

Investigating the correlation between teachers' instructional communication and students' motivation

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Abstract

There is an anecdotal evidence that teachers' instructional communication can affect students' communication. Thus, the present study aims to investigate the correlation between teachers' instructional communication and students' motivation. The present study applies a quantitative approach by distributing a set of questionnaires to 52 participants in a senior high school in Bekasi, Indonesia. The findings of the present study indicate a strong correlation between teachers' instruction communication and students' motivation. In addition, the most salient factors of teachers' instructional communication are feedback and organization of instructional units or teachers' ability to deliver the materials. Regarding students' motivation, the majority of the respondents are motivated by integrated regulation. The latter refers to the respondents' ability to internalize their goals. It can be said that feedback and teachers' ability to present learning materials in an engaging manner can help students to see the merits behind their learning process and internalize the goals. The present study also discuss the implications and further studies.

Keywords: Motivation, Quantitative Method, Teachers' Instructional Communication.

INTRODUCTION

Instructional communication plays an important role in learning and teaching. Instructional communication can be defined as part of a research area that aims to examine the dynamics of communication in teaching and learning related to exchanges of meaning between students and teachers that occur in any context or setting (Preiss & Wheelless, 2014). In this case, instructional communication is closely related to the teacher as the sender of the message (communicator) and students as the recipient of the message (communicant) because the message given is the material taught in class (Thadi, 2019). Therefore, instructional communication is greatly influenced by the teacher's ability to communicate teaching (Shintiyana, 2020). Instructional communication is important because it influences the learning process in the classroom (Arianto et al, 2018). In addition, instructional communication can also affect cognitive, affective and psychomotor aspects of students as the target of communication (Yusuf, 2010). The points above show the importance of teacher instructional communication to students.

Related to the point in the previous paragraph, instructional communication influences student motivation. Learning motivation is the driving force that exists within students to generate learning activities, guarantee the continuity of learning activities, and provide direction for learning or learning activities, so that the desired goals are achieved (Sadirman, 2016). Therefore motivation has an important role in all teaching and learning

processes because the success of the teaching and learning process depends on student motivation (Filgona et al, 2020). Motivation is influenced by intrinsic factors (positive attitude towards the learning and teaching process) and extrinsic factors (teachers or learning environment) (Ryan & Deci, 2017). With regard to extrinsic factors, teacher's communication is an aspect that can motivate students (Webster, 2010). The latter premise has been investigated in various studies. In this regard, the results of Joko's research (2018) show that instructional communication carried out by teachers inside and outside the classroom can have a positive influence on students' motivation as well as students' attitudes and behavior in a better direction. Similar research was also conducted by Utomo (2019) who concluded that there were positive results between the direct influence of instructional communication and students' learning motivation. It can be concluded that teachers' instructional communication skills can influence students' motivation.

The effects of teachers' instructional communication on student motivation has been investigated in several studies (Joko, 2018; Utomo, 2019). However, there is still little research that investigates the correlation between teachers' instructional communication and students' motivation. Such studies might provide more insights on the effects of teachers' instructional communication, especially in the context of teaching and learning in Indonesia, on students' motivation. Therefore, this study aims to analyze the correlation between teachers' instructional communication for increasing students' motivation through a quantitative approach. The present study is specifically guided by following research questions:

- RQ.1 What is the correlation between teachers' instructional communication and students' motivation?
- RQ.2 What are the most salient factors of teachers' instructional communication?
- RQ.3 What are the most salient factors of students' motivation?

LITERATURE REVIEW

Instructional communication

Instructional communication is derived from the word "instruction" which means learning or teaching (Yusup, 2010). Instructional communication is a branch of educational communication that focuses on interpersonal communication and public speaking techniques (Conley & Ah Yun, 2017). However, the scope of educational communication is wider than simply instruction. When the term communication is combined with education and instructional, the terms educational communication and instructional communication occur (Yusup, 2010). Therefore instructional communication can be defined as a research area that analyzes the dynamics of communication in learning and teaching related to the exchange of meaning between teachers and students in various settings, subjects or studies (Preiss & Wheless, 2014). Therefore instructional communication is related to the teacher's role as a communicator who always needs improve his/her skills in communicating because it becomes a provision in changing student behavior in a better direction. The benefits of instructional communication also include the impact of changes in behavior that occur through instructional communication actions (Yusup, 2010).

Therefore, the instructional process occurs when someone can help others in changing behavior. This process involves an intentional attempt. In this regard, Yusup (2010) identified following indicators as teachers' instructional communication: Specification of content and instructional objectives (The communicator, namely the teacher must determine the content and instructional goals before carrying out teaching or learning), assessment of initial behavior (As communicators, what we know about other people often influences our communication behavior), application of instructional strategies (Teacher must decide which strategy is right to carry out the teaching or learning process. This strategy must be adapted to the circumstances of each student as well as the information from each subject that needs to be conveyed or reviewed. The situation and conditions in the field greatly influence the strategies used by communicators or teachers), organization of instructional units (Teacher as a communicator who deliver information to each student in a systematic and sequenced system from

various small units and nothing should be missed. The instruction should be started from a simple thing to more complicated, and proceeded to more complex or difficult), and feedback (The functions of the feedback are to evaluate success, to determine how much impact the communication strategy implemented, and to determine whether the material understanding plan is in accordance with the learning objectives).

Students' Motivation

Students' motivation can have a significant effect on learning achievement and student independence. Motivation is a change in energy within a person which is marked by the appearance of "feeling" and is preceded by a response to a goal (Sadirman, 2018). Learning, motivation is an internal state that improves, directs and maintains students' desires and behavior in learning (Woolfolk, 2019). Several studies have shown that motivation plays an important role in improving students' achievements (Adara & Haqiyah, 2020, 2021; Huang, 2011; Hulleman et al., 2010; Möller et al., 2009). In addition, motivated students will show more independence in completing assignments (Liu, 2015). Therefore, motivation has an important role in increasing student achievement and independence.

Motivational orientation concerns the underlying attitudes and goals that lead to their actions-regarding why they act (Ryan & Deci, 2020). A person who tends to feel motivated has energy or is actively moving within himself, whereas a person who is not motivated tends to be lazy in acting, even feeling that there is no encouragement or inspiration to act. However, the feelings of someone who has motivation within him will be different from the quantity and different from the type of motivation he has. Therefore, a person's motivation varies not only in the level of motivation, but also in the orientation of the motivation or the type of motivation.

Various theories have attempted to explain motivation (Credé & Phillips, 2011; Gopalan et al., 2017). One of them is Self Determination Theory (SDT) or self-identification theory developed by Edward Deci and Richard Ryan in 1985. SDT is a comprehensive framework of thinking about motivation and is used to explain how a person can succeed in various aspects of life (Ryan & Deci, 2017). This theory has been quantitatively and qualitatively effective for explaining various types of motivation and their impact on achievement and various positive outcomes in the process of teaching and learning in schools (Howard et al., 2021; Vasconcellos et al., 2020). Therefore, SDT is used as a medium to explain the correlation between motivation and instructional communication in this study.

Therefore, according to SDT, motivation is divided into two types; intrinsic and extrinsic motivation. Intrinsic motivation is internal motivation, there is a drive to encourage someone to behave in a certain way which is a core value, interest, and personal morality. On the other hand, extrinsic motivation is the urge to behave in a certain way based on external factors such as appraisal systems, rewards, employee evaluations and other factors (Ryan & Deci, 2020). Both types of motivation influence each other. In this case, intrinsic motivation can be present due to external influences while individuals will also try to find external factors that support the learning process if they are intrinsically motivated. Furthermore, SDT separates extrinsic motivation into four types based on how effective the internalization process is, namely external regulation, introjected regulation, identified regulation, and integrated regulation (Deci et al., 1991).

a. *External regulation*

Located at the extreme end of extrinsic motivational autonomy, external regulation has a form of behavior that is controlled and has the weakest level of self-determination (Ryan & Deci, 2020). External regulation is behavior that is formed due to external consequences from outside the individual, either in the form of rewards or punishments (Whitfield et al., 2021). Therefore, it can be interpreted that external regulation is the urge that arises in a person to do something because of external factors that are influenced by the individual in the form of reward or punishment. For example, students are serious about taking exams to get good grades in order to get praise from the teacher or students do homework assignments given by the teacher for fear of being punished by the teacher.

b. *Introjected regulation*

Introjected regulation is on a slightly autonomous extrinsic motivation. Described as a form of internal regulation, but still controlled because a person does something with feelings that suppress himself from within to avoid feelings of guilt, anxiety, to achieve peace or self-esteem (Ryan & Deci, 2020). For example, someone feels that learning every day is good for increasing learning achievement (positive feeling). However, he feels that learning every day is not supported by his friends because he has less time to play with his friends (negative feeling). Thus, introjected regulation is an impulse that arises in a person to get positive feelings (calmness, self-esteem) or avoid negative feelings (guilt, anxiety, worry) within oneself which requires a person to do so because there is no choice (Santoso, 2013).

c. *Identified regulation*

Identified regulation occurs when an existing behavior or arrangement is considered as something important to him/her (Ryan & Deci, 2017). For example, a student chooses to read a book in the library because he knows the benefits of that activity. Therefore, identified regulation is a person's encouragement to act because he considers the action or behavior that is carried out important in achieving the desired goal.

d. *Integrated regulation*

One of extrinsic motivations that has the most desired factors is integrated regulation. When identifications have become integrated, people are wholeheartedly involved and carry out an activity in relation to the purpose of the activity, and without obstacles or internal conflicts (Deci et al, 2017). The form of extrinsic motivation that is most autonomous and shares many values with intrinsic motivation is integrated regulation. The difference between intrinsic motivation and integrated regulation lies in someone who is intrinsically motivated to do something for his pleasure and satisfaction, while integrated regulation does something because the behavior is in accordance with the self-concept they have (Ryan & Deci, 2017). Therefore, integrated regulation can be defined as a person's encouragement to do something in accordance with one's self-concept in order to achieve the desired goal.

Previous Studies

Several studies have managed to investigate teachers' instructional communication and motivation. The effect of teacher instructional communication on student achievement is the subject of study by Amin et al's research (2019). This study uses a quantitative approach and survey techniques with a total of 72 respondents in MAN 2 Makassar City. The probability / random sampling technique method was used to collect the sample. Meanwhile, the validity and reliability tests used bivariate Pearson and Cronbach Alpha correlations with the help of the SPSS 21 program. The data analysis process used simple linear regression. The purpose of this study was to find out how teacher instructional communication can affect student achievement. The results of this study found that effective instructional communication significantly improves student achievement. Therefore, it can be concluded that student success in learning is correlated with the level of instructional communication involvement in the school or environment.

In addition, Joko's research (2018) analyzes teachers' instructional communication in increasing students' motivation. This study combines observation research methods, interviews and documentation. The research results were analyzed qualitatively. Informants in this study were 10 teachers at SMPN 5 Kendari. The research data were analyzed using a qualitative descriptive method, namely by describing each narrative and interpretive explanation by linking various phenomena in detail and systematically obtained during the study. The purpose of this study was to determine teacher instructional communication in fostering student learning motivation and how the level of student changes to teacher instructional communication drives changes in student learning motivation at SMPN 5 Kendari. The results of this study indicate that the instructional communication carried out by the teacher is able to increase students' learning motivation both inside and outside the classroom. This can be proven if students are in the classroom students are faster in completing assignments and tend to be more active in answering questions and in asking questions to the teacher. When outside the classroom, the attitudes and behavior shown by students become more polite both to teachers, friends or to the environment in society.

In addition, when viewed from the quality of the final test results, the average is close to the expected target.

Besides that, Khoiroh's research (2016) looks at how students' positive mindset can be influenced by teachers' instructional communication in learning Indonesian at SDN Pakukerto 1. The descriptive method is combined with a quantitative approach in this study. There were 183 students (i) in this study with a total of 92 girls and 91 boys as the population. Purposive sampling method was used to select 32 students who were used as research samples. The SPSS 17.00 program was used to test the validity and reliability using Pearson Product Moment and Cronbach Alpha, as well as data analysis techniques using linear regression analysis. The purpose of this research is to find out how students' positive mindset is influenced by teacher instructional communication in learning Indonesian. This study shows that the teacher's instructional communication variable in class Indonesian lessons has an average of 4.31 while for the positive mindset variable of students in class III, IV, V and VI Indonesian lessons the average is 4.46. Both of these variables fall into the very good category. The positive and significant influence of teacher instructional communication on student mindset is 51.4. It can be concluded that instructional communication influences students' positive mindset in learning Indonesian.

Hypothesis

A hypothesis is an answer to a research problem whose truth is still weak or temporary. Thus, a hypothesis needs to be empirically tested in order to confirm it. Following are the hypotheses in the present study:

H_a : Teachers' instructional communication has a positive influence on students' motivation.

H_o : Teachers' instructional communication has a negative influence on students' motivation.

METHODS

Research design

The present study uses a quantitative approach. The latter emphasizes numerical data analysis which is then analyzed using appropriate statistical techniques (Hardani et al, 2020). Therefore, a quantitative research is generally used to test hypotheses and statistical results. Quantitative research aims to find a mathematical representation of a phenomenon (Borgstede & Scholz, 2021). Quantitative research results which obtained through statistical tests can reveal the significance of the relationship to be sought, so that the direction of the resulting relationship depends on the hypothesis and statistical test results, not on scientific logic (Hardani et al, 2020). In this regard, the quantitative approach was chosen because it is considered appropriate to explain the phenomena that are studied in this study.

Related to the present study, a survey method was used to find research results. Survey method is a research method that uses a questionnaire as a measuring tool in data collection. The purpose of using surveys in quantitative research is to obtain information about a number of respondents who are considered to represent certain populations or groups (Kriyantono, 2006). Furthermore, survey research is research that takes samples from a population and uses a questionnaire as primary data collection (Riduwan, 2010). Based on the research methods described above, the present study uses a descriptive quantitative approach because it aims to determine the value of one or more variables without making comparisons with other variables. The use of the descriptive method aims to test the truth between the hypotheses and theories put forward by experts regarding the correlation of instructional communication and student learning motivation.

Participants

The present study involves a group of students of a senior high school in Bekasi, Indonesia as research subjects. The present study uses a random sampling method using a probability sampling technique. The latter can be defined as an opportunity for each population to be sampled (Sugiyono, 2017). The sample size for the present study was determined using the Slovin formula as follows:

$$n = \frac{N}{1 + Ne^2}$$

Descriptions:

n : Sample Size

N : Population Size

e : Error rate in sampling

In this study, it was determined that e was 10% while N was 110 or a whole population. Then, the samples taken in this study are:

$$\begin{aligned} n &= \frac{110}{1 + 110(0.1)^2} \\ n &= \frac{110}{1 + 110(0.01)} \\ n &= \frac{110}{1 + 1,1} \\ n &= \frac{110}{2,1} \\ n &= 52,3 \end{aligned}$$

Based on the above calculation, 52 students are chosen as the sample.

Data Collection and Analysis

Data collection techniques can be performed through interviews, questionnaires, observation and a combination of these three components (Sugiyono, 2017). In this study the data collection technique used was a questionnaire (questionnaire). Questionnaires are carried out by giving respondents a series of questions or written statements to answer (Sugiyono, 2017). The questionnaire used in this study was a closed questionnaire where respondents could only mark the answers they considered correct. The Likert scale is used as a measuring tool to measure respondents' attitudes or perceptions of social events. The Likert scale used in this study is at least 1 and a maximum of 4 points, because it will be easy to know whether the respondents' answers tend to agree or disagree. thus, the results of the answers given by respondents are expected to be aligned and more relevant (Sugiyono, 2014). The questionnaires used in the present study consist of 35 items. The questionnaires are adapted from Yusuf (2010) and Deci & Ryan (2000). Following are the responses used in the questionnaires for the present study:

No	Responses	Score
1.	Totally Disagree (STS)	1
2.	Disagree (TS)	2
3.	Agree (S)	3
4.	Totally Agree (SS)	4

Table 1. Likert Scale Responses

The questionnaires are distributed to the participants through Google Forms. The findings are analyzed using SPSS 26 for Windows. Following are the items used in the questionnaires:

Table 2. Questionnaires' Items

Variable	Indicator	Statements	Item Number
Variable (X) Teachers' instructional communication (Yusup) 2010	Specification of content and instructional objectives (X.1)	Teachers at school able to explain what will be learned before the lesson begins.	1
		Teachers at school give you praise or prizes when you get good grades or behave well (go to class on time, do your homework, don't make a scene in class).	2
		Teachers at school review previous lessons before classes start.	3
	Initial behavior assessment (X.2)	Teachers at the school only start lessons when the students are ready (students are not noisy, some students are present and listen to the lesson intently).	4
		Teachers at school know a way of learning that students can understand (using interesting presentations, using videos related to lessons, inviting learning outside the classroom and including practice when studying such as practicum in the lab or field work practice in companies).	5
		Teachers know if students are ready to learn or not (don't feel bored, don't feel sad, don't have problems with classmates or family at home).	6
	Determining instructional strategy (X.3)	Teachers at school teach material in a fun and appropriate way (students can understand it, not rigid).	7
		Teachers at school use videos, posters, etc. to teach	8
	Organization of instructional units (X.4)	Teachers at school master the learning material well.	9
		Teachers at school are able to convey the material well so that students can easily understand it.	10
		Teachers at school are able to present learning materials.	11
	Feedback (X.5)	Teachers at school are able to provide feedback (input or criticism).	12
		Teachers at school are able to respond well to student difficulties.	13
		Teachers at school are able to give a fair assessment to students.	14
		Teachers at school are able to review and conclude the content of the lessons.	15

Variable	Indicator	Statements	Item Number
Variable (Y) Students' Motivation (Deci & Ryan, 2000)	Intrinsic Motivation (Y.1)	I feel satisfied when I learn and get new things that are interesting to me	16
		I study something because I love it	17
		Learning and practicing is fun for me	18
		I feel satisfied when I master something	19
	External Regulation (Y.2)	I do homework given by the teacher to get good/high grades.	20
		I try to get high marks to be liked by my classmates.	21
		I study to get high scores so that I get praise from my friends.	22
		I study to get high scores so that I get praise from my friends.	23
	Introjected Regulation (Y.3)	I feel proud if I can answer questions given by the teacher in class.	24
		Completing assignments before the time set by the teacher makes me feel calm.	25
		If I don't study before the test I will feel worried.	26
		I feel sad if my score is less than the set target.	27
	Identified Regulation (Y.4)	I will study longer to master the material	28
		I make a regular study schedule to support my success in school	29
		I will try to enter the class because I want to understand the subject	30
		I pay attention to the teacher's explanation so that I understand the material provided	31
	Integrated Regulation (Y.5)	Learning is my obligation as a student	32
		Understanding the subject matter provided by the teacher is useful for supporting my goals	33
		If the teacher gives me assignments, then I will complete them on time so that I become a disciplined person	34
		I will choose to study even though there are no assignments or exams	35

Variable Operational Definitions

The operational definition of a variable is a term given to a variable by giving meaning or specifying activities or providing an operation needed to measure that variable (Sugiyono, 2011). The present study uses two variables; the independent variable (teachers' instructional communication) and the dependent variable (students' motivation). In this regard, teachers' instructional communication influences students' motivation.

Pilot Study

In order to ensure the validity and reliability of the questionnaires, a pilot study was conducted. Bivariate Pearson correlation (Pearson Moment Product) is used to measure the validity of each item. This analysis is used while correlating each item's score with the total score. The total score is the result of all items. Question items that are significantly related to the total score indicate that these items are able to provide encouragement in expressing something. The pilot study uses 10% of samples ($n=5$). Thus, each item can be considered as valid if they show the score > 0.878 . Besides a validity test, the pilot study uses a reliability test by using a Cronbach Alpha test. Each item can be considered as reliable if it shows Cronbach Alpha of > 0.6 . The results of the pilot study show that each item is valid with a coefficient of 0.87 and Cronbach Alpha coefficient of 0.896. The results of the pilot study suggest that each item is valid and reliable.

RESULTS AND DISCUSSIONS

Results

Table 3. Pearson Correlation Test Results

		Teachers' Instructional Communication	Students' Motivation
Teachers' Instructional Communication (X)	Pearson Correlation	1	.681**
	Sig. (2-tailed)		.000
	N		52
Students' Motivation (Y)	Pearson Correlation	.681**	1
	Sig. (2-tailed)	.000	
	N	52	52

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

The above table shows a correlation value of 0.681 with the number of participants of 52. According to Sugiyono (2017), the correlation valued of 0.681 can be considered as strong. The findings of the present study suggest that teachers' instructional communication has a strong correlation with students' motivation. In addition, the findings indicate that the better teachers' instructional communication, the more motivation that students have. It can also be concluded that H_a (Teachers' instructional communication has a positive influence on students' motivation) is accepted while H_o (Teachers' instructional communication has a negative influence on students' motivation) is rejected.

Table 4. Teachers' Instructional Communication

Teachers' Instructional Communication	X1 (Specification of content and instructional objectives)	X2 (Initial behavior assessment)	X3 (Determining instructional strategy)	X4 (Organization of instructional units)	X5 (Feedback)
Mean	2.67	2.58	2.38	2.92	3.08
Std. Deviation	734	696	745	589	577

The above table suggests that the most salient factors of teachers' instructional communication are feedback ($M=3.08$) and organization of instructional units ($M=2.92$). On the other hand, the least salient factors are determining instructional strategy ($M=2.38$) and initial behavior assessment ($M=2.58$). It can be inferred that the participants consider teachers' feedback as the most effective aspect of teachers' instructional communication.

Table 5. Students' Motivation

Students' Motivation	Y1 (Intrinsic Motivation)	Y2 (External Regulation)	Y3 (Introjected Regulation)	Y4 (Identified Regulation)	Y5 (Integrated Regulation)
Mean	2.1	2.88	2.04	3.15	3.25
Std. Deviation	454	646	394	638	682

Table 5 shows integrated regulation ($M=3.25$) and identified regulation ($M=3.15$) as the most salient motivational factors. In contrast, introjected regulation ($M=2.04$) and intrinsic motivation ($M=2.1$) are the least salient motivational factors. It can be said that the majority of the participants are motivated because they have understood the benefits of studying for their future (integrated regulation).

DISCUSSIONS

The findings of the present study indicate the positive correlation between teachers' instructional communication and students' motivation. The aforementioned findings are similar with ones shown in numerous studies (Istiqamah et al, 2023; Khatha et al, 2022; Khoiroh, 2016; Megawati & Hartono, 2020). It can be inferred that teachers' instructional communication might have positive impacts toward students' motivation. In this sense, students might be more motivated to endure learning process when teachers are able to communicate the learning objectives and deliver the lessons to the students. In order to achieve the latter feat, building a positive rapport with students seems important. A study of Amin et al (2022) on the impacts of teachers' interpersonal communication skills on students' motivation during Covid-19 pandemic indicate the improvement in students' performance and motivation when their teachers have interpersonal relationship with students. Similarly, Bimas Saputra's (2022) study on the effects of teachers' communication skills and students' motivation toward the learning outcomes shows that the better students' perceptions toward teachers' communication skills, the better students' motivation and achievements. Developing interpersonal relationship can only be conducted when teachers know their students well. In this sense, teachers should interact well with students so that teachers can know the best approaches to deliver the lessons. A study of Adara et al (2021) suggests developing personal rapport with students as one of teachers' motivational strategies during Covid-19 pandemic. Furthermore, Fajri (2020) suggests emphatic communication which focuses on actively listening and responding the messages in order to improve students' learning interests. In this regard, teachers should actively listen to students' concerns and provide meaningful responses to students. Nevertheless, the latter premise needs to be investigated in further studies toward the effects of emphatic communication as a part of teachers' instructional communication to students' motivation.

In addition, the findings of the present study suggest feedback as the most salient factors of teachers' instructional communication. Several studies show the benefits of feedback to students' performances (Han & Xu, 2019; Kyaruzi et al, 2019; Neupane Bastola & Hu, 2020). In this sense, Ramani et al (2019) define feedback as a controlling system in which an action is scrutinized in order to modify and enhance future actions. The present study will focus on teachers' feedback as it is related to teachers' instructional communication. Ramani et al (2019) also argue that feedback should have some degrees of credibility and improve students' learning. In this regard, students should believe that teachers have authorities to provide the feedback so that students will believe teachers' feedback and improve their classroom performance. Furthermore, feedback can come in different forms. One of those forms of feedback is teachers' feedback. As a part of teachers' instructional communication, teachers' feedback should be given in a positive and constructive manner in order to improve students' motivation and

performances. Schwab et al (2022) argue that teachers' feedback correlates with peers' social acceptance, showing that positive feedback from the teacher can result in higher students acceptance while negative feedback leads to lack of popularity among classmates. In addition, negative feedback can also lead to negative emotions as when students get grades lower than their expectations, they might get sad, angry or shameful (Ryan & Henderson, 2018). In order to provide a constructive feedback, Omer et al (2017) propose several ideas to provide constructive feedback. First, teachers should share expected learning outcomes and the importance of feedback to achieve the learning outcomes. By sharing the learning outcomes, students could predict the learning process and how it can be improved through feedback. Next, Omer et al (2017) posit immediate, non-judgmental, accurate, and relevant as the nature of feedback given to students. In this regard, teachers should give feedback as soon as possible and fair in order to maintain students' interests in learning process. Mamoon-Al-Bashir et al (2016) even suggest the use of technology to provide immediate and accurate feedback to students. It can be said that providing constructive feedback is not an impossible feat and teachers can achieve it through several strategies.

Related to teachers' instructional motivation, organization of instructional units is found as the second most salient teachers' instructional factor. A study of Mupa & Chinooneka (2015) argues that the lack of organization of instructional units is a factor that differentiates a successful school from a less successful one. Without sufficient organization units, they argue that it may be difficult to deliver lessons effectively. Concerning maximizing organization of instructional units, Alenezi (2023) suggests including digital technologies to improve the delivery of lessons. For instance, teachers can use Android or IOS based applications to track students' performances in the classes. Besides feedback and organization of instructional units, initial behavior assessments are shown to be the third most salient teachers' instructional communication factor. Regarding the present study, an assessment of initial behavior can be defined as the early assessment conducted by teachers toward skills/talents or interests of students (Hariyanto, 2018). This assessment is conducted in order to recognize the weaknesses or strengths of students to suit the learning programs that will be given to students later. By understanding students better, teachers might know suitable approaches to communicate with students.

Besides teachers' instructional communication, the findings of the present study indicate integrated regulation as the most salient motivational factor among students. While a study of Abun (2021) identifies integrated regulation as the least salient motivational factor, Torudomsak et al's (2021) study indicate that integrated regulation as the most salient motivational factor among students. It can be said that the results might depend on the characteristics of the participants, implying the necessity to perform a study with a huge number of participants to gain wider insights. Nevertheless, there are still some insights that can be gained from the above results. Firstly, integrated regulation is related to learners' internalization of the benefits of learning process. In this regard, learners know the positive impacts that they will gain after enduring the learning process. In addition, integrated regulation has similar characteristics with intrinsic motivation as they are both autonomously self-regulated (Moll-Khosrawi et al, 2021). In this regard, students set their own goals and monitor their own progress. It has been argued that autonomous self-regulated learners are more motivated than controlled self-regulated as the previous ones have internalized the positive aspects of learning and set their own goals instead of being controlled by extrinsic factors (Brühlmann et al, 2018).

In addition, identified regulation is found as the second most salient motivational factor. Identified regulation is related how a learner explicitly accepts the reasons behind their action. For instance, a student studies hard for a university entrance exam because being accepted into the university is important for him/her. Several studies show the effects of identified regulation on individuals. Zhang et al's (2016) study on the impacts of four motivational profiles (external, introjected, identified regulation and intrinsic motivation) indicate the positive effects of identified regulation on work performance. Van den Broeck et al's (2021) meta-analysis on SDT's suggests identified regulation as the strongest predictor of work performance. It can be said that identified regulation can be an important factor that motivates students. Besides that, external regulation is shown as the third most salient motivational factor. Although Zamarripa et al (2018) state that external regulation is considered as the weakest factor, a study of Kirkaglacı & Oz (2017) shows that external regulation has a positive correlation with students' academic achievements. Kirkaglacı & Oz (2017) illustrate how their participants are

more motivated with external factors such as rewards than intrinsic factors such as interests in learning process. Related to the present study, external regulation is unique because it is the only extrinsic motivation which drives the majority of the participants. It can be said that some participants are still motivated with external factors. However, Whitfield et al (2020) argue that both intrinsic and extrinsic factors are important to sustain students' motivation. Furthermore, they propose several strategies to maintain students' motivation such as setting realistic learning goals, avoiding procrastination and developing positive network. The weight of evidence suggests the importance of both intrinsic and extrinsic factors to students' motivation.

CONCLUSION

Investigating the relationship between teachers' instructional communication and students' motivation seems imperative because such investigation can provide deeper insights on the effects of teachers' instructional motivation toward students' motivation. Hence, the present study aimed to investigate the correlation between teachers' instructional communication and students' motivation. The present study applied a descriptive quantitative approach by distributing a set of questionnaires adapted from Yusuf (2010) and Deci & Ryan (2000). The questionnaires consist of 35 items. The questionnaires were distributed to a group of high school students in a private school in Bekasi, Indonesia. The results of the present study show a positive correlation between teachers' instructional communication and students' motivation. In this regard, the better students' perceptions toward teachers' instructional communication, the higher students' motivation. It can be said that maintaining students' motivation can be conducted through improving teachers' instructional communication.

Several implications can be deduced from the results of the present study. First, it can be inferred that improving teachers' instructional communication can have merits toward students' motivation. In order to achieve the latter goal, teachers need to be trained on the provision of teachers' instructional communication. Such training should be given to both inservice and preservice teachers to ensure the provision of suitable teachers' instructional communication that can improve students' motivation. Second, the results also suggest the importance of feedback as a form of teachers' instructional communication. Thus, teachers need to be given training related to the strategies to give appropriate feedback to students. In addition to teachers' instructional communication, the findings of the present study show how both intrinsic and extrinsic factors can affect students' motivation. Thus, nurturing intrinsic motivation through the provision of suitable extrinsic factors such as giving supportive learning environment and peers support seems beneficial for students. However, there should be further studies that examine how peers support can affect students' motivation.

Nevertheless, the present study is not without some limitations. First, it is limited to a quantitative approach so that it can delve on students' perceptions on the aspects of teachers' instructional motivation that affect them the most. Next study should use a mixed-method to test the latter premise. In addition, the present study only used a small number of participants. Including more participants might shed more insights on the relationship between teachers' instructional communication and students' motivation.

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