

# Perception on Collaborative Writing, Self-efficacy and Writing Achievement in Information Technology Era : A Correlational Study

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**Abstract.** This mix method study investigated the correlation among students' perception on collaborative writing (SPoCW), students' self-efficacy (SSE) and students' writing achievement (SWA). The quantitative data of the study was gained from 62 students who have been taught using collaborative writing during one semester. The data included the students' perception on collaborative writing questionnaire adapted from [1]. The questionnaire consisted of 18 statements with a five Likert scales. The reliability is 0.892. While students' self-efficacy is measured using self efficacy questionnaire consists of 23 statements adopted from [2] with the reliability is 0.80. Using correlation Pearson Product Moment, It was found that SPoCW correlated with SSE and the score is 0.377. To investigate the correlation between independent variable (SPoCW and SSE) and dependent variable (SWA), the researcher used Analysis Model Summary, it showed that R Square value is 0.394. This mean that the effect of SPoCW and SSE toward students writing achievement is 39.4 % and the rest is influenced by another factor. While to get qualitative data, semi structure interview was randomly given to the students and it was revealed that mostly students felt confident and had a new writing experience with collaborative writing which strengthen the investigation. It is recommended to build good students' perception and self-efficacy for best writing achievement.

## 1. INTRODUCTION

The weaknesses of learning writing recently has been an interesting topic to be discussed. Like the other English skills, learning to write encounters some problems. The problems are; having no idea and willingness to write, having no space and chance to write, lackin of vocabularies and having limited knowledge about grammar. As a productive language skill, writing is not really easy to do. It is a difficult task for any people from any age group.[3]

Since It is not just a mechanical task but also a mental activity. Particularly students at school do not like writing or experience difficulty in writing task. [4] Most of the students have good idea to write but not to compose into text. Dealing with the ability of writing, more students who have a good cognitive ability to write but it is not impelled by the motivation. [5] stated that the main reason for the student's reluctance to write are lack of self confidence (40.2%) and lack of motivation (16.1%). Self-confidence becomes very interesting to study in this case. Since to be success in everything ones should have strong motivation and self-confidence. Some studies investigated that the success of writing in line with the motivation or writing self efficacy and attitude on writing achievement.[6] ;[7] ;[8]. Perceived self-efficacy took an important factor which affect learning achievement.

The correlation between self-efficacy toward students learning achievement has been studied by many researchers. The research finding showed a positive relationship between reading self-efficacy and reading comprehension of Iranian EFL learners [9] The other study found that there is positive and high correlation between writing attitude and writing self-efficacy beliefs and writing self-efficacy beliefs affects summary writing directly and significantly [5].



Although one's self efficacy have positive relationship for the students' writing achievement, but there is still another factor which contribute to the success of learning writing. To be a better writer, the students have chance to collaborate with other in order to share their idea and thought.

The researchers mostly found the advantages of learning to write [10] and writing to learn a second language. Collaboratively, that is, collaboration while the writing process support learners to encourage and learn from each other's writing and regulation processes [11] and as a result, is believed to have a positive effect on individual writing as in for example the production of better (more accurate) text [12] It also found that most students experienced enjoyable with CW condition and it supported to their L2 learning [13]

Beside CW itself, the perception toward CW is interesting topic to be investigated. A study about perception toward online CW [14] found that there was a positive attitude towards the online collaborative writing. It's also added that collaborative writing strategy has supported students in generating their writing ideas and enhancing the students' background knowledge of the topics assigned to them to develop their writings.

For the researcher point of view, the success of learning writing is influenced by many factors. The recent study scrutinizes whether the students' perception toward collaborative writing, students' self-efficacy and students' writing achievement are correlated each other. It is hoped that this recent study will be valuable contribution for learning writing for English learner.

### 1.1 Research Question

This current research will investigate two research questions stated as follow;

- a. Is there any correlation between students' perception on collaborative writing and students' self-efficacy?
- b. Is there any correlation among students' perception on collaborative writing, students' self efficacy and students' writing achievement?

## 2. REVIEW OF RELATED LITERATURE

### 2.1 Student Perceptions on Collaborative Writing.

Perception related to individual opinion or assessment toward a stimulant in the form of thing, sign and certain condition which influence motivation, willingness and individual sense to the stimulant [15]. Perception is the active process done by human to give certain meaning to the environment (human, object, event, situation and phenomena ) by choosing, organizing and interpreting the environment. [16] The active process consists of three continuous process and integrated each other that are selection, organization, and interpretation stimulation toward sensory to be meaningful and coherent perspective [16].

[17] Referred to perception as the process of information extraction. They specified that perceptions are the procedures that regulate how humans understand their environment. [17] Defined perception as a dynamic process as one selectively observes, manages, and construes what one experiences. Interpretations are made based on the perceivers' past experiences, expectations of human behaviour, knowledge of other situations, attitudes, needs, and outlooks.

[18] classified perceptions into individual and general. They stated that human behaviours are influenced by each other's perceptions, and these behaviours can potentially be influenced directly or indirectly by general perceptions.

Hence, a student's perception refers to the comprehension of stimuli that are created by connecting to previous perceptual sets that are formed from experience, exposure, or other communication methods. Perception is related to the human senses that create signals from the environment through sight, hearing, touch, smell and taste.[19]

### 2.2 Self efficacy

The concept of self-efficacy was first familiarized by [19]. He conveyed that people's sense of self-efficacy affects their motivation, behavior, and actions. It also stated self-efficacy as "people's judgments of their abilities to manage and execute courses of action required to get designated types of performances" (p. 391). Based on social cognitive theory goals increase peoples's cognitive and affective reaction to performance outcomes because goals specify the requirements for personal achievement. Goals also promptly monitored and self judgments of performance achievements.

Self-efficacy is one of the most important affective factors influential on the writing skill. Self efficacy motivation is the belief that one's have in one's own ability, specifically one's ability to meet the challenges ahead of her/him and complete a task successfully [19] General self efficacy refers to one's overall belief in her/his ability. While [20] defined that self-efficacy refers to people's specific judgments and beliefs about their abilities like reading a book, writing a poem, etc. Further he conveyed that defining motivation and especially self-efficacy

lead to teachers for student's engagement in literacy activities. Students who are efficacious are more likely to work hard, to persist, and to seek help so they can complete challenging tasks. Efficacious students easily achieve their goals. This success motivates them in more literacy activities engagement, which, in turn, increases their reading and writing achievement.

### 3. RESEARCH METHOD

This mixed method study is aimed at finding the correlation among SPoCW, SSE and SWA. The quantitative data of the study was gained from 62 students who have been taught using collaborative writing during one semester. The data included the students' perception on collaborative writing questionnaire adapted from [1] While, students' self-efficacy is measured using self efficacy questionnaire consists of 23 statements adopted from [2] Then to investigate the correlation between independent variable (SPoCW and SSE) and dependent variable (SWA), the researcher used Analysis Model Summary. To get qualitative data, semi structure interview was randomly given to the students to strengthen the research finding.

#### 3.1 Data Source

The population of the subject is the 9<sup>th</sup> grade students of State Islamic Junior High School Gresik 2019-2020 academic year. While all the students from two classes were chosen as the sample of the research. Since they have learnt writing learning process using collaborative writing. They were 62 students from class 9B and 9C. The data taken from the sample were SPoCW questionnaire, SE questionnaire and their writing score.

#### 3.2 Instrument

To collect the data in the field of study the researcher used two instruments in the form of questionnaires and one writing test. To strengthen the result of the research, the researcher also used semi structure interviews. This, is used as an additional information about the research. The first questionnaire is about SPoCW. It is adapted from [1] The questionnaire consisted of 20 statements with a 5 point Likert scales, (strongly agree, agree, neutral, tend to disagree and strongly disagree). Each scale was scored differently. For strongly agree got 5; agree was 4; neutral was 3; tend to disagree was 2; and score 1 for strongly disagree. The reliability of the questionnaire has been examined. The result showed that the overall Cronbach Alpha Coefficient of the questionnaire is ( $r=0.89$ ) indicating a very high degree of internal consistency. To get the validity and reliability 62 students attended to fill the questionnaire. From the twenty questionnaire items filled, 18 items are valid because the score was between 0.415 - 0.715. that's bigger than  $t$  table 0.254. Two items were not used since the score was 0.247 and 0.054. While the reliability is 0.892 indicated that it is adequate to be the instrument.

To the second is SSE questionnaire. To get the SSE score the researcher used the questionnaire adopted from [2] A brief questionnaire for measuring self-efficacy in youth. Journal of Psychopathology and Behavioural Assessment, 23, 145-149. The questionnaire consisted 23 questions which categorized into three parts, they are academic self-efficacy, social self-efficacy and emotional self-efficacy which each category contained eight questionnaire items.

Each questionnaire item was scored by using five rating scale they are very good, good, fair, poor and very poor. For very good got score 5, good got score 4, fair got score 3, poor got score 2; and score 1 for very poor. From the result of the analysis, twenty-three items have  $t$  score more than  $t$  table (it ranges between 0.276 – 0.630) indicated that they are valid. While one item has score 0.038. It means that the score bellow than  $t$  table (0.254). It can be concluded that the item cannot be used as the instrument. While the reliability is 0.801 indicated that the instrument is reliable.

To get the students writing score, the researcher got the score from the teacher based on the score of writing descriptive text. To get the score the teacher used grading rubric adapted from Jacobs at all (1981) and adapted by Hedgcock and Lefkowitz (1992) which divide the aspect of writing constructing into five ; they are (1) content ; (2) grammar ; (3) organization ; (4) vocabulary and (5) mechanic. These writing scores then correlated with SPoCW and SSE.

The next is finding the normality. Normality test is used to check whether the data from the variables are normally distributed. Using *One-Sample Kolmogorov-Smirnov* the result showed that the significance value of SSE and SPoCW questionnaires are 0.2 that means it is bigger than 0.05. So, it can be concluded that both the data are normally distributed.

After that is finding the Linearity. It is used to know whether there is linear correlation between the independent variable and dependent variable, that is between SPoCW (X1) and SWA (Y) and between SSE (X2) and SWA (Y) To know it the F one-way Anova was used. The significance value is 0.376. It is bigger than 0.05 so regression direction of independent variable, SPoCW is linear. While, From the linearity test of SSE, the significance value is 0.149 on deviation line of linearity. It is bigger than 0.05 so the regression direction of (independent variable) SSE is also linear.

#### 3.3 Data Collection Analysis

To classify the first and the second data the researcher calculated the score of each item of the questionnaires and calculate the mean. To answer the first research question or the first hypothesis by using Correlation of Product Moment using SPSS program. While to investigate the second research question or the second hypothesis the researcher used Multiple regression equation.

#### 4. RESULT AND DISCUSSION

##### 4.1 *The Result of First Research Question*

The first research question is finding whether there is correlation between SPoCW and SSE. Using the formula of correlation Product Moment, the result showed that the score is 0.377, it is bigger than 0.05 means that there is positive significant correlation between SPoCW and SSE.

This research finding categorized self-efficacy into three aspects. They are academic self-efficacy, social self-efficacy and emotional self-efficacy. The mean score of the academic self-efficacy is 3,60; the mean score of social self-efficacy is 3,69 and the mean score of emotional self-efficacy is 3,50. All of them ranged between 3-4 scale. It means that the SSE is in good range. When asked whether the students have better self-efficacy when doing CW most students said that their self-efficacy increased as well as their perception on CW.

The researcher has done some interviews for the students to find the students opinion about self-efficacy and their perception toward collaborative writing. It is as first interviewee, Nadia said that she felt unconfident frequently with her English ability but she felt more confident if she work in a team. By working in a team, she got some benefits.

When asked about what students' perception toward the process of collaborative writing the second interviewee, Rizka said that collaborative work was not a new thing for her but writing collaboratively was a new experience for her. By joining learning writing collaboratively, she could support her friend. She also agreed that by writing collaboratively they felt more confident since there were collaboration thought, idea and togetherness.

Further when asked whether their self-efficacy in line with their perception toward collaborative writing, the third interviewee Rizal, said that his perception toward collaborative writing is supported by his past experience while learning collaboratively. He got some new knowledge, idea and support from his team during working collaboratively. He felt that his self-efficacy grew better than before.

Based on the result of the interview from some students, they argued that self-efficacy had relationship with the student perception because of some reasons. The first, ones who have good self-efficacy thought that they had such a good sense of doing something. This, influenced to what they will do. The better self-efficacy the better action they will do. The second, one's perception toward something was as a result of behavior and influenced by each other perception. This statement was as [18] added that behaviors were potentially be influenced directly or indirectly.

##### 4.2 *The Result of Second Research Question*

The second research question is finding the correlation among SPoCW, SSE and SWA. To know it the researcher did an analysis of each independent variable toward dependent variable ( using t-table analysis). The t table 0.05 for dk is  $62-2 = 60$  is 2.00. From the research finding the t score for SPoCW variable is 2.608 in which it is bigger than 2.00. It can be concluded that there is significant correlation between students' perception on collaborative writing and students writing score. While the t score for SSE variable is 4.225 in which it is bigger than 2.00, it can be concluded that there is correlation between SSE and SWA.

To know the correlation among students' perception on collaborative writing, students' self-efficacy and students writing score, the researcher used the following step;

The first step is using Analysis Model Summary. The result showed that R Square value is 0.394. This mean that the effect of SPoCW and SSE toward students writing score is 39.4 % and the rest is influenced by another factor.

The second step is using Analysis of Anova. The result showed that F-value is 19.216 with significant level at 0.00 that is bigger than 0.05. This mean that there is correlation between independent variable ( SPoCW and SSE ) and SWA.

This finding strengthens the previous research [5] that there was positive and significant correlation between students' writing attitude and self-efficacy toward their summary writing. In line with this finding, [21] added that in CW each student has their own writing capability. Ones have good in organizing idea, one else good in vocabulary and grammar. So, this condition will be useful for writing collaboratively. Each group will have their own advantages as well as having peer reviewing.

Further, CW can encourage students to share ideas between members of group, respect others' opinions, and manage team work in order to complete their writing task. [21] argues that CW offers six benefits: (1) students can pool ideas and share knowledge and and linguistic resources with each other; (2) they share some responsibilities for completing a writing task; (3) students can

receive direct feedback from the other members of the group; (4) they can learn to manage writing activities; (5) students can maintain social practices in the learning process by helping each other; and (6) student's critical thinking skill can be developed through the process of group negotiation and discussion.

While, CW as the way to develop linguistic and writing of second language has been supported by sociocultural perspective [22]. The result of the studies stated that collaborative situation let the writers encourage to make decisions about language needed to convey, formulate their ideas and produce a text together. Knowledge grow in the discourse between a couple together" (p. 71). He added that Knowledge is situated in a certain activity setting and it involves group working together to gain a common goal.

Through the act of writing collaboratively, learners engage in a dialogue that impels them to notice gaps in their L2 production and then to test new hypotheses regarding language and literacy acquisition. Further, learning is not seen just as the product of one individual's efforts, but as deeply connected to the surroundings, tools and the overall context in which the learning takes place [23]

[21] added that collaboration gave the students chance to share the same aim and equal responsibilities to construct their writing. [24] also found that collaborative writing could improve students' writing skill. He reported that a group implemented a collaborative writing outperformed those who wrote individually. In addition, the students agreed that collaborative writing could promote better interpersonal relation. Recently, the study about collaborative writing done by [25] found that collaborative writing task improved students' engagement in writing process and empowered them to become engaged story tellers.

Dealing with SPoCW the researcher added that one's perception could be different and the perception toward something will influence to how someone will do something. The students' opinion about CW. 90% said that CW was kind of teaching method which gave the students chance to share their idea freely as well as to have peer review among the member of the group. Trough CW a social interaction also happened which psychologically strengthen the group. Our perception of something is a personal interpretation of information from our own perspective. The influence of schools on student's academic performance is appeared from a student's individual perception rather than the objective reality of the activities and interpersonal relations in the educational environment [23].

Even in contrary 10% said that CW was time consumed since the member of group didn't effectively work and did the steps given by the teacher. Based on the researcher knowledge, CW for second language learner has many benefits not only for the learner writing achievement but also for social interaction among them. The social interaction gives them chance to share idea, knowledge, critical thinking which physiologically support their motivation to work together.

## 5. CONCLUSSION

Self-efficacy is one of the most important affective factors influential on the writing skill. Self-efficacy motivation is the belief that one's have in one's own ability. In learning writing, self-efficacy takes an important role for the students writing achievement. The other factor which also contribute is the perception toward collaborative writing. Based on the research finding, there is correlation between student' perception on collaborative writing and students' self-efficacy. This current research also found that there are correlations among students' perception on collaborative writing, students' self-efficacy and students' writing score. It is also strengthened with the students opinion that they get new knowledge by sharing idea, get peer reviewing within the group and make good relationship for better writing achievement after implementing collaborative writing. It's also suggested to build good perception toward learning as well as good self-efficacy to increase the goal of learning writing.

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