainment, the length of work experience and the self-efficacy of employees/faculty and the difference of self-efficacy of employees based on their educational attainment and the length of work experience. The study found that both, educational attainment and the length of work experience correlated to self-efficacy. The study found that the higher the educational attainment is and the longer the work experience is, the higher the self-efficacy becomes. The study also confirmed through the analysis of variance that there are differences in self-efficacy among employees based on educational attainment and the length of work experience.

Therefore, the hypothesis of the study that there is a correlation between educational attainment, the length of work experience and self-efficacy is accepted. It also accepts the second hypothesis that there is a difference in self-efficacy among employees based on their educational attainment and the length of work experience.

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Institutional Review Board Statement: Ethical review and approval were waived for this study, due to that the research does not deal with vulnerable groups or sensitive issues.

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Reference

- Abun, D., Magallanes, T., Nicolas, M.T., Apollo, E.P., & Encarnacion, M.J. (2021). Employees' Self-Efficacy and Work Performance of Employees as Mediated by Work Environment. *International Journal of Research in Business and Social Science*, 10(7).
- Ariola, M.M. (2006). *Principles and Methods of Research*. Manila: Rex Book Store
- Ariss, S.S. & Timmins, S.A. (1989). *Employee Education and Job Performance: Does Education Matter?* *Public Personnel Management*, 18(1), 1-9. <https://doi.org/10.1177/009102608901800101>
- Artino, A.R. (2012). *Academic self-efficacy: from educational theory to instructional practice*. *Perspect Med Educ*, 1, 76–85.
- Ash, R.A. & Levine, E.L. (1985). *Job applicant training and work experience evaluation: An empirical comparison of four methods*. *Journal of Applied Psychology*. 70, 572-576.
- Bandura, A. (1977). *Self-efficacy: Toward a unifying theory of behavioural change*. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York, NY: W. H. Freeman.
- Bawa, B. (2020). *Essay on Realism*. Retrieved from <https://www.yourarticlelibrary.com/essay/essay-on-realism/76803>
- Bayrak, Y. (2014). *Kant's Views on Education*. Amsterdam: Elsevier.
- Bayramdurdyeva, G. (2019). *Factors affecting the success of international students*. *International Journal of Humanities and Education*, 5(11), 509-524
- Beyhan, E. (2008). *The Impact Of Higher Education On The Job Preparedness And Job Performance of Turkish National Police Officers*. Unpublished Dissertation. STARS. The University of Florida.
- Burbules, N.C. (2009). *Postmodernism and Education*. Oxford Handbooks Online. <https://doi.org/10.1093/oxfordhb/9780195312881.003.0029>. Retrieved from <https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195312881.001.0001/oxfordhb-9780195312881-e-029>
- California Department of Education (2021). *Work Experience Education*. CDE. Retrieved from <https://www.cde.ca.gov/ci/ct/we/>
- California Career Center (2020). *Work Experience Education*. CalCNR. Retrieved from <https://www.calcareercenter.org/Home/Content?contentID=116>
- Campion, M.A., Cheraskin, L., & Stevens, M.J. (1994). *Career-related antecedents and outcomes of job rotation*. *Academy of Management Journal*. 37. 1518-1542.
- Chung, M.C., AlQarni, N., Al Muhairi, S., & Mitchell, B. (2017). *The relationship between trauma centrality, self-efficacy, posttraumatic stress and psychiatric co-morbidity among Syrian refugees: is gender a moderator?* *Journal of Psychiatric Research*, 94, 107-115.
- Copleston, F.C. (1946). *History of Philosophy*. Westminster: Image Books
- Cunniën, K.A., Rogers, N.M. & Mortimer, J.T. (2009). *Work Experience and Self-efficacy*. *International Journal of Social Policy*, 29(3/4), 174-175.
- Dokko, G., Wilk, S.L. & Rothbard, N.P. (2009). *Unpacking Prior Experience: How Career History Affects Job Performance*. *Organization Science*, 20(1), 51-68.
- Duignan, B. (2011). *The History of Western Ethics*. New York: Encyclopedia Britannica Publishing.
- Duta, S. (2020). *The Relevance of Realism in The Field of Education: A Philosophical Discourse*. Adams University. Retrieved from <https://adamasuniversity.ac.in/the-relevance-of-realism-in-the-field-of-education-a-philosophical-discourse/>
- Fiedler, F.E. (1970). *Leadership experience and leader performance: Another hypothesis shot to hell*. *Organizational Behavior and Human Performance*. 5, 1-14.
- Ford, J.K., Quifiones, M.A., Segó, D.J., & Sorra, J. (1992). *Factors affecting the opportunity to perform trained tasks on the job*. *Personnel Psychology*, 45, 511-527.
- Guignon, C. (2013). *Existentialism*. In: Craig, E. (Ed.) *Concise Routledge encyclopedia of philosophy*. (p. 265). London: Routledge.
- Hossieni, A.O. & Khalili, S. (2011). *Explanation of creativity in postmodern educational ideas*. *Procedia - Social and Behavioral Sciences*, 15, 1307-1313.
- Hunter, J.E. & Hunter, R.F. (1984). *Validity and utility of alternative predictors of job performance*. *Psychological Bulletin*. 96.72-98.
- Institute for Academic Development (2021). *Literature Review*. The University of Edinburgh. Retrieved from <https://www.ed.ac.uk/institute-academic-development>
- Jung, K.R., Zhou, E.Q. & Lee, R.M. (2017). *Self-efficacy, self-discipline and academic performance: Testing a context-specific mediation model*. *Learning and Individual Differences*, 60, 33-39.

- Kant, I. (1992). *Kant on Education*, (Trans. A. Churton), England: Key Texts
- Kasika, B.D. (2015). *The effect of educational qualification on job performance: The case of Social Security Commission in Namibia (SSC)*. Unpublished Master Thesis. Namibia: UNAM (University of Namibia).
- Kayacan, K., & Selvi, M. (2017). *The effect of inquiry-based learning enriched with self-regulated activities on conceptual understanding and academic self-efficacy*. *Kastamonu Education Journal*, 25(5), 1771-1786.
- Lasisi, A. (2019). *Curriculum Vitae: Work Experience or Working Experience?* Retrieved from <https://punchng.com/curriculum-vitae-work-experience-or-working-experience/>
- Lawless, A. (2005). *Plato's sun: an introduction to philosophy*. Toronto: University of Toronto Press
- Lawson, B.E. (2004). *Booker T. Washington: A Pragmatist at Work*. In Bill E. Lawson and Donald F. Koch (Ed). *Pragmatism and the Problem of Race*. Bloomington: Indiana University Press, (2004), 126, 131.
- Leedy, P.D. (1974). *Practical Research: planning and design*. New York: Macmillan
- Maranto, C.L. & Rodgers, R.C. (1984). *Does Work Experience Increase Productivity? A Test of the On-the Job-Training Hypothesis*. *The Journal of Human Resources*, 19(3).
- McCall, M.W., Lombardo, M.M., & Morrison, A.M. (1988). *The lessons of experience*. New York: Lexington.
- McCombes, S. (2020). *Descriptive Research*. Scribbr. Retrieved from <https://www.scribbr.com/methodology/descriptive-research/>
- Mueller, A. (2020). *Education Vs. Experience: Which One Gets the Job?* Investopedia. Retrieved from <https://www.investopedia.com/financial-edge/0511/work-experience-vs.-education-which-lands-you-the-best-job.aspx>
- Ng, T.W.H. & Feldman, D.C. (2009). *How Broadly Does Education Contribute to Job Performance?* *Personnel Psychology*, 62, 89-134.
- Ozmon, H.A (2012). *Philosophical Foundations of Education* (9th ed). New Jersey, Upper Saddle River: Pearson education, Inc.
- Platunji, O.A., Idemudia, E.S. & Olawa, B.D. (2020). *Family Support, Self-Efficacy, and Suicidal Ideation at Emerging Adulthood: A mediation analysis*. *International Journal of Adolescence and Youth*, 25(1).
- Putri, I.A.J. (2020). *The Effect of Work Experience and Characteristics of Jobs on Employee Work Achievement in Shipping Company*. *Social Sciences and Education Research Review*, 7(1), 285-302.
- Quinones, M., Ford, J.K. & Teachout, M. (1995). *The Relationship between Work Experience and Job Performance: A Conceptual and Meta-Analytic Review*. *Personnel Psychology* 48(4):887 – 910.
- Raelin, J.A., Bayley, M.B., & Hamann, J.C. (2015). *The Role of Work Experience and Self-Efficacy in STEM Student Retention*. *Journal of Excellence in College Teaching*, 26 (4), 29-50.
- Schunk, D.H. (2008). *Self-Efficacy, Motivation, and Performance*. *Journal of Applied Sport Psychology*, 7(2).
- Schwarzer, R., & Jerusalem, M. (1995). *Generalized Self-Efficacy scale*. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.
- Singh, Y.K. (2007). *Philosophical foundations of education*. New Delhi: APH Publishing Corporation
- Taylor, H.O. (1938). *The Medieval Mind*. Cambridge, Massachusetts: Harvard University Press.
- Trautner, M. & Schwinger, M. (2020). *Integrating the concepts self-efficacy and motivation regulation: How do self-efficacy beliefs for motivation regulation influence self-regulatory success?* *Learning and Individual Differences*, 80, 101890
- Voica, C., Singer, F.M. & Stan, E. (2020). *How are motivation and self-efficacy interacting in problem-solving and problem-posing?* *Educational Studies in Mathematics*, 105, 487–517.
- Wang, C.M., Qu, H.Y. & Xu, H.M. (2015). *Relationship between social support and self-efficacy in women psychiatrists*. *Chinese Nursing Research*, 2(4), 103-106.
- Washington, B.T. (1905). *A Commencement Address in Washington, D.C*. Urbana: University of Illinois Press, 8, 313.
- Wang, C.M., Qu, H.Y. & Xu, H.M. (2015). *Relationship between social support and self-efficacy in women psychiatrists*. *Chinese Nursing Research*, 2(4), 103-106.
- Wilkinson, D. (2000). *The researcher's toolkit: the complete guide to practitioner research*. New York: Routledge/Falmer.
- Wood, A.W. (1998). *Hegel on Education*. In Amélie O. Rorty (ed.). *Philosophy as Education*. London: Routledge.
- Zimmerman, B.J., & Schunk, D.H. (Eds.). (1989). *Springer series in cognitive development. Self-regulated learning and academic achievement: Theory, research, and practice*. Springer-Verlag: New York. <https://doi.org/10.1007/978-1-4612-3618-4>

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