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INSPIRATIONAL BOOK READING: THE CHANGES IN SELF-EFFICACY AND LOCUS OF CONTROL IN MINORITY STUDENTS: A MIXED METHOD STUDY

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ABSTRACT

The literature on college attrition rates has revealed that self-efficacy and locus of control play a critical role in academic performance and retention. However, despite the importance of students' attitudes in academic performance, there have been few studies focused on how to develop students' self-efficacy and internal locus of control. We examined the impact of motivational book reading on the promotion of self-efficacy and locus of control by leveraging a mixed method study, analyzing quantitative and qualitative data. One hundred diverse, business students participated in the research, where they read one motivational book and wrote essays to reflect their learning and took surveys that measured the quantitative variables before and after reading the book. The analysis revealed that motivational book reading significantly increased self-efficacy and locus of control of the participants. The qualitative analysis revealed that students expressed improvement in self-efficacy and internal locus of control after reading the book. The limitations, practical implications, and future research implications are discussed in this paper.

KEYWORDS: Vicarious learning, motivational book reading, self-efficacy, locus of control, minority students

1. Introduction

Core self-evaluation has been described as a higher-order concept that people hold of themselves and how they interact and function in their environments (Judge et al., 2004). Those with positive core self-evaluations are consistent when in various situations. The implications on workplace performance from core self-evaluations are critical and can impact job satisfaction (Judge & Bono, 2001), career adaptability and organizational citizenship behavior (OCB) (Xu & Yu, 2019), attrition (Ahn, 2015), and overall leader performance (Ahn et al., 2018).

Similarly, students' attitudes affect academic performance, GPAs, student satisfaction, class attrition rates, student retention rates, and job placement rates. A dearth of literature has investigated

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students' self-efficacy, self-esteem, and locus of control and how these factors impacted student retention rates (Gifford et al., 2006). The most prominent antecedents of students' success are positive attitudes, internal locus of control and strong self-efficacy that contributes to the total number of accumulated credits, increased GPAs, and satisfaction with college life (Anderson et al., 2005; Wang, 2005; Zajacova et al., 2005). Despite the literary findings showing that self-efficacy and locus of control play a pivotal role in determining academic performance, few studies have explored how to develop minority students' self-efficacy and locus of control.

Vicarious learning refers to learning through other's actions and deriving meaning from someone else's experiences (Myers, 2018). Gioia & Manz (1985) shared that learning through observing other's behaviors and their consequences differs from attempting to perform tasks themselves. Vicarious learning has advanced since social learning theory was established, and has contributed to learning and performance achievements (Bandura, 1977). Vicarious learning has been established as an effective method to increase individual and organizational success (Bresman, 2013). This research is grounded in the vicarious learning theory, which seeks to measure students' self-efficacy and locus of control by reading an inspirational book that delivers life's lessons and the importance of staying positive.

The following research question guiding this study is:

Does motivational book reading have a positive impact on students' self-efficacy and locus of control?

By examining this question, the current study contributes to the extant literature on students' attitudes and emotional intelligence in several ways. Through the literary review of the effects of motivational book reading on the improvement of students' self-efficacy and locus of control, we established that this research is the first study to examine these factors. The research collected data to examine the changes in students' attitudes and the effect of emotional intelligence. Further, this research employed both quantitative and qualitative analyses to corroborate results and enhance the test on the hypotheses. Finally, the research results will provide valuable insights for school administrators and professors regarding how to reduce attrition through the development of appropriate curriculum development. The following sections include hypothesis development, research methodology, findings, and conclusions.

2. Hypothesis Development

2.1. Self-efficacy

Self-efficacy impacts a person's belief that they can successfully complete tasks and affects performance (Bandura, 1997). High self-efficacy equates to putting forth more effort to complete tasks and accomplish objectives. Conversely, when self-efficacy is reduced, tasks are not completed, as individuals are not confident they can successfully complete the task (Stajkovic & Luthans, 1998).

Self-efficacy impacts employee performance and group effectiveness (Prussia & Kinicki, 1996) and has been studied in sales (Carter et al., 2018), service performance (Yoon & Yoon, 2019), creativity and productivity (Tierney & Farmer, 2002; Walumbwa et al., 2018), innovation (Wood et al., 1990), technology (Gist et al., 1989), coping with events that are career-related (Stumper et al., 1987), tasks related to computers (Stone & Henry, 2003), career choices (Lent et al., 1987), and acceptance of organizational change (Judge et al., 2004). These previous studies found that self-efficacy is positively related to more desirable workplace outcomes. More recently shown in studies is the

existence of a reverse relationship between self-efficacy and task performance. Howard (2019) found that self-efficacy was influenced by task performance despite no increases in the skills required to achieve success.

Self-efficacy positively affects students' academic performances. Positive self-efficacy beliefs affect college outcomes by promoting students' motivation and persistence to keep working when faced with challenging, academic tasks (Bandura, 1993). High self-efficacy creates high motivation and high grades (Salazar & Hayward, 2018) and relates to the time spent studying (Torres & Solberg, 2001). The most prominent factor of a student's college achievement is high self-efficacy (Zajacova et al., 2005).

2.2. Locus of Control

Locus of control refers to whether a person believes that internal or external forces have affected them (Rotter, 1966). Someone who has an external locus of control thinks that outside factors have created certain outcomes in their life, whereas someone with an internal locus credits themselves for life's outcomes. An internal locus of control creates self-motivation and independent thinking (Spector, 1982).

Locus of control has been found to contribute to educational achievement and enhance employee performance, thus contributing to positive results. An employee's emotional intelligence and organizational citizenship behavior were moderated by locus of control (Turnipseed, 2018). Further, Modies & Rambe (2017) revealed that there is a positive relationship between self-esteem and job performance.

Studies have further demonstrated that an internal locus of control impacts salary and career advancement (Groves, 2005; Heckman et al., 2006). Moreover, Duncan and Dunifon (1998) found that in the long term, high self-efficacy predicted workers' successes, and supports this theory. Last, previous studies also revealed that locus of control had both direct and indirect effects on career advancement, earnings, and organizational outcomes.

From an academic perspective, locus of control has shown similar effects on student outcomes. Students with an external locus of control are considered to be at higher risk of not flourishing (Anderson et al., 2005; Gifford et al., 2006; Morris et al., 2005). External locus of control has been found to contribute to lower academic achievement (Bursik & Martin, 2006; Gifford et al., 2006) and higher attrition rates (Nowicki et al., 2004). Conversely, internal locus of control contributes to graduating and going to college (Baron & Cobb-Clark, 2010; Coleman & DeLeire, 2003). Thus, students with an internal locus of control are more likely to attend and complete college.

2.3. Vicarious Learning

Once a learner observes other's actions, vicarious learning occurs, and a decision is made whether to execute the same approaches to accomplishment of a task or goal (McCown et al., 1996). Sumpter et al. (2017) found that through observation of supervisors' autonomy and expediency, empowerment occurred and subordinates mimicked their manager's work ethic (Afota et al., 2019). Expedited learning occurs through observing others as compared to completing tasks oneself (Bandura, 1997; Schunk, 2000). By observing experts, teachers, and other role models, learners expedite mastering challenging tasks. Vicarious learning increases students' self-efficacy for performing and mastering similar tasks as compared to their role models (Bandura, 1986; Ertmer et al., 2003; Gist et al., 1989).

Developing appropriate and positive attitudes contributes to students' success, and these researchers tested whether positive behavior through reading a

motivational book had an impact on students' core-self-evaluations. The researchers picked the book "The Promise of a Pencil" to measure the impact on student's self-efficacy, locus of control, and self-esteem. Brown (2014) described the journey of a young social entrepreneur who started a non-profit organization that built schools for children in underdeveloped countries. The author exemplified how he overcame challenges and persisted in achieving his dreams, through inspirational, non-fiction stories. The thirty chapters reflected messages such as: "Get out of your comfort zone", "Why to be normal", "If your dreams don't scare you, they are not big enough".

This research study was grounded in vicarious learning constructs. The study proposed that diverse students who read "The Promise of a Pencil" increased self-efficacy and developed an internal locus of control.

Based on the discussion in this section, this study proposes the following hypotheses:

Hypothesis 1: Motivational book reading positively affected the reader's self-efficacy.

Hypothesis 2: Motivational book reading positively affected the reader's internal locus of control.

3. Research Methodology

3.1. Participants

Research participants were junior and senior business majors from a mid-sized, urban university on the east coast of the United States. Students were asked to read the book "The Promise of a Pencil" as an assignment for their coursework and then write essays and take surveys to reflect their learning. A total of 100 students participated in the research. The demographic data of the participants included: 55% were female, 45% were male; 11% were white, 29% were black, 32% were Hispanic, 10% were Asian, 4% were more than two races; and the average age of the participants was 24.9 years old.

3.2. Experiment

The book "The Promise of the Pencil" was selected for this research, as it was an inspiring non-fiction book that illustrated a story of a young social entrepreneur, Adam Brown, who founded a non-profit organization. The book provides students with information regarding how to create a non-profit organization as an entrepreneur.

Two surveys were given to participants, before reading the book (time 1) and after reading the book (time 2). The participants had six weeks to complete reading the book and writing their essays. The first survey measured students' self-efficacy, locus of control, and demographic information prior to reading the book. The second survey was completed after the books were read, and measured self-efficacy and locus of control through their submitted essays and using rating scales.

3.3. Measurements

Self-efficacy: Schwarzer and Born's (1997, $\alpha = .86$) general 5-point Likert, self-efficacy scale was utilized and included ten items that assessed the belief that one is capable of succeeding in certain situations, and the ability to successfully accomplish a task. Some example items were: "I am confident that I could deal efficiently with unexpected events", "I can solve most problems if I invest the necessary effort", and "I can usually handle whatever comes my way". The five-point scale ranged from "1" representing "strongly disagree" and "5" representing "strongly agree."

Locus of Control: Rotter's (1966) Internal-External (I-E) Locus of Control Scale consisted of 23 items arranged in a paired-comparison format. Subjects indicated which of the 23 items best matched their beliefs, and their responses were summed with higher scores

representing an external locus of control. The Cronbach's alpha for this scale in the current study is .72.

4. Data Analysis

4.1. Quantitative Analysis

To test the hypotheses, we ran a paired T-test using SPSS Version 25, which summarized the outcome of descriptive and correlation analysis (Table no. 1).

Table no. 1

Correlation analysis outcome

	1	2	3	4	5	6	7	8
1.Gender								
2. Age	.197							
3. Race	.218	.009						
4. SE (T1)	.141	.130	.031					
5. SE (T2)	.011	.175	.007	.785***				
6. SE CHNG	-.251	.085	-.046	.400**	.554**			
7. LOC (T1)	-.310*	-.121	-.205	.723**	.728**	.374**		
8. LOC (T2)	-.230	-.206	-.231	.637**	.638**	.308*	.720***	
9. LOC CHNG	-.103	.165	.069	.271*	.283*	.193	.283*	-.116

* <.05, ** <.01, *** <.001,

SE: Self-efficacy, SE CHNG: Self-efficacy change,

LOC: Locus of Control, LOC CHNG: Locus of control change

As predicted in Hypothesis 1a, positive self-efficacy improvements were seen by reading the motivational book. A paired-sample t-test was conducted to compare the level of self-efficacy pre and post-book reading. The scores for self-efficacy prior to reading the book were (M = 3.45, SD = 1.13) and there was a statistically significant difference after reading the book (M = 3.86, SD = 1.24); t (df = 97) =13.42, p <.001. Hypothesis 1a supports that motivational book reading improved participants' self-efficacy levels.

Creating internal locus of control through reading a motivational book was proposed and supported through Hypothesis 1b. A paired-sample t-test was conducted to compare the change of locus of control pre and post-reading the motivational book. Locus of control pre reading the book was (M = 10.14, SD = 4.04) and post reading the book (M = 9.01, SD = 3.88) conditions; t (df = 97) = -5.81, p <.05. Locus of control was improved thus hypothesis 1b was substantiated (Figure no. 1).

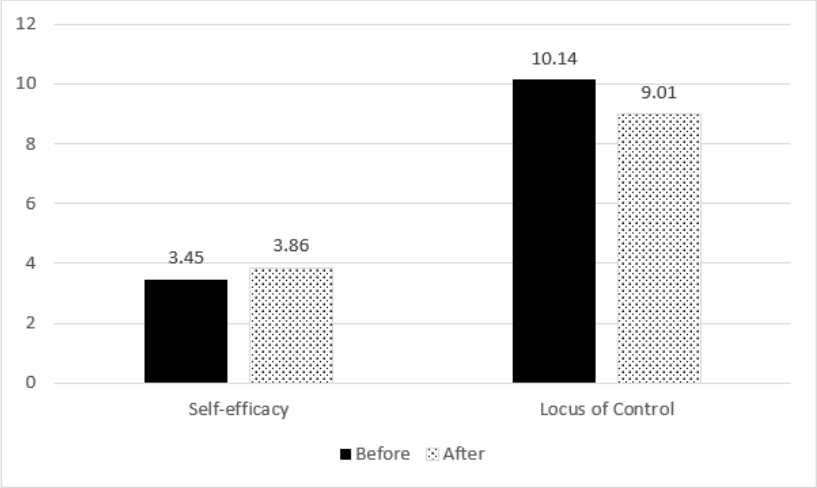


Figure no. 1: *Attitude changes after reading book*

4.2. Qualitative Data Analysis

High self-efficacy in individuals is described as those possessing a match between a belief that one can accomplish a goal and achievement of a goal, thus resulting in high self-esteem (Riding & Raynor, 2001). This qualitative data analysis included reviewing 100 student responses after reading the inspirational book "Promise of a Pencil" by Adam Brown. Two questions were posited using an open-ended approach, anonymously. The first question was: *"among 30 mantras, pick two mantras that you like most and discuss your learning from the mantras"*; the second question was, *"discuss your overall learning from the book"*.

The researchers utilized NVivo 11 software to house written responses, then leveraged a horizonalization process to organize the data. A modified seven-step process consisted of: (a) listing and preliminary grouping of statements; (b) reduction and elimination to determine invariant constituents; (c) clustering and thematizing the invariant constituents; (d) identification of the invariant constituents and themes by application; (e) developing individual textural descriptions for each participant; (f) developing individual structural descriptions for each participant; (g) developing composite textural descriptions and composite structural descriptions for participants as a whole (Moustakas, 1994). A holistic understanding of the students' responses was accomplished utilizing this approach. Van Kaam's (1969) steps allowed qualitative themes to emerge.

Funneling the overarching themes into narrow themes post epoche, the researcher refrained from judgment. Data saturation occurred after the 53th respondent. Further, the cross-case synthesis technique helped the researchers unveil commonalities and variances amongst themes from one study subject to another. The qualitative approach confirmed the themes and subthemes that emerged during the process of analyzing the data.

4.3. Findings

The responses from the first question: *"Among 30 mantras, pick two mantras that you like most, and discuss your learning from the mantras"*, are as follows:

The most highly impactful mantra was *"Get out of your comfort zone"*, with 24% of the students selecting this mantra. Overall, 24% of the students selected this mantra most frequently.

One participant shared, *I needed to stop being in a place that I was comfortable than after I had read this book it helped me to explore other areas of the company where I could have a better opportunity* (#7).

Another participant divulged: *To get out of my comfort zone, is to go out there and explore new things, meet new people, or even try out different jobs now, while I am still young. Many people are scared to get out of their comfort zone nowadays, but it's all about what could be waiting for you at the other side of the road if you actually try to get out of that zone* (#17).

Further, another participant shared: *I strongly believe it is impossible to grow as a person without things that are uncomfortable* (#14).

The mantra that received the second most responses (20%) with impact for students was *"surround yourself with those who make you better"*.

Another participant stated: *Nothing is more overwhelming when you are older than knowing that you've wasted your time surrounding yourself with the wrong people. Be careful whom you call your friends. I'd rather have four quarters than one hundred pennies* (#16).

A different participant divulged: *I have found that I have encountered a plethora of people of different backgrounds, ethnicities, ages, and mindsets who have guided me in the direction of where I am going. It is important to surround yourself with those who make you better because those people will feed your soul and drive you to your ultimate goal* (#18).

The following mantra, *"Fess up to your failures"*, where 11% of students selected this as the most impactful.

As this respondent shared: *Oftentimes people think their failures are negative and they give up trying to succeed over these failures. Doing this is a terrible approach to the situation because if you don't try to overcome your failures, you will never grow in life* (#78).

This last mantra received 9% of responses from participants, *"If your dreams don't scare you, they are not big enough"*.

A participant said: *Life's multiple failures tend to weigh people down and as a result people tend to give up on their dreams or tend to dream at all. What this mantra is saying to me is that it is important to dream big, to feel like you can accomplish things and go for anything* (#62).

The summary of participant responses is illustrated in Table no. 2 below.

Table no. 2

Summary of the participants' most selected responses

Mantra	Number of Participants	Percentage Responses
Get out of your comfort zone	24 of 100	24%
Surround yourself with those who make you better	20 of 100	20%
Fess up to your failures	11 of 100	11%
If your dreams don't scare you, they are not big enough	9 of 100	9%

The second research question was *"discuss your overall learning from the book"*. The predominant theme that evolved was *"Anything is possible with courage, hard work, drive and the ability to overcome obstacles"* 37% (37 of 100) of the research participants.

Specifically, a student responded: *I have the confidence and morale to work harder and overcome all difficulties to achieve my dreams. I believe I can do it* (#3).

The second most frequent theme that emerged was: *"Believe in your dreams, and start small, go big"*, 19% (19 of 100) students felt this theme was the essential learning that they internalized from reading this book.

The third theme that emerged was: *"Don't focus on money, instead focus on your passions". First of all I need to live a life full of meaning and understand that the more the meaning of my life resonates with the needs of others, the better my life will be* (68).

Last, *"You need people to help you"* were the last themes to emerge with 10% responses (10 of 100). These last themes indicated that participants felt anything was possible and that you just have to put the effort and commitment in to achieve goals and to ask people for help along the way.

A summary of the themes for question two are illustrated in Table no. 3.

Table no. 3

Summary of emerged themes

Emerged Theme	Number of Participants	Percentage of Participants
Believe in your dreams, start small, then go big.	19 of 100	19%
Anything is possible with courage, hard work, drive and the ability to overcome obstacles	18 of 100	18%
Don't focus on money focus on your passions	15 of 100	15%
You need people to help you	10 of 100	10%

Two overarching themes emerged after data-saturation occurred at the 30th survey respondent. The first question was to list two mantras that elicited strong internalized feelings after reading the book "A Promise of a Pencil" by Adam Brown. The first response was, *"Get out of your comfort zone"* (24%), and the second-highest response was *"Surround yourself with those who make you better"* (11%).

The second study question was, *"discuss your learnings from the book"* and elicited the emerging theme of *"Believe in your dreams, start small, go big, overcome obstacles"* (37%). The study subjects shared that those who experience obstacles can rise above them and become stronger, and you have to believe in your dreams and persevere. This theme indicates that high self-efficacy and internal locus of control exist in 37% of the study subjects after reading the book.

4.4. Summary

Reading self-improvement books has the potential to raise awareness of things that are essential for minority learners to embrace. "The Promise of a Pencil" raised students' awareness of principles that guide self-actualization and enhance self-efficacy and

internal locus of control. The theme that emerged in response to the first question that was asked of the research participants *"Among 30 mantras pick two mantras that you like most and discuss your learning from the mantras"* the largest selection of mantras was *"Get out of your comfort zone"* revealing 34% of the responses.

The second theme that emerged from the first research question was *"Surround yourself with those who make you better"*, with 24% of those respondents selecting this mantra. This mantra indicates that self-efficacy and internal locus of control are increased when learning vicariously by others. Surround yourself with people who stretch your capabilities and make you better, and those that help appropriate behavior; increases learning by observing others. Self-efficacy and internal locus of control are increased by seeing others try and fail, as well as succeed, as the fear of failure is reduced. This response shows that students realize the power of mentors and realize they need people around them to inspire, teach, and coach them to success.

In response to the second question, *"discuss your learnings from this book"*, the study showed that *"you should believe in your dreams, start small, go big, and overcome obstacles"*, with 30% of the respondents showing this as an overarching theme. This theme indicated the respondents' beliefs they could achieve anything as long as they put their mind to it, showing they had high self-efficacy and internal locus of control. Those with high self-efficacy and internal locus of control look at challenges as opportunities and obstacles as challenges, and they persevere in the face of defeat (Ootim, 2000). This theme indicates that students realized after reading the book that they could in fact, achieve anything they set out to achieve as long as they kept persisting even in the face of defeat, which indicates high self-efficacy and internal locus of control.

In sum, the qualitative analysis component of this mixed-methods study indicated that self-efficacy and locus of control can be enhanced by reading and analyzing self-help books. Further, self-efficacy and locus of control can be increased through vicarious learning.

5. Conclusion

Based on vicarious learning theory, we hypothesized that motivational book reading would improve student's internal locus of control and self-efficacy. A quantitative analysis outcome demonstrated that reading a motivational book enhanced the reader's internal locus of control and self-efficacy significantly, supporting hypotheses 1 & 2. This study conducted a qualitative analysis with students' essays that reflected their overall learning from reading the book. The results of the qualitative analysis captured the common themes of students' change in their self-efficacy and locus of control that supported the results of the quantitative analysis.

The results imply that students are motivated to change their attitudes when they see others' inspirational stories. "The Promise of a Pencil" focuses on how Adam Brown overcame the obstacles and barriers that he experienced, as he persevered and did not give up on his dreams. In particular, when students observe that an ordinary person can achieve extraordinary work, they are motivated to mimic the person's behavior by relating and identifying with the character.

Our study provided valuable implications for administrators and educators in college. Reading motivational books, specifically minority students, may enhance self-efficacy and improve student outcomes. Therefore, motivational books would benefit minority students' self-efficacy and enhance locus of control and a focus in college course curriculums would be beneficial.

5.1. Contribution

This study contributes to the extant literature on minority students' attitudes by revealing the impact of motivational book reading on self-efficacy and locus of control with both quantitative and qualitative approaches. There have been few empirical studies on the programs to improve self-efficacy and locus of control in minority samples. This finding provides practical implications for educators and researchers. In particular, the qualitative analysis of student essays enabled the researchers to capture valuable findings of students' attitude changes, which often quantitative analysis is impossible to capture. The combination of quantitative and qualitative research methods makes the research richer.

5.2. Limitations

We must address the weaknesses embedded in our research. First, there is a limitation in applying the outcomes of this study to other population groups. The participants were primarily minority junior and senior business major students in the east coast of the United States. For different age groups, cultural, and socio-economic groups; motivational book reading might have different effects from the participants in the current study. Thus, future studies need to research a larger study sample.

Secondly, this study measured the changes in self-efficacy and locus of control right after reading the book and found that there are significant changes. However, within the research design, this study could not examine how long the participants retained their changed attitudes.

Lastly, for the data collection, we depended on the participants' self-reported survey. Thus, this causes the risk of common method bias in our dataset.

5.3. Future Research Issues

Our study revealed that reading motivational books influenced readers' attitudes and changes in attitudes. The current study ran only one session where students read one book. Future research may include multiple sessions where students read many books in intervals, and their attitude changes are tracked for each session. Thirdly, to enhance learning from the book, we required participants to write essays to reflect their learning. To maximize the learning effect, future research may include additional qualitative techniques, and compare each method's impact on attitude changes. Lastly, past studies found that college students' self-efficacy and locus of control influenced academic performance and satisfaction with college life (Anderson et al., 2005; Wang, 2005; Zajacova et al., 2005) and retention rates (Gifford et al., 2006). Due to the limitations in the timeframe, our study could not examine the effects of motivational book reading on long-term outcomes. Future studies may include a longitudinal research approach that can investigate how motivational book reading leads to sustained increases in retention rates, academic performance, and satisfaction long-term.

REFERENCES

Ahn, T. (2015). Locus of control and job turnover. *Economic Inquiry, Vol. 53, Issue 2,* 1350-1365. Available at: https://doi.org/10.1111/ecin.12173.

Ahn, J., Lee, S., & Yum, S. (2018). Leaders' core self-evaluation, ethical leadership, and employees' job performance: The moderating role of employees' exchange ideology. *Journal of Business Ethics, Vol. 148, Issue 2,* 457-470. DOI:10.1007/s10551-016-3030-0.

Anderson, A., Hattie, J., & Hamilton, R.J. (2005). Locus of control, self-efficacy, and motivation in different schools: Is moderation the key to success? *Educational Psychology, Vol. 25, Issue 5,* 517-535. Available at: https://doi.org/10.1080/01443410500046754.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, Vol. 84, Issue 2,* 191-215. Available at: https://doi.org/10.1037/0033-295X.84.2.191.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. New Jersey: Prentice-Hall Inc.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, Vol. 28, Issue 2*, 117-149. Available at: https://doi.org/10.1207/s15326985ep2802_3.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: MacMillan Publishing.

Baron, J.D., & Cobb-Clark, D.A. (2010). Are young people's educational outcomes linked to their sense of control? *IZA Discussion Paper No. 4907. Institute for the Study of Labor (IZA)*. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1599005.

Brown, A. (2014). *The promise of a pencil: How an ordinary person can create extraordinary change.* New York: Scribner.

Bresman, H. (2013). Changing routines: A process model of vicarious group learning in pharmaceutical R&D. *The Academy of Management Journal, Vol. 56, Issue 1*, 35-61. Available at: https://www.jstor.org/stable/23414344.

Bursik, K., & Martin, T.A. (2006). Ego development and adolescent academic achievement. *Journal of Research on Adolescence, Vol. 16, Issue 1*, 1-18. Available at: https://doi.org/10.1111/j.1532-7795.2006.00116.x.

Carter, W.R., Nesbit, P.L., Badham, R.J., Parker, S.K., & Sung, L.K. (2018). The effects of employee engagement and self-efficacy on job performance: a longitudinal field study. *The International Journal of Human Resource Management, Vol. 29, Issue 17,* 2483-2502. DOI:10.1080/09585192.2016.1244096.

Coleman, M., & DeLeire, T. (2003). An economic model of locus of control and the human capital investment decision. *The Journal of Human Resources, Vol. 38, Issue 3*, 701-21. Available at: https://doi.org/10.2307/1558773.

Duncan, G.J., & Dunifon, R. (1998). Soft-skills and long-run labor market success. *Research in Labor Economics, Vol. 17*, 123-149. DOI:10.1108/S0147-9121(2012)0000035036.

Ertmer, P.A., Conklin, D., Lewandoski, J., Osika, E., Selo, M., & Wignall, E. (2003). Increasing preservice teachers' capacity for technology integration through the use of electronic models. *Teacher Education Quarterly, Vol. 30, Issue 1*, 95-112. Available at: https://www.jstor.org/stable/23478427.

Gioia, D.A., & Manz, C.C. (1985). Linking cognition and behavior: A script processing interpretation of vicarious learning. *The Academy of Management Review, Vol. 10, Issue 3*, 527-539. Available at: https://doi.org/10.2307/258134.

Gifford, D.D., Briceno-Perriott, J., & Mianzo, F. (2006). Locus of control: academic achievement and retention in a sample of first-year university students. *Journal of College Admission, Vol. 191*, 19-25.

Gist, M.E., Schwoerer, C., & Rose, B. (1989). Effects or alternative training methods on self efficacy and performance in computer software training. *Journal of Applied Psychology, Vol. 74*, 884-891. DOI:10.1037/0021-9010.74.6.884.

Groves, M.O. (2005). How important is your personality? Labor market returns to personality for women in the US and UK. *Journal of Economic Psychology, Vol. 26, Issue 6*, 827-841. Available at: https://doi.org/10.1016/j.joep.2005.03.001.

Heckman, J.J., Stixrud, J., & Urzua, S. (2006). The effects of cognitive and non-cognitive abilities on labor market outcomes and social behavior. *Journal of Labor Economics, Vol. 24, Issue 3*, 411-482. DOI 10.3386/w12006.

Howard, M.C. (2019). Task performance influences general self-efficacy, even without increases in the skills required to achieve success. *Journal of Social Psychology, Vol. 159, Issue 5*, 642-647. DOI:10.1080/00224545.2018.1546161.

Judge, T.A., & Bono, J.E. (2001). Relationship of core self-evaluations traits − Self-esteem, generalized self-efficacy, locus of control, and emotional stability − with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, Vol. 86, Issue 1*, 80-92. Available at: https://doi.org/10.1037/0021-9010.86.1.80.

Judge, T.A., van Vianen, A.E.M., & De Pater, I.E. (2004). Emotional stability, core self-evaluation, and job outcomes: A review of Evidence and an agenda for future research. *Human Performance, Vol. 17, Issue 3*, 325-346. DOI:10.1207/s15327043hup1703_4.

Lent, R.W., Brown, S.D., & Larkin, K.C. (1987). Comparison of three theoretically derived variables in predicting career and academic behavior: Self-efficacy, interest congruence, and consequence thinking. *Journal of Counseling Psychology, Vol. 34, Issue 3,* 293-298. Available at: https://doi.org/10.1037/0022-0167.34.3.293.

McCown, R., Driscoll, M., & Roop, P.G. (1996). *Educational psychology: A learning centered approach to classroom practice.* Allyn & Bacon.

Modise, D., & Rambe, P. (2017). Internal and external locus of control of engineering workforce in a power distribution utility: Implications for job performance. *African Journal of Business & Economic Research, Vol. 12, Issue 2/3*, 113-147.

Morris, L.V., Wu, S-S., & Finnegan, C.L. (2005). Predicting retention in online general education courses. *American Journal of Distance Education, Vol. 19, Issue 1*, 23-36. DOI:10.1207/s15389286ajde1901_3.

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications.

Myers, C.G. (2018). Coactive vicarious learning: Toward a relational theory of vicarious learning in organizations. *The Academy of Management Review, Vol. 43, Issue 4*, 610-634. Available at: https://doi.org/10.5465/amr.2016.0202.

Nowicki, S., Duke, M.P., Sisney, S., Stricker, B., & Tyler, M.A. (2004). Reducing the drop-out rate of at-risk high school students: the effective learning program (ELP). *Genetic, Social, and General Psychology Monographs, Vol. 130, Issue 3*, 225-39. DOI:10.3200/MONO.130.3.225-240.

Ootim, B. (2000). Self-efficacy. *Nursing Management, Vol. 7, Issue 3*, 4-7.

Prussia, G.E., & Kinicki, A.J. (1996). A motivational investigation of group effectiveness using social-cognitive theory. *Journal of Applied Psychology, Vol. 81, Issue 2*, 187-198. Available at: https://doi.org/10.1037/0021-9010.81.2.187.

Riding, R.J., & Raynor, S.G. (2001). *Self-perception*. Ablex Publishing, Westport, CT. ISBN: 1 5675-588-0

Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied, Vol. 80, Issue 1*, 1-28. DOI:10.1037/h0092976.

Salazar, R.L., & Hayward, S.L. (2018). An Examination of college students' problem solving self-efficacy, academic self-efficacy, motivation, test performance, and expected grade in introductory-level economics courses. *Decision Sciences Journal of Innovative Education, Vol. 16, Issue 3*, 217-240. DOI:10.1111/dsji.12161.

Schunk, D.H. (2000). *Learning theories: An educational perspective*. Prentice-Hall.

Schwarzer, R., & Born, A. (1997). Optimistic self-beliefs: Assessment of general perceived self efficacy in thirteen cultures. *World Psychology, Vol. 3, Issue 1*, 177-190.

Spector, P.E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin, Vol. 91, Issue 3*, 482-497. Available at: https://doi.org/10.1037/0033-2909.91.3.482.

Stajkovic, A.D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta analysis. *Psychological Bulletin, Vol. 124 Issue 2*, 240-261. Available at: https://doi.org/10.1037/0033-2909.124.2.240.

Stone, R.W., & Henry, J.W. (2003). The roles of computer self-efficacy and outcome expectancy in influencing the computer end-user' commitment. *Journal of End User Computing, Vol. 15, Issue 1*, 38-53. DOI:10.4018/joeuc.2003010103.

Stumper, S.A., Brief, A.P., & Hartman, K. (1987). Self-efficacy expectations and coping with career-related events. *Journal of Vocational Behavior, Vol. 31*, 91-108.

Sumpter, D.M., Gibson, C.B., & Porath, C. (2017). Act expediently, with autonomy: Vicarious learning, empowered behaviors, and performance. *Journal of Business Psychology, Vol. 32, Issue 2*, 131-145. Available at: https://doi.org/10.1007/s10869-016-9440-2.

Tierney, P., & Farmer. S.M. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. *Academy of Management Journal, Vol. 45, Issue 6*, 1137-1148. DOI:10.2307/3069429.

Torres, J.B., & Solberg, V.S. (2001). Role of self-efficacy, stress, social integration and family support in Latino college student persistence and health. *Journal of Vocational Behavior, Vol. 59, Issue 1*, 53-63. Available at: https://doi.org/10.1006/jvbe.2000.1785.

Turnipseed, D.L. (2018). Emotional intelligence and OCB: The moderating role of work locus of control. *Journal of Social Psychology, Vol. 158, Issue 3*, 322-336. DOI: 10.1080/ 00224545.2017.1346582.

Van Kaam, A. (1969). *Existential foundations of psychology*. New York: Double Day.

Walumbwa, F.O., Christensen-Salem, A., Ichieh, H., & Misati, E. (2018). Creative self-efficacy and creative performance: Understanding the underlying mechanisms. *Academy of Management Annual Meeting Proceedings, Vol. 1*, 1-6.

Wang, D. (2005). Students' learning and locus of control in web-supplemental instruction. *Innovative Higher Education, Vol. 30, Issue 1*, 67-82. DOI:10.1007/s10755-005-3299-x.

Wood, R.E., Bandura, A., & Bailey T. (1990). Mechanisms governing organizational performance in complex decision-making environments. *Organizational Behavior and Human Decision Process, Vol. 46, Issue 2*, 181-201. Available at: https://doi.org/10.1016/0749-5978(90)90028-8.

Xu, X., & Yu, K. (2019). When core self-evaluation leads to career adaptability: Effects of ethical leadership and implications for citizenship behavior. *The Journal of Psychology, Vol. 153, Issue 5*, 463-477. Available at: https://doi.org/10.1080/00223980.2018.1564724.

Yoon, M.H., & Yoon, D.J. (2019). When and why does relative leader-member exchange enhance service performance? : The roles of self-efficacy, team commitment, and multi foci team-level differentiation. *International Journal of Contemporary Hospitality Management, Vol. 31, Issue 7*, 2666-2690. DOI:10.1108/IJCHM-07-2018-0592.

Zajacova, A., Lynch, S.M., & Espenshade, T.J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education, Vol. 46, Issue 6,* 677-706. DOI:10.1007/s11162-004-4139-z.

*The data that support the findings of this study are available from the corresponding author, [KK], upon reasonable request.