The Servant Leadership Effect on Student Engagement Mediated by Student Motivation at Christian Senior High School in Surabaya

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The Servant Leadership Effect on Student Engagement Mediated by Student Motivation at "X" Christian Senior High School in Surabaya

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Abstract

This study aims to determine the effect of Servant Leadership (Voluntary Subordination (VS), Authentic Self (AS), Covenantal Relationship (CR), Responsible morality (RM), Transcendental spirituality (TS), Transforming Influence (TI)) on teachers on Student Engagement (SE) mediated by Student Motivation (SM) at "X" Christian Senior High School in Surabaya. This research method is causal-comparative quantitative, and the research respondents are 201 students in the 11th grade of the science study program. Partial Least Square (SmartPLS) version 3.0 is the data analysis method. This indicated that VS significantly affected SE. Authentic Self significantly affected SE. CR didn't significantly affect SE. However, RM significantly affected SE, TS significantly affected SE, and TI significantly affected SE. The mediating variables: VS, AS, CR, RM, TS, and TI. Furthermore, School management needs to improve their professional relations with students and develop themselves to bring positive changes to students, increasing SE in the learning process.

Keywords: Servant Leadership; Student Motivation; Student Engagement.

1. Introduction

The COVID-19 pandemic has brought changes in all aspects of human life, from the economic and social to educational fields, which causes changes in the learning system, both formally and informally. Due to the increasingly worrying pandemic, the government issued a policy limiting community activities, including learning activities at all levels of education, to prevent the spread of COVID-19. This is stated in a Circular Letter issued by the Minister of Education and Culture on the provisions of the learning process during the pandemic; the learning process shall be carried out from the home to provide meaningful learning through online or remote learning (Mendikbud, 2020).

UNESCO stated that 300 million students were disrupted in school activities and temporary school closures to overcome the health crisis (Handoyo, 2020).

The remote learning implementation during this pandemic caused much concern for the community, not only because of sudden changes but also many challenges experienced by students, parents, and educators. Network constraints used by students and teachers during the distance learning process and ineffective teaching methods cause the quality of learning to be questioned. A study in Indonesia shows that 1 out of 58 students understand very well about online learning, 23 out of 58 students understand, and the rest state that they do not understand much (Nausadar, 2020).

The pandemic that forces learning to occur in separate spaces causes a loss of direct interaction between teachers and students, learning spirit of the student becomes weak (Hershkovitz, Elhija, and Zedan, 2019; Prawira, 2021). Students will lose motivation to learn and are required to be able to learn independently (Lianto et al., 2022). In addition, the infrastructure will become the main facility for the smooth implementation of distance learning and must be adequately prepared. Research also states that the internet network's constraints and stability have obstructed the learning process. Technical and financial problems cause this instability (Bao, 2020; Jones & Sharma, 2019; Obiakor & Adeniran, 2020; Purwanto, Pramono, Asbari, Santoso, Wijayanti & Hyun, 2020).

The pandemic forces the learning process to occur in separate places. It has resulted in the loss of direct interaction between teachers and students and among students, weakening students' enthusiasm for learning (Hershkovitz, Elhija, and Zedan, 2019).

The government's policy that requires education units to carry out remote learning forces teachers to be more creative in delivering learning materials and motivating their students. The results show that teachers' creativity needs to be supported by positive leadership and good school management (Amtu et al., 2019). Support is expected from leadership in the education environment, namely from the principal. Leadership is expected to spur followers' enthusiasm, creativity, and endurance. This study intends to determine the effect of Servant Leadership on Student Engagement mediated by Student Motivation at "X" Christian Senior High School in Surabaya. Research related to this matter in the field of education is still

lacking.

In this study, Servant Leadership was observed in mathematics teachers. Mathematics is universal science, and it plays a role in various sciences. Besides, it underlies the development of modern technology and advances thinking power (Permendikbud No.22 of 2016).

After explaining the background, then based on the description above, the formulation of the problems is as follows:

1. Do the six dimensions of Servant Leadership, namely Voluntary Subordination, Authentic Self, Covenantal Relationship, Responsible Morality, Transcendental Spirituality, and Transforming Influence, affect Student Engagement during a pandemic?

2. Do the six dimensions of Servant Leadership affect Student Engagement mediated by Student Motivation?

2. Literature Review

2.1. Student Engagement (SE)

Reeve (2005) defined SE as the intensity of students' behavior, emotional quality, and efforts to participate in learning activities actively. According to Connell & Wellborn (1991; Christenson, 2012), SE is a manifestation of motivation seen through actions, namely behavior, emotions, and cognition shown by students during the learning process. It indicates that SE can be measured through the students' active involvement in the classroom.

SE has four dimensions: agent, behavior, emotional, and cognitive engagement (Burch et al., 2015; Angella & Ricky, 2022). Whereas Reeve & Tseng (2011) disclose that this is a development of what was previously stated by Fredricks, Blumenfeld, & Paris (2004) that SE has three dimensions (emotional, behavioral, and cognitive), which are explained as follows, students who show behavioral involvement are seen to attend class diligently consistently, follow school activities well and obey school rules. This research will be measured by empirical indicators of SE consisting of three dimensions: Agent, Behavior, and Emotional Engagement.

2.2. Servant Leadership (SL)

Servant Leadership researchers agree that Robert Greenleaf is the first author of Servant Leadership through his essay 'The Servant as a Leader (Sendjaya, 2002, Wheeler, 2012). Greenleaf (2002) asserted that a leader should have aspirations and desires to serve, and Sendjaya (2015) added that Servant Leadership is a leadership style based on a sense of caring to serve others.

Spears (2002) introduced ten characteristics of Servant Leadership: Listening, Empathy, Healing, Awareness, Persuasion, Conceptualization, Foresight, Commitment to the growth of people, Stewardship, and Building Community.

As explained above, Servant Leadership consists of ten dimensions, while Liden (2008) described Servant Leadership into seven dimensions: Emotional healing, Creating value for the community, Conceptual skills, Empowering, Helping subordinates grow and succeed, Putting subordinates first, and Behaving ethically. The concept of Servant Leadership continues to develop. The latest definition of Servant Leadership, according to Eva et al. (2019), is a peer-oriented leadership approach manifested through the personal service of each individual by prioritizing the needs of followers and leadership that influences followers and organizations to put the interests of others and the community outside their organization first. Besides, through their policies, servant leaders ensure equality in leader-follower relationships and try to understand the background, values, beliefs, assumptions, and unique behaviors.

Experts have proposed many Servant Leadership concepts; in this study, the authors chose the Servant Leadership concept according to Sendjaya (2015), which has a holistic leadership approach involving rational, relational, ethical, emotional, and spiritual aspects of leaders and followers in such way, so leaders and followers turn into what they are capable of becoming (Sendjaya 2015). There are six Servant Leadership dimensions, according to Sendjaya (2015). First, the VS with characteristics of Being a servant and Acts of service. Second, the AS with characteristics of Humility, Integrity, Accountability, Security, and Vulnerability. Third, CR with characteristics of Acceptance, availability, Equality, and Collaboration. Fourth, RM has characteristics of Moral Reasoning and Moral Action. Fifth, TS with characteristics of Transcendental Beliefs, Interconnectedness, Sense of Mission, and Wholeness. Sixth, TI with the characteristics of Vision, empowerment, Modeling, Mentoring, and Trust.

The difference between the Servant Leadership dimensions described by Sendjaya (2015) from other Servant Leadership concepts is that there is an important spiritual dimension to help students understand the existence and purpose of life personally and socially, especially in schools based on Christian beliefs.

Researchers chose the six-dimensional Servant Leadership concept because they saw the advantages, namely the existence of a spiritual dimension that can help students understand spiritual values and the meaning of learning for their future lives.

2.3. Student Motivation (SM)

Concerning the learning process in schools, Pintrich and Schunk (2002) and Lianto et al. (2022)

considered motivation as an inseparable part of learning, Awan et al. (2011: 72) added that the lack of motivation in the learning process is a major obstacle and the leading cause of the decline in educational standards.

The results of research on motivation explain that students' motivation in achieving the specified goals, efforts, emotions, and feelings are shown in the learning process (Glynn et al., 2007). Uno (2011) revealed that the nature of motivation is internal and external encouragement for students who learn to make behavior changes supported by other indicators. External factors that affect SM in learning are certainly complex to identify because not visible when students participate in the learning process. Intrinsic motivation is the motivation that comes from within students. This is indicated by the ability to think and a high interest in learning.

2.4. Relationship between Concepts

Based on the research from Hammermeister et al. (2008) about the effect of the Servant Leadership approach adopted by athletic head coaches in sports, athletes mentored by serving leaders exhibit higher levels of intrinsic motivation than other athletes. Servant Leadership empowers every follower and pays attention to the values of their intrinsic motivation (Greenleaf, 2002). The authors formulate the hypotheses after viewing the correlation between the dimensions of Servant Leadership and SM, as follows:

H_1: Dimensions of Servant Leadership, namely, VS, AS, CR, RM, TS, and TI, affect SM.

Then H_1 is further elaborated into each dimension of Servant Leadership as follows: Voluntary Subordination (VS); according to Sendjaya (2015), leaders who serve voluntarily abandon their personal ambitions for a larger purpose within the organization. The servant leader is seen as a role model; students try to increase their intrinsic motivation to grow their creativity. A strong relationship between the leader and his followers creates a strong motivation. Therefore, the authors formulated the following hypothesis:

H_{1a}: The VS affects SM. Second Authentic Self (AS), Servant Leadership teachers have humility, Integrity, Accountability, Security, and Vulnerability that will give students self-confidence and the motivation to learn better. After viewing the correlation between the AS and student learning motivation, the authors formulated the following hypothesis:

H_{1b}: The AS affects SM.

Third, Covenantal Relationship (CR), teachers with leadership that also have Acceptance, Availability, Equality, and the ability to collaborate with students

will increase students' motivation to try harder in learning. After viewing the correlation between CR behavior and student learning motivation, the authors formulated the following hypothesis:

H_{1c}: The CR affects SM.

Fourth, Responsible Morality (RM), teachers who can be firm in making decisions based on moral principles will lead to self-confidence in students, so they are motivated to follow moral directions in the learning process. After viewing the correlation between the RM behavior of Servant Leadership and student learning motivation, the authors formulated the following hypothesis:

H_{1d}: The RM affects SM.

Fifth, Transcendental Spirituality (TS), is the behavior of leaders who introduce spiritual values to their followers since Servant Leadership and spiritual leadership are interrelated (Angella & Ricky, 2022). Spiritual insight is the basis for motivating followers authentically and deeply, which turns them into what they can become (Prawira, 2021). Viewing this correlation, the authors formulated the hypothesis: H1e: The TS affects SM. And sixth, Transforming Influence (TI), the attitude that appears in the teacher's Servant Leadership style for the TI dimension is allowing students to try to be creative in working on their assignments and continue to assist, as stated by Liden et al. (2008), a key characteristic of Servant leaders focuses on how to meet the needs of followers, so they are expected to know the needs of employees and contribute to meeting their needs by empowering, caring and providing opportunities to develop skills. Therefore, the authors formulated the following hypothesis:

H_{1f}: The TI affects SM.

According to Schlechty (2002), to determine the level of SM, the teacher needs to identify the students' passions or interests by planning activities that can attract their passions in the classroom. Motivation can create situations that determine the willingness to participate in learning (Pintrich & Schunk, 2002). After explaining the correlation between SM and SE, the researchers formulated the following hypothesis:

H_2: SM mediates the correlation between Servant Leadership and SE.

According to Sendjaja et al. (2008), statistical results show a very supportive correlation between the Servant Leadership style as one of the most appropriate approaches to leadership in education. Christenson et al. (2012) noted that SE is reflected in academics. It has behavioral, emotional, and cognitive dimensions. SE in learning is holistically influenced by the teachers' professional commitment and service behavior in their student interaction. Gultekin and Dougherty (2021) stated that there is a strong correlation between the

achievement scores of science and social students with Servant Leadership. When teachers model themselves as personal examples and act as Servant Leaders during the instructional learning process, students will be highly committed, dedicated, and disciplined and strive to improve their academic abilities (Scardino, 2013). Therefore, the following hypothesis is formulated:

H3:   Servant Leadership affects SE mediated by SM.

Based on the correlation between the three variables above, the framework of thinking is formulated as shown in Figure 1.

3. Methods

The research method used was quantitative, with non-probability sampling techniques, which do not provide equal opportunities for each member of the population to be a sample (Sugiyono, 2013). At the same time, the sampling method in this study was purposive sampling. In this study, the independent variable was Servant Leadership, the dependent variable was Student Engagement, and the mediating variable was Student Motivation. The variables were measured using a Likert scale; for respondents' responses in answering the questions posed. According to Sekaran and Bougie (2016:207), the Likert scale is structured to see how strongly the respondents agree with a statement on a 5-point scale indicated by the scores, namely 5 for strongly agree (SS), 4 for agree (S), 3 for neutral (N), 2 for disagree (TS), and 1 for strongly disagree (STS).

The type of data in this study was in the form of numbers. Then, the data source was obtained directly from the respondents (the 11th-grade students) by filling out the questionnaires. The method used for data collection was a population survey, carried out by distributing questionnaires to the 11th-grade students majoring in science at "X" Christian Senior High School in Surabaya and conducted online using Google Forms. This was done since a limited learning model was still applied.

In this study, the sampling technique used non-probability techniques, which does not provide equal opportunities or opportunities for every member of the population to be a sample (Sugiyono, 2013). While the sampling method in this research is purposive sampling. The purposive sampling method is a method sampling is carried out based on the criteria determined by the researchers (Sekaran and Bougie, 2016) that is homogeneous (all students majoring in science class XI). The problem that was specifically researched was the Influence of Servant Leadership on mathematics teachers to Student Engagement.

Data analysis included validity and reliability tests. The validity test was performed using the SmartPLS 3.0 software; it can be seen from the loading factor value for each construct indicator. The reliability test was performed using the SmartPLS 3.0 software to measure the reliability of a construct with reflexive indicators by calculating the composite reliability value. Descriptive analysis is a statistical analysis that aims to provide a descriptive picture related to the research subject based on variable data obtained from certain subject groups. The descriptive analysis in this study was presented as a table of mean values, standard deviation values, and t-statistics.

The Statistical Data Analysis method used was SEM (Structural Equation Modeling). It consists of two test models: the Outer and Inner (Devi, 2015). The outer model with reflective indicator was evaluated with convergent validity, discriminant validity, and composite reliability, as well as Cronbach's Alpha for the indicators (Ghozali and Latan, 2015:73). The Inner model tests conducted in this study were the R-Square and Q-square tests. Hypothesis testing is carried out to measure the relationship between two or more variables and to show the direction of the relationship between variables. This test is required to know the significance of the effect of each independent variable on the dependent variable. Criteria significance test with a cut of 1.96. If lambda (λ) has t test > 1.96, then the lambda (λ) value is significant (Yamin and Kurniawan, 2009: 224).
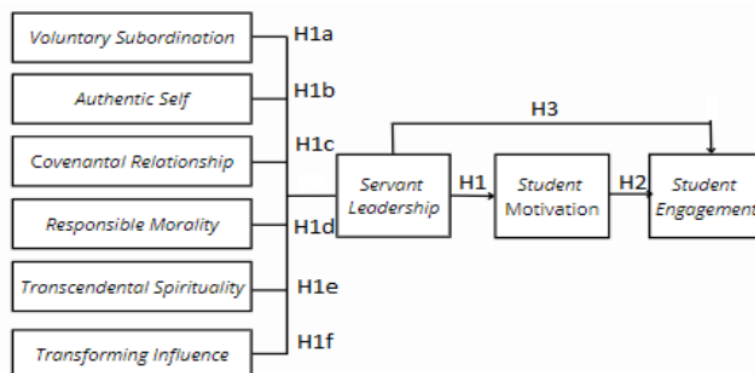

Figure 1. Research Model

Table 1. Respondents' profile

Respondents' Profile Attributes	Indicator Type	Total	Percentage
Gender	Male	87	43.30%
	Female	114	56.70%
Age	16 - 17 years old	201	100.00%
Reasons to choose a science major	Interested in science subjects	146	73.10%
	Etc.		
	Wider choice of college majors		
	Will study at college according to the science major	46	23.90%
	Parents' advice		
	Not interested in social subject		
Difficulty in understanding the lessons	No learning difficulties	121	60.20%
	Experience learning difficulties	80	39.80%
Learning method	Private Tutoring	80	41.30%
	Parent	3	1.00%
	Independent	90	44.8%
	Etc.		
	Internet	20	10%
	Friend Assistance		
	Tutoring Agency		

4. Results

4.1. Descriptive Analysis of Research Respondents' Profile

The respondents' gender in this study was dominated by 56.7% male respondents and 43.3% female respondents. Based on the student's motivation in choosing the science study program, most of them, or 73.1%, were interested in the science department, parents forced 2%, while the other reason was 24.9%. Concerning learning difficulties, the data shows that only 39.8% of respondents experienced learning difficulties, while 60.2% didn't experience learning difficulties. As per the learning method, the results show that most of the respondents, or 44.8%, studied independently, about 41.30% were assisted by, and only 3% were assisted by teaching teachers outside school hours. In contrast, the rest were assisted by parents or through social media.

4.2. Data Analysis

Table 2. Research variable reliability test

Research Variable	Cronbach's Alpha	rho_A	Composite Reliability
VS	0.833	0.844	0.875
AS	0.837	0.847	0.881
CR	0.835	0.842	0.880
RM	0.818	0.818	0.874
TS	0.804	0.814	0.871
TI	0.824	0.829	0.868
SE	0.933	0.936	0.941
SM	0.757	0.771	0.847

The VS has a Cronbach's Alpha value of 0.833, rho_A of 0.844, and composite reliability of 0.875, which is valid as shown in Table 2. The AS has a Cronbach's Alpha value of 0.737, rho_A of 0.847, and composite reliability of 0.881. The CR variable is valid since it has a Cronbach's Alpha value of 0.835, rho_A of 0.842, and a composite reliability of 0.880.

The RM variable's Cronbach's Alpha value was 0.818, the rho_A value was 0.818, and the composite reliability was 0.874.

In the TS variable, Cronbach's Alpha was 0.804, rho_A value was 0.814, and composite reliability was 0.871. The Transformational Influence variable can be valid since it obtained Cronbach's Alpha value of 0.824, rho_A of 0.829, and composite reliability of 0.868. While the SM obtained Cronbach's Alpha value of 0.933, rho_A of 0.936, and composite reliability of 0.941, in the SE variable, Cronbach's Alpha was 0.757, rho_A value was 0.771, and composite reliability was 0.847.

The coefficient of determination was used to measure how much variation in the dependent variable is explained by the independent variable. R Square values of 0.75, 0.50, and 0.25 indicate that the model is strong, moderate, and weak (Sarstedt et al., 2017). The R-square value is shown in Table 3.

Table 3. R-square value

Variable	R Square	Adjusted R Square
SM	0.533	0.516
SE	0.507	0.492

Table 3 explains that the R-Square value for SE was 0.533, which means SM, VS, AS, CR, RM, TS, and TI can present SE. The R-Square value for the SM

variable was 0.507, which means VS, AS, CR, RM, TS and TI can explain SM.

With the results of the R-Square value in Table 4.14, the level of suitability of this model is obtained through:

Q-Square = $1 - [(1 - r1^2) \times (1 - r2^2)]$
= $1 - [(1 - 0.533) \times (1 - 0.507)]$
= $1 - [0.2302] = 0.7698$

The Q-Square value obtained in this model was 0.7698 or exceeded 0, so the model has predictive relevance. The research hypothesis testing is shown on the t-statistical value. If the t-statistical hypothesis testing value is above or 1.96 or the significance value (P-Value) is below or 0.05, the alternative hypothesis is accepted; if it is the other way around, the alternative hypothesis is rejected. VAF is a measure that indicates how far the mediating variable is capable of absorbing direct effects.

VAF = $\dfrac{\text{Path Coefficient (Specific Indirect Effect)}}{\text{Path Coefficient (Total Effect)}}$

Suppose the VAF value is > 80%; then the mediation variable can be considered full mediation, and 20%-80% is declared partial mediation. Furthermore, <20% is no mediating role (Hair et al., 2013). The result analysis is indicated in Table 4 and Figure 2.

The H_{1a} hypothesis test result with a path efficient value of the effect of VS on SM was 0.266, with a t-statistic of 2.353 and a P-Value of 0.019. H_{3a} hypothesis test results were obtained with a path efficient value of the effect of VS on SE of 0.394, with a t-statistic of 4.069 and a P-Value of 0.001. In hypothesis H_{1b}, the path coefficient value of the effect of AS on SM as a mediating variable was 0.552, with a t-statistic of 1.198 and a P-Value of 0.232. It indicates that the AS didn't significantly affect SM. The H_{3b} hypothesis test result with a path coefficient value of the effect of AS on SE was 0,552, with a t-statistic of 9.209 and a P-Value of 0.000. H_{1c} hypothesis test results were obtained with a path coefficient value of the effect of CR on SE was 0.033, which has a t-statistic of 1 and a P-Value of 0.049.

The H_{3c} hypothesis test result with a path coefficient value of the effect of CR on SE was 0.033, with a t-statistic of 1.261 and a P-Value of 0.794. f RM on SE was 0.298, with a t-statistic of 3.510 and a P-Value of 0.006. H_{3d} hypothesis test results were obtained with a path coefficient value of the effect of RM on SE was 0.033, which has a t-statistic of 2.065 and a P-Value of 0.039. H_{1e} hypothesis test result with a path coefficient value of the effect of TS on SM of 0.370, which has a t-statistic of 3.169 and a P-Value of 0.022. H_{3e} hypothesis test results were obtained with a path coefficient value of the effect of TS on SE was 0.421, which has a t-statistic of 3.348, and a P-Value of 0.014 is below 0.05. H_{1f} hypothesis test results were obtained with a path coefficient value of the effect of TI on SM was 0.094, which has a t-statistic of 0.943 and a P-value of 0.346.

H_{3f} hypothesis test result with a path coefficient value of the effect of TI on SE was 0.430, which has a t-statistic of 4.442 and a P-value of 0.000. Last, H_2 hypothesis test results were obtained with a path coefficient value of the effect of SM on SE was 0.555, which has a t-statistic of 6.032 and a P-value of 0.000.

Table 5 and figure 3 present the indirect hypothesis test. The path coefficient value of the VS effect on SE through SM was 0.147 with a t-statistic of 1.198 and a P-Value of 0.048. The path coefficient value of the AS effect on SE through SM was 0.254 with a t-statistic of 3,598 and a P-Value of 0. The path coefficient value of the CR effect on SE through SM was 0.018 with a t-statistic of 0.254 and a P-Value of 0,799. There was no significant effect of the CR variable on SE through SM. The path coefficient value of the RM effect on SE through SM of 0.112 with a t-statistic of 1.738 and a P-Value value of 0.058. This indicated that RM could not increase SE through SM. The path coefficient value of the TS effect on SE through SM was 0.252 with a t-statistic of 3.493 and a P-Value of 0.000. The path coefficient value of the TI effect on SE through SM of 0.239, which has a t-statistic of 3.428 and a P-Value of 0.001.

Table 4. Direct effect hypothesis test results

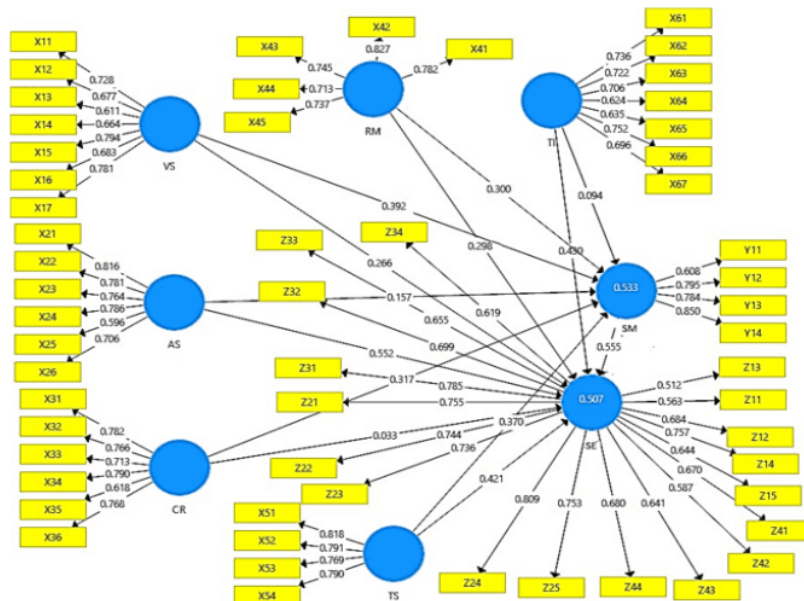| Path Coefficient	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
VS → SM	0.392	0.399	0.095	4.069	0.001
VS → SM	0.266	0.268	0.113	2.353	0.019
AS → SM	0.157	0.167	0.131	1.198	0.232
AS → SE	0.552	0.562	0.060	9.209	0.000
CR → SM	0.317	0.304	0.161	1.970	0.049
CR → SE	0.033	0.031	0.125	0.261	0.794
RM → SM	0.300	0.322	0.085	3.510	0.006
RM → SE	0.298	0.316	0.144	2.065	0.039
TS → SM	0.370	0.336	0.087	3.169	0.022
TS → SE	0.421	0.352	0.081	3.348	0.014
TI → SM	0.094	0.091	0.100	0.943	0.346
TI → SE	0.430	0.435	0.097	4.442	0.000
SM → SE	0.555	0.566	0.092	6.032	0.000

Figure 2. Path coefficient test results

Table 5. Indirect effect hypothesis test results

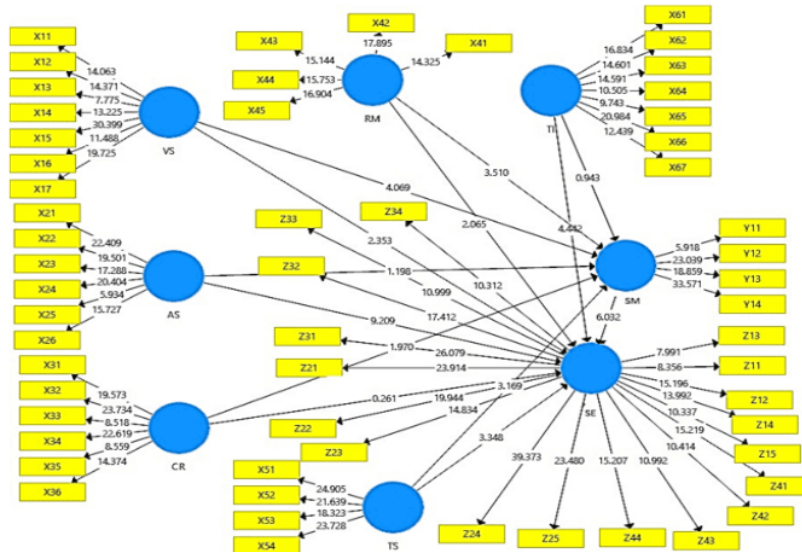| Indirect Effect	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
VS → SM → SE	0.147	0.173	0.068	1.983	0.048
AS → SM → SE	0.254	0.294	0.068	3.598	0.000
CR → SM → SE	0.018	0.020	0.072	0.254	0.799
RM → SM → SE	0.112	0.169	0.089	1.738	0.058
TS → SM → SE	0.252	0.253	0.065	3.493	0.000
TI → SM → SE	0.239	0.247	0.070	3.428	0.001

Figure 3. T-statistic path coefficient test results

5. Discussion

Assumed from the significance test results using the Bootstrapping technique on the correlation between VS and SM, the t-statistic value exceeded the t-table was 1.96, and P-Value exceeded 0.05. The resulting path coefficient value was 0.392; this indicated that the VS variable significantly affected SM's learning process during the pandemic. The H_{1a} hypothesis is accepted. Concerning the correlation between AS and SM, the t-statistic value exceeded the t-table was 1.96, and P-Value was above 0.05. Thus, it indicated that the AS variable didn't significantly affect SM's learning process during the pandemic. The H_{1b} hypothesis is rejected.

According to Liden et al. (2014), one of the keys to Servant Leaders is that followers see the leader as a person who behaves authentically. Servant leader becomes role model for their followers to emulate. Conducting online learning by following an emergency curriculum became challenging when creating a more intensive relationship between teachers and students. The teacher as a role model has not been maximally performed.

The resulting path coefficient value was 0.317; thus, CR significantly affected SM in the learning process during the pandemic. The H_{1c} hypothesis is accepted. The resulting path coefficient value was 0.300; thus, RM significantly affected SM in the learning process during the pandemic. The H_{1d} hypothesis is accepted. The resulting path coefficient value was 0.370; thus, TS significantly affected SM's learning process during the pandemic. The H1e hypothesis is accepted.

TI occurs when those whom a Servant leader serves are positively transformed in various dimensions (e.g., emotional, intellectual, social, and spiritual) to be like the Servant leader" (Sendjaya et al., 2008; Prawira, 2021). The results of previous research stated that Servant Leadership is a leadership style that cares and motivates to serve and strives to build and develop the abilities of its followers as achievable (Greenleaf, 2002; Winston & Fields, 2015). However, based on the significance test results using the Bootstrapping technique on the correlation between TI and SM, the t-statistic value exceeded the t-table was 1.96, and P-Value was above 0.05. Thus, TI didn't significantly affect SM's learning process during the pandemic. The H_{1f} hypothesis is rejected.

From the results of this study, the leadership of Servant Leadership teachers during learning generally increased SM in the classroom. This is in line with the results of previous research from Van Dierendonck (2011), which states there is a potential for transferring Servant Leadership to teacher leadership. Empirical evidence confirmed that supportive leadership positively affects followers' intrinsic motivation (Jaramillo and Mulki, 2008). In line with the study by Hammermeister et al. (2008) on the Servant Leadership effect on the followers' motivation adopted from the leadership of the head coach of athletics in sports, the results showed that athletes mentored by servant leaders exhibit higher levels of intrinsic motivation than other athletes. It is supported by Bande et al. (2016), whose research showed that Servant Leadership could increase salespeople's intrinsic motivation. In contrast to the results of other studies, Noland and Richards (2015) found that Servant Leadership Concept can facilitate cognitive learning and SE in learning. However, this concept has a negative impact on motivation because they focus more on student needs but not directly affect SM.

The H_2 hypothesis test results were obtained with a path coefficient value of the effect of SM on SE of 0.555, which has a t-statistic of 6.032 and a P-Value of 0.000. There was a significant influence between SM on SE in the learning process during a pandemic. From six dimensions of the Servant Leadership variable tested in this study, four dimensions, namely VS, AS, TS, and TI, significantly affected SE mediated by the SE variable. Two dimensions (RM and CR) didn't significantly affect SE mediated by SM. Teachers with a clear vision, creating a caring environment with positive emotions, and supporting their students have students reporting engagement (Klem & Connel, 2004; Mazer, 2012a, 2013a; Skinner et al., 2008). Skinner et al. (2008) found that providing support to students is a teacher's most beneficial action to increase motivation and SE.

Based on the data analysis of this study, it was known that the teachers' servant leadership affected SE, one of which was through SM in partial mediation. Previous research results stated that Servant Leadership empirically has a positive effect on attitudes, behavior, and performance (Parris & Peachey, 2013). SM as a mediating has also been widely tested. One of them is a previous study by Ryan & Deci (2019), who found that Servant Leadership is reflected in ethical behavior, enabling followers to complete their tasks, providing positive feedback, and followers who are more intrinsically motivated.

The results of this study in Table 6 indicated that VS affected SM. SM also significantly affected the SE. As per the significance test results of this study on the mediating effect of the SM variable on the correlation between VS and SE variables, the t-statistic value was above 1.96, and P-Value was below the minimum limit of 0.05. This indicated that the SM variable mediated the correlation between the VS and SE variables. Based on the VAF value calculation, while VAF value of 0.53963 showed that SM (partial mediation). SM was not the only mediating variable that affected the correlation between Servant Leadership and SE.

Table 6. Mediating effect test result

Model path	Path Coefficient (specific indirect effects)	Path coefficient (total effect)	T Statistics (IO/STDEVI)	P Values	VAF	Information	Mediation Effect
VS → SM → SE	0.14763	0.392	1.983	0.048	0.53963	H3a is accepted	Partial mediation
AS → SM → SE	0.30636	0.157	3.598	0.000	0.46336	H3b is accepted	Partial mediation
CR → SM → SE	0.018315	0.317	0.254	0.799	0.335315	H3c is rejected	No mediation
RM → SM → SE	0.16539	0.300	1.738	0.058	0.46539	H3d is rejected	No mediation
TS → SM → SE	0.233655	0.370	3.493	0.000	0.603655	H3e is accepted	Partial mediation
TI → SM → SE	0.23865	0.094	3.428	0.001	0.33265	H3f is accepted	Partial mediation

Furthermore, SM also significantly affected the SE. Based upon the significance test results of this study on the mediating effect of the SM variable on the correlation between the AS and SE variables, the t-statistic value was 3.598, and P-Value was 0.000. This indicated that the SM variable mediated the correlation between the AS and SE variables. Based on the VAF value calculation, a VAF value of 0.46336 (partial mediation).

VS affected SM. Furthermore, SM also significantly affected SE. Assumed from the significance test results using the Bootstrapping, the indirect effect value, the mediating effect of SM on the correlation between CR and SE, obtained a t-statistic of 0.261 and a P-Value of 0.794. This indicated that SM didn't mediate the correlation between CR and SE. However, if we look at the results of the previous significance test that CR affected SE, it indicated that teacher leadership, especially CR, has an effect in increasing motivation, and SM affected SE. Nevertheless, SM didn't mediate the correlation between CR and SE in this study.

This indicated a significant effect of RM on SM. Furthermore, SM also affected SE. As stated, Servant Leaders put their followers' interests above their own and act morally and humbly (van Dierendonck, 2011). Based on significance test results on the mediating effect of SM on the correlation between RM and SE, the t-statistic was 1.738, and P-Value was 0.058. Thus, SM didn't mediate the correlation between RM and SE.

According to Sendjaya et al. (2008), serving leaders always ensure that they empower others ethically and follow moral values, namely, taking a firm stance in making decisions based on moral reason and acting firmly against moral principles as a form of moral action. Based on this study's direct effect significance test results, the RM variable significantly affected SM and SE. However, the indirect effect test found that SM didn't mediate the correlation between RM and SE. This indicated that the teachers' moral reason and moral action in the classroom didn't affect SM since the school directly managed policies related to violations of moral ethics.

It indicated a significant effect of TS on SM. SM also significantly affected SE. The significance test results on the mediating effect of SM on the correlation between TS and SE variables indicated that the t-statistic value was 3.493, and the P-Value value was 0.000. This indicated that SM mediated the correlation between TS and SE. Based on the VAF value calculation, the VAF value of 0.603655 showed that SM has a partial mediation effect. This research found that TI generated a significant effect on SM. Furthermore, SM also significantly affected SE. The significance test results on the mediating effect of SM on the correlation between TS and SE obtained a t-statistic value of 3.428 and a P-Value of 0.001. The SM variable mediated the correlation between TI and SE variables. Based on the VAF value calculation, the VAF value was 0.33265. The research can be implemented in the face-to-face learning process.

6. Conclusions

Based on the results and discussion of the research entitled The Effect of Servant Leadership on Student Engagement mediated by Student Motivation, the conclusion which can be drawn, including:

Out of the six dimensions of Servant Leadership behavior, namely Voluntary Subordination, Authentic Self, Covenantal Relationship, Responsible Morality, Transcendental Spirituality, and Transforming Influence, there are five dimensions, namely Voluntary Subordination, Authentic Self, Responsible Morality, Transcendent Spirituality, and Transforming Influence affect Student Engagement during the pandemic, while the Covenantal Relationship dimension does not affect Student Engagement. In this study, out of the six dimensions of Servant Leadership behavior, four

dimensions affect Student Engagement, and 5 of them are mediated by Student Motivation, namely Voluntary Subordination, Authentic Self, Transcendental Spirituality, and Transforming Influence.

The research on teacher Servant Leadership's effect on Student Engagement was carried out through online learning, so the next can be conducted through on-site learning. Besides, those were applied to school units other than "X" Christian Senior High School in Surabaya.

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