

Is self-efficacy a
product of past
performance or a
driver of future
performance?...



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Self-efficacy is defined as a person's belief about their capabilities to produce designated levels of performance which exercise impacts over events that affect their lives. Self-efficacy is strongly related to work performance however it depends on task complexity. Previous studies shows that both self-efficacy and motivation are a part of performance however present studies analyzes the research findings which belongs to the relationship between self efficacy, work related performance and motivation.

A meta-analysis study was conducted by Sitzmann & Yeo, (2013) to investigate if within the person self-efficacy or performance relationship produces positive, null or negative effects on the past or future performance. The research also tested to compare the strength of the current performance and self-efficacy with the past and self-efficacy. Sitzmann & Yeo, (2013) asserts that the past performance has an impact on self-efficacy which later affects future performance. Past performance has a positive impact on the self-efficacy because the way one performed in the past can be used a way of judgement and it determines the future success. The gap identified in the previous studies is that they performed the effects of self-efficacy and performance on the individual's level of analysis but this design is not reliable to differentiate between an individual's self-efficacy and performance vs effects of past performance on self-efficacy. Results from other studies have demonstrated that there is positive correlation between the individual's self-efficacy/ performance and positive effects in the past (Sitzmann & Yeo, 2013)

The researcher used correlational meta-analysis to compare the results from different studies based on different methodologies. It controls

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methodological artifacts to give a conclusion of difference in sizes which are hypothesized moderators than the factors which correlate with this study. The researcher investigated if self-efficacy in someone's relationship could be affected by different moderators. The researchers tested if self-efficacy was assessed using unipolar scale or by Likert and whether it was done in the laboratory or in the field research or in published sources (Sitzmann & Yeo, 2013).

The researcher used different procedures to choose studies for meta-analysis. They first looked in the Sitzmann and Ely's (2011) database to identify the studies that investigated self-efficacy since the construct was in their meta-analysis of self-efficacy domain. Secondly, the researcher assessed the studies reviewed by Bandura to check for relevance. The references which were used in the meta-analysis and other relevant studies were reviewed. Moreover, the literature searches were conducted from Psyc Info and Digital Dissertations identify the studies which may have been left. Lastly, there were 142 doctors and researchers who were experienced in self-efficacy that were asked to give lead on printed and unprinted sources. The studies that qualified were those whose participants were physically and mentally sound. Self-efficacy and performance were tested in three points. There were 38 studies that were reviewed which contributed to meta-analysis. They included twenty-eight published as well as ten unpublished researches Neal, (2013).

Data was collected from 5, 414 participants and the reports had repeated measurements of performance as well as self-efficacy. In some studies, there were college students, adults, and employees. Data was analyzed meta
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analytically and the correlations were calculated the data set of the person period which every individual had several rows of data. The variables were individual mean centered where every person's average score in all trials was subtracted from his score on every trial and correlated (Neal & Yeo 2013).

The measurement of the person's individual score was taken based on the sample size in the individual period data set during the time of computing the correlations. This was done so because there were studies which had a big sample size and it produced repeated measures that were more reliable. The reliability and error of efficacy measures was determined by correcting the mean and variance correlations using Hunter and Schmidt 's formula (Sitzmann & Yeo, 2013)

From the results, 42% of the studies did not show reliability coefficients for self-efficacy therefore the researcher used artifacts distribution corrections. However, some studies indicated the reliability coefficients for every repeated measurement there the average reliability was used in the artifact distribution. There were no range restrictions therefore no bias was corrected

According to the results of the current study and analysis from previous data, there was no wanted exclusion obtained from the meta-analysis. The author gave raw data which was analyzed using HLM software to remove the variance in performance and self-efficacy in the linear trajectory. It also analyzed past performance and self-efficacy. In this case the past performance was created with self-efficacy variables using level-residual

from the software in order to obtain the variance in person- mean centered self-efficacy from the previous performance. Secondly, the residual function was used in creating self-efficacy, performance and past performance variables which excepted variance characteristics. to linear trajectory (Sitzmann & Yeo, 2013)

The results from this analysis indicated that self-efficacy's meta-analytic corrected in an individual correlation with performance is significantly greater than zero. Implying that people who have high confidence increases the way they perform. These results are consistent with the self-efficacy theory by Bandura which states that self-efficacy leads to a positive impact on the performance of the individual (Bandura, 2012). However, the impact is not invariant because most of the studies demonstrated that self-efficacy negatively affected an individual's performance due to the contextual factors.

The gap we found in this literature review is insufficient data to examine relationship between self-efficacy and performance meta analytically at the within-person level.

We see that meta-analysis was based on 38 studies but that is too early to conclude that effect of meta-analytic apply across all context. For this study we need more research to clarify how the relationship differ across situation.

This study only focused on single goal context which may have subside the within-person effect of self-efficacy on performances. So, future research should compare self-efficacy causes and effects across multiple goal context.

Future research also distinguish goal setting and goal striving phases while developing comprehensive model of within-person self-efficacy performance reciprocal effects. It is seen from the studies that during goal setting, self-efficacy was positively related to the decision to allocate resources while during goal striving its negatively related to resource allocation. So researchers must ensure that people are holding goal level constant when examining goal striving.

Lastly, researcher should develop an integrative framework of mediating mechanism that affects self-efficacy or performance relationships.

Literature Review

According to review papers from google scholar of top journals we collected 10 articles together to show how self-efficacy impact performance. Scholars based on different research aims and different kinds of view to study the relationship between self-efficacy and performance. A research was conducted on self-efficacy and performance in computer software training by Gist, Schwoerer, and Rosen, (1989). According to them, software self-efficacy was developed on the job experience training therefore it is a dependent variable compare to the other variable (computer self-efficacy) in the context which was considered an independent variable, this was based on the fact that measures were taken to know the level of participants computer self-efficacy before training commenced . A 15 minutes task performance test was conducted at the end of the training to know participants' ability to use the software. However, the study shows the correlation between software self-efficacy and performance is. 80**

Bouchard (1990) conducted the second study and found that how perceived self-efficacy influenced cognitive performance among 64 college students. Studies shows that students with high perceived self-efficacy, inspired by positive feedback, completed more problems, had more efficient problem solving strategies and had accurately self evaluated responses. From this 4 indicators it can be seen that there is strong positive correlation between perception of self-efficacy and problem success among high self-efficacy students. The result of this study shows that students with high self-efficacy had determined higher achievement goals than in low self-efficacy people.

Mitchell, Hopper, Daniels, Falvy, and James (1994) researched on some students who were assigned job as an air traffic controller. They found out that people decrease their cognitive effort over time in performing the task. That supports hypothesis-1, but when individual factors contribute to self-efficacy, the impact was not significant enough over trials. The correlation between actual performance and self-efficacy were . 79, . 64, . 64 and . 54 (all significant at $p < . 01$) for trials 2, 4, 5 and 7 respectively. So, overall hypothesis -1 outcome was convoluted. Hypothesis-2 showed the clearer picture than hypothesis-1. The relationship between the expected score for a trial and the reported goal (at the end of trial) was very high. The correlation between the goal and expected score was . 94 with 90% common variance. On the other hand, the correlation between self-efficacy and the expected score was . 63, with only 40% common variance. So, the relationship among self-efficacy, expected score, goals, and performance are complex change over skill acquisition process.

Three studies were conducted by Cole and Hopkins (1995) and they have examined the relationship between the reported self-efficiency and performance. The employees performance in the simulation was correlated with the report of self-efficacy. For study 1, 13 male and 17 female graduate students were asked to manage the computer simulated furniture factory. Their performance was measured in hours and it took the group to complete 18 weekly production order. Later they were asked to fill out the questionnaire which tells about self-efficacy at the end of each week of the simulation. From 6 weeks to the end of 12 weeks, gradually positive correlation between self-efficacy was reported. Hence, study 1 again reproduced the typical significant positive correlation which was already obtained by Bandura and colleagues.

Lastly (Bandura 1988; Schunk 1989; Elliot Dweck, 1988; Carver and Scheier, 1990)

Subsequent study, Schmidt and DeShon (2010) focused on performance ambiguity

(Ambiguity was operational zed by letting participants know the number of words embedded

In the experimental game task). They showed that under high ambiguity (no such information was provided), self-efficacy was negatively related to subsequent performance, whereas under low ambiguity, self-efficacy was positively related to subsequent performance. Their results are consistent with the reward moderation idea because, compared to participants in the

high ambiguity condition, participants in the low-ambiguity condition actually
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had a goal (i. e., the number of possible words), which, similar to reward, promotes motivation.

The last study conducted by Niu (2010) analyzed the link between self-efficacy and career commitment in a food industry of 1025 employees. Likert scale of 7 point was used ranging from “strongly disagree” to “strongly agree.” ANOVA of survey data has supported the link between self-efficacy and career commitment. Using a Chi square test, positive correlation between self-efficacy and career commitment has been found in this study and the result of this test is significant. This implies that employees with higher self-efficacy are highly committed in their job.

Brown, Jones, and Leigh (2005) considered the effect of role overload on self-efficacy and goal level to work performance of sales representatives.

Empirical data showed a significant positive effect of organizational resources on self-efficacy when role overload was low not when it was high. The correlation between self-efficacy and personal goal is weak. So, it did not support hypothesis 2. Performance model result shows in stage 1 & 2 that self-efficacy was strongly related to high performance when role overload was low. However, in stage 3 when role overload was high, neither self-efficacy nor goal level was significantly related to performance. Therefore, self-efficacy has significant effects on performance in case of low role overload, but in high role overload, any strong impact is not found.

Judge, Jackson, Shaw, Scott, and Rich (2007) studied the role of individual differences in self-efficacy and work-related performance. They found out self-efficacy moderately influenced performance ($\beta = .13$, ns). However, the

number of variables significantly influenced self-efficacy and work-related performance. Correlations were as follows: self-efficacy $R = .57$ ($p < .001$) and work-related performance $R = .68$ ($p < .001$). Here, correlation of self-efficacy with work-related performance varied considerably when they considered moderator variables. These variables reduced the validity of self-efficacy on performance by 67.43%. Therefore, although self-efficacy is moderately correlated with work performance, once individual differences come into play this self-efficacy and performance positive correlation degrades significantly.

Firstly, a study conducted in an insurance company in Taiwan by Gong, Huang, and Farh, (2009) examined employee creative self-efficacy, performance and motivation. According to them, a resource mobilization test was performed on old employees to assess their ability to attract new clients and other resources. The result from this assessment was measured with employee's supervisor performance appraisal to know if they corresponded. The study concluded that both employee creative self-efficacy and supervisor rated job performance were positively related.

Finally, a meta-analytic research conducted by Moritz, Feltz, Fahrback, and Mack, (2000), shows a correlation between self-efficacy and performance. Studies were conducted in the area of sport performance in relation to self-efficacy and an average correlation reported between the two variables was .38. Based on their findings, evidence shows the way other variables such as age, time, ability and effort were not consistent therefore, several analyses were conducted due to diverse " individual development differences, time, ability, and effort". However, with a view to reconcile the differences, the <https://assignbuster.com/is-self-efficacy-a-product-of-past-performance-or-a-driver-of-future-performance/>

specific task, type of performance and time of assessment were harmoniously measured.

Conclusion

The results from this meta-analysis demonstrate that within-person level analysis, self-efficacy gives best positive but moderate effects on the performance as well as null effect when the conditions are moderate. Secondly, findings show that the major effect of past performance on self-efficacy is greater than the effect on self-efficacy on performance in moderate conditions. Lastly, the past performance effects on self-efficacy ranges from moderate to the strongest across all moderating conditions. The effects of the two is statistically significant based on the performance tasks, methodological and contextual factors.

Thus it is concluded from the above studies that performance of an employee is positively influenced by the overall self-efficacy. In addition to this, people who have high self efficacy are most likely to set goals for themselves which are most often achieved. These studies evaluates the impacts of self-efficacy of the individuals on the performance at workplace, and the mechanism by which an individual by their self-efficacy determines his or her job performance and motivation.

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