

Memperkuat kepemimpinan pelayan di sekolah vokasi swasta: pendekatan POP-SDM

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Abstrak

Purpose. Penelitian ini bertujuan untuk menghasilkan cara dan strategi untuk memperkuat kepemimpinan pelayan dengan menganalisis pengaruh variabel yang memiliki pengaruh positif dan dominan terhadap kepemimpinan pelayan. **Method.** Penelitian ini menggunakan pendekatan POP-SDM (*Modeling and Optimization of Strengthening Management Resources*) dengan analisis SITOREM untuk menghasilkan solusi optimal dari solusi yang ada. **Findings.** Kepala Sekolah SMA Negeri di Kabupaten Bogor belum secara optimal menunjukkan kepemimpinan pelayan. **Practical Implication.** Hasil penelitian ini dapat dijadikan landasan praktis bagi pihak manajemen sekolah untuk merancang program pelatihan dan evaluasi kepala sekolah yang berfokus pada pengembangan kecerdasan menghadapi kesulitan, penguatan kerja sama tim, serta motivasi guna mewujudkan kepemimpinan pelayan yang optimal. **Originality.** Kepemimpinan pelayan ingin diperkuat, perlu dikembangkan kecerdasan menghadapi kesulitan, kepribadian proaktif, kerja tim, dan peningkatan komitmen terhadap organisasi, serta motivasi kerja.

Kata Kunci: Kecerdasan dalam Menghadapi Kesulitan; Kepribadian Proaktif; Kepemimpinan yang Melayani; Kerja Sama Tim

Abstract

Purpose. This study aims to produce ways and strategies to strengthen servant leadership by analyzing the influence of variables that have a positive and dominant influence on servant leadership. **Method.** This study uses the POP-SDM (*Modeling and Optimization of Strengthening Management Resources*) approach with SITOREM analysis to produce optimal solutions from existing solutions. **Findings.** Public High School Principals in Bogor Regency have not optimally demonstrated servant leadership. **Practical Implications.** The results of this study can be used as a practical basis for school management to design principal training and evaluation programs that focus on developing intelligence in facing difficulties, strengthening teamwork, and motivation to realize optimal servant leadership. **Originality.** Servant leadership wants to be strengthened, it is necessary to develop intelligence in facing difficulties, proactive personality, teamwork, and increased commitment to the organization, as well as work motivation.

Kata Kunci : Adversity Intelligence; Proactive Personality; Servant Leadership; Teamwork

INTRODUCTION

National development through education aims to educate the nation and develop the Indonesian people as a whole. The government's efforts to advance education in Indonesia continue to be carried out continuously. One of them is to reform the principal's main duties as a leader in schools. The principal is a strategic key in achieving educational goals effectively and efficiently because the quality of the school depends on the principal, how the principal carries out his duties and functions as a leader. Regulation of the Minister of Education and Culture (Permendikbud) number 6 of 2018 emphasizes that teachers who are appointed as principals are no longer as additional duties but as the main task to lead and manage each level of education unit.

Educational leadership is the ability and process of influencing, guiding, coordinating, and motivating others who are related to the development of educational science and the implementation of educational services, so that the activities carried out can be more efficient and effective in achieving educational goals. A principal who serves is a principal who helps his/her community with various efforts for the progress of the school. Servant leadership is a management style in which leading and serving are in harmony, and is present in interactions with the environment.

The concept of servant leadership is providing excellent service to all school residents, optimizing the empowerment and development of school residents, with the essence being that the principal serves others. The focus of servant leadership is performance and growth as well as the impact on the progress of the school and the community. In other words, teachers who are appointed as principals do not merely serve as leaders who master managerial, entrepreneurial and supervisory knowledge, but principals who master managerial, entrepreneurial and supervisory knowledge who are ready to provide services to teachers, education personnel, students, parents, the community and all stakeholders related to education.

Servant leadership developed in schools will produce principals who have the following skills: 1) technical skills are skills in supervising and evaluating the learning process, as well as the progress of the learning process, 2) relationship building skills (human skills) are skills in building cooperation with all school residents so that a harmonious atmosphere is created between school residents and the community, 3) conceptual skills are skills in solving various problems that arise in schools with full wisdom and prudently. (Minister of National Education Regulation number 13 of 2007).

Based on data and facts obtained through an initial survey conducted on December 16-21, 2025, using a questionnaire that servant leadership in 30 Private Vocational Schools in Bogor Regency, is in a condition that really needs to be strengthened. The initial survey was in the form of statements to 30 principals as respondents. The data obtained shows that 47% of school principals have not shown humility behavior, 41% of school principals have not shown compassion behavior, 48% of school

principals have not shown Accountability behavior, 47% of school principals have not shown courage, 50% of school principals have not shown Integrity behavior, and 58% of school principals have not shown listening behavior. The survey results above indicate that the principal's servant leadership still needs to be strengthened and considering that the principal's servant leadership is an important element related to achieving educational goals, this servant leadership is interesting to study.

This study aims to produce ways and strategies to strengthen servant leadership by analyzing the influence of variables that have a positive and dominant influence on servant leadership. Based on the results of qualitative research, these variables are adversity intelligence, proactive personality, commitment to the Organization, teamwork and work motivation. Furthermore, the methods and strategies for improving servant leadership found are used as recommendations to related parties, namely the Head of the Education Office, Education Institutions, School Supervisors, Principals, and Private Vocational School Teachers in Bogor Regency. This research focuses on ways and strategies to strengthen servant leadership which is an important element related to achieving educational goals.

Dierendonck, (2011), explains that Servant Leadership is a leader's behavior that prioritizes service, namely service that arises from a person's desire to serve others, which aims for the individuals being served to grow, be healthy, be autonomous, and have a spirit of service. The indicators of servant leadership are as follows: 1) Empowering and developing, 2) Humanizing humans, 3) Expressing oneself according to oneself (Authenticity), 4) Developing Interpersonal-Acceptance, 5) Providing Direction, and (6) Stewardship. Parris, D.I and Peachey, J.W (2013), Servant Leadership is placing them/the people being led above the personal interests of the leader. The indicators of servant leadership are as follows: 1) Listening, 2) Empathy, 3) Healing, 4) Awareness, 5) Persuasion, 6) Conceptualization, 7) Foresight, 8) Stewardship 9) Commitment to the growth of people and 10) Building Community.

Focht, A and Ponton, M (2015), Servant leadership begins with a desire to provide services to individuals (subordinates) and then develops aspirations to direct individuals to certain goals. In other words, it is a leader's behavior that is based on a desire to serve, and is driven by efforts to direct other individuals to certain goals. The indicators of servant leadership are as follows: 1) Value People, 2) Humility, 3) Listening, 4) Trust, 5) Caring, 6) Integrity, 7) Service, 8) Empowering, 9) Serve other's needs before their own, 10) Collaboration: servant leadership is about pursuing a higher purpose for the good of the whole, and because a leadership by definition collaborative process (between leaders and followers), 11) Love, Unconditional Love. This category includes acceptance, acknowledgment, appreciation of others, trust and vulnerability, and 12) Learning: Servant Leaders know that they don't know it all so they are willing to learn from all directions in the organization. This includes comfort with ambiguity, intellectual energy and curiosity.

Stone, A.G. et al, (2004), defines Servant Leadership as a Leader who serves and fulfills the needs of others optimally by developing the attitudes of individuals around him with the hope of having the same attitude to serve well. The indicators of servant leadership are as follows: 1) Vision, 2) Honesty, 3) Integrity, 4) Trust 5) Service, and 6) Style

Spears, L.C (2010), Servant Leadership is a leader who prioritizes service, starting with a person's natural feeling of wanting to serve and to prioritize service. Furthermore, consciously, this choice brings aspirations and encouragement in leading others. Servant leadership indicators are as follows: 1) Listening, 2) Empathy, 3) Healing, 4) Awareness, 5) Persuasion, 6) Conceptualization, 7) Insight, 8) Openness, 9) Commitment to growth, and 10) Building community. Sendjaya, S. et.al, (2008) defines Servant Leadership as a leader who prioritizes the needs of others, aspirations, and interests of others over themselves. Servant leaders have a commitment to serve others. The indicators of servant leadership are as follows: 1) Maintaining relationships, 2) Responsible, 3) Morality, 4) Spirituality, and 5) Depicting influence.

From the various theories above, it can be synthesized that servant leadership is a leader's behavior that begins with feelings and commitment to carry out conscious service, directing individuals, prioritizing the interests of others, aspirations, harmony, and good character to build prosperity and common good. The indicators of Servant Leadership are as follows: 1) Humility Behavior, 2) Compassion Behavior, 3) Accountability Behavior, 4) Courage, 5) Integrity Behavior, and 6) Listening Behavior.

Shivaranjani (2014), explains that Adversity quotient is how well a person faces difficulties and their ability to overcome them. Indicators of adversity intelligence, namely: 1) Control, 2) Origin and Ownership, 3) Reach, and 4) Endurance.

Pangma, R, et.al, (2009), Adversity Quotient is related to how well individuals can solve and fight the problems they face. Indicators of adversity intelligence are as follows: 1) Identifying problems, and how to respond or not respond to the problem, 2) Finding and developing ego identity or self-control in problem situations, 3) Adapting and adjusting to the surrounding environment, 4) Individual strength in facing problems (physical and mental), and 5) Adjustment to stressful situations.

Santos, M.C.J (2012), describes Adversity Quotient as the ability to withstand difficulties. The indicators of adversity intelligence are as follows: 1) Control, 2) Origin and Ownership, 3) Reach, and 4) Endurance. Tony Wijaya (2007) argues that Adversity intelligence is the level of individual persistence in facing all the challenges faced in his life. The indicators of adversity intelligence are as follows: 1) Control, 2) Origin, 3) Ownership, 4) Reach, and 5) Endurance.

From the various theories above, it can be synthesized that Adversity Intelligence is an individual characteristic that has a response to various difficulties and obstacles in carrying out tasks. The indicators of Adversity Intelligence are as follows: 1) Attitude of controlling difficulties (Control), 2) Attitude towards the origin of difficulties (Origin), 3) Attitude facing difficulties (Ownership), 4) Attitude anticipating the impact of difficulties (Reach), and 5) Endurance against difficulties (Endurance). Schermerhorn, J.R. Jr, et.al, (2007), explains that proactive personality is a disposition that identifies whether individuals act or do not affect their environment. Indicators of proactive personality are as follows: 1) Identifying opportunities and following up, 2) Showing initiative, 3) Taking action, and 4) Persisting until meaningful change occurs.

Covey, S.R (2004), being proactive means having initiative, being responsible, making choices based on principles and values, using four unique human gifts (self-awareness, conscience, imagination, and free will), creating change and encouraging creativity. Proactive personality indicators are as follows: 1) Having initiative, 2) Being responsible, 3) Making choices based on principles and values, 4) Using four unique human gifts: self-awareness, conscience, imagination, and free will, 5) Creating change, and 6) Encouraging creativity.

DuBrin, A.J (2014), explains that proactive personality refers to someone who has a relatively stable tendency to make environmental changes. Proactive personality indicators are as follows: 1) a desire for control, 2) taking charge at work, 3) above-average cognitive skills, 4) high self-efficiency, 5) setting challenging goals, 6) opportunity seeking and breaking things that merit breaking, 7) independent judgment combined with willingness to speak out, 8) being an early riser, and 9) assessing the probable success of proactive behavior.

Crant, M.J and Bateman, T.S (2001), describe a proactive personality as someone who identifies opportunities, shows initiative, takes action, and perseveres until meaningful change occurs. (Proactive personality: A person who identifies opportunities, shows initiative, takes action, and perseveres until meaningful change occurs). Indicators of people who have a proactive personality are: 1) identifying opportunities and acting, 2) having initiative, 3) taking action, and 4) persisting until bringing about meaningful change.

From the various theories above, it can be synthesized that a proactive personality is an individual characteristic that has a tendency to try to take action to influence the environment. Indicators of a proactive personality are as follows: 1) Identifying opportunities and following up (Opportunities), 2) Initiative, 3) Action, and 4) Working hard until change occurs (Worker).

Robbins, S.P and Judge, T.A, (2013), explained that Teamwork is a group whose members produce group performance that is greater than the sum of individual performances. Teamwork indicators are as

follows: 1) Performance is collective, 2) Group members synergize with each other, 3) Prioritize togetherness (not individuals), and 4) Members complement each other's skills and expertise. Gibson, J.L, et.al. (2012), Teamwork is a group of individuals whose behavior and performance influence each other between one member and another. Teamwork indicators are as follows: 1) Members have the same goals (Group Goals), 2) Strong interpersonal relationships between members, 3) The group fosters togetherness, and 4) Members complement each other (proximity).

Kreitner, R and Kinicki, A (2010), describe teamwork as a group of individuals who feel satisfied working in a group and each is willing to contribute to the group. Factors that influence group cooperation: 1) Group goals are clearly formulated, 2) Active participation of members, 3) Informal relationships between members, 4) Decisions are taken together (consensus), 5) Open interpersonal communication, 6) Clear group norms, and 6) Complementary abilities.

Tenner, A.R., and DeToro, I.J., (2002), describe teamwork as a group of people who work together to achieve the same goal and the goal will be easier to achieve by doing teamwork than by doing it alone. Teamwork indicators are as follows: 1) Evaluation and appreciation, 2) Social relationships, 3) Organizational support, 4) Task characteristics, and 5) Leaders. From the various theories above, it can be synthesized that teamwork is a group of individuals who cooperate by influencing each other and contributing effectively and responsibly in carrying out tasks to achieve common goals. Teamwork indicators are as follows: 1) Cooperation, 2) Trust, 3) Cohesiveness, 4) Responsibilities, and 5) Communication.

Mitchell, T.R and Larson, J.R (2005: 144), explain that organizational commitment is a person's attitude to continue to participate in the organization. Indicators of work commitment are as follows: 1) loyalty, 2) self-identification with the organization, and 3) acceptance of organizational goals. Hellriegel, D and Slochun, J.W. Jr (2011). Organizational commitment is the extent to which a person is involved in their organization and the strength of their identification with the organization. Indicators of work commitment are as follows: 1) Having confidence in the goals and values of the organization, so that it will create an emotional connection between members of the organization and their organization; and 2) Readiness and willingness to mobilize energy and thoughts for the benefit of the organization, because he needs it and will have an impact on his career development, maintaining a strong relationship with the organization, so that members of the organization try to be part of the organization and have no intention of leaving the organization.

Ivancevich, J.M et.al (2008), Organizational commitment can be interpreted as a feeling of identification, involvement, and loyalty expressed by employees towards the organization. Indicators of commitment to the organization are as follows: 1) Affective occupational commitment, 2) Continuance

commitment. and 3) Normative commitment. Luthan, F (2006), describes organizational commitment as an attitude that reflects employee loyalty to the organization and an ongoing process where employees express their concern for the organization and its continued success and progress. Indicators of work commitment are as follows: 1) Affective commitment, 2) Continuance commitment, and 3) Normative commitment.

From the various theories above, it can be synthesized that organizational commitment is a strong desire that exists in a person towards his organization in the form of loyalty by playing an active role in achieving organizational goals and maintaining membership in the organization. The indicators of commitment to the organization are as follows: 1) sense of belonging, 2) loyalty to work, 3) togetherness in the organization and realizing organizational goals, 4) desired services, 5) feedback received from the organization, 6) suitability of abilities, 7) increased income and fulfillment of needs.

George, J.M and Jones, R, (2012), Explain that work motivation is a psychological force that determines the direction of a person's behavior in an organization, the level of a person's effort, and the level of a person's persistence. Elements of work motivation: 1) Direction of Behavior, 2) Level of Effort, and 3) Level of Persistence.

Schermerhorn, J.R. (2013), Motivation describes the power within an individual that takes into account the level, direction, and persistence of effort made at work. Simply put, highly motivated people work hard at work while unmotivated people do not. One of the most important managerial responsibilities is to create conditions in which others are consistently inspired to work hard. Work motivation indicators are as follows: 1) Achievement, 2) Recognition 3) Work itself 4) Responsibility, 5) Advancement 6) Growth, 7) Working conditions, 8) Interpersonal relationships, 9) Organizational policies and administration, and 10) Compensation.

Greenberg, J and Baron, R.A (2008), define Motivation as a process that encourages, directs, maintains human behavior towards achieving a goal. Motivation will create stimulation, encouragement within oneself to do something as much as possible, and be directed as it should be in achieving goals. Motivation factors are: 1) Stimulation, is something that can influence someone to do activities, 2) Maintenance, is an activity in maintaining and caring for something well, 3) arousing elements, is reviving something within oneself in doing activities/work, and 4) Directing, is providing a definite direction in achieving the desired goals.

Wexley, K.N and Yukl, G.A (2005), describe Work motivation as something that creates enthusiasm or work drive. Motivation as a form of a person's desire to do something, the motivation comes from within, and comes from outside. Motivation factors include: 1) work motivation depends on the work factor itself, 2) achievements achieved, 3) opportunities to advance, and 4) recognition from others. From

the various theories above, it can be synthesized that Work motivation is the drive, desire and driving force that grows within a person, both from within and outside himself to do a job with high enthusiasm using all the abilities and skills he has which aims for maximum achievement. The indicators are as follows: 1) Desire to achieve achievements (Achievement), 2) Desire to gain recognition (Confession), 3) Desire to be responsible (Responsibility), 4) Desire to gain progress (Progress), 5) Desire to gain working conditions (Working Condition), and 6) Desire to gain organizational procedures (Organizational Procedure).

Operations research is a common method used in the study and optimization of systems through system modeling. Hardhienata, S (2017), defines Operations research as the application of scientific methods to find optimal solutions and decision making of a problem by taking into account existing resources and constraints. In the analysis and solution of the problems mentioned above, modeling and optimization are usually used. A statistical mathematical model is an equation formed from a framework of thought to describe the relationship or influence of dependent variables with independent variables. Most studies that use statistical models in the field of management, especially in the field of educational management, the discussion is stopped at the finding that there is a positive relationship or influence between the variables studied. This results in the conclusion of the study being only a statistical conclusion and the suggestions made being only normative.

SITOREM stands for "Scientific Identification Theory to Conduct Operation Research in Education Management", which can generally be interpreted as a scientific method used to identify variables in order to carry out "Operation Research" in the field of Education Management (Soewarto Hardhienata, 2017). In the context of Correlational and Path Analysis research, SITOREM is used as a method to conduct: a) Identification of the strength of influence between Independent Variables and Dependent Variables, b) Analysis of the value of research results for each indicator of research variables, c) Analysis of the weight of each indicator of each research variable based on the criteria of "Cost, Benefit, Urgency and Importance". Based on the identification of the strength of influence between research variables, and also based on the weight of each indicator of the independent variable that has the greatest contribution, a priority order of indicators that need to be improved and those that are maintained or developed can be arranged.

This study uses the POP-SDM (Modeling and Optimization of Management Resource Strengthening) approach developed by Setyaningsih, S. and Hardhienata, S. in 2019. In this method, the study begins by conducting qualitative research to explore factors that are suspected of having a positive and dominant influence on the resources to be strengthened. Based on the factors or variables found, a constellation of the influence of these variables on the resources to be strengthened is compiled to produce a research hypothesis. The research hypothesis at the quasi-qualitative research stage is then tested using path analysis at the quantitative research stage.

The steps in POP-SDM consist of 7 stages, namely: 1) Research Theme, 2) Pre Modelling, 3) Modelling, 4) Pre Model Test, 5) Model Test, 6) Model Optimization, and 7) Optimal Recommendation.

Figure 1. Stage of POP-SDM Setyaningsih, S. dan Hardhienata, S (2019)

METHOD

This study uses the POP-SDM (*Modeling and Optimization of Management Resource Strengthening*) approach developed by Setyaningsih, S. and Hardhienata, S. in 2019. In this method, the study begins by conducting qualitative research to explore factors that are suspected of having a positive and dominant influence on the resources to be strengthened.

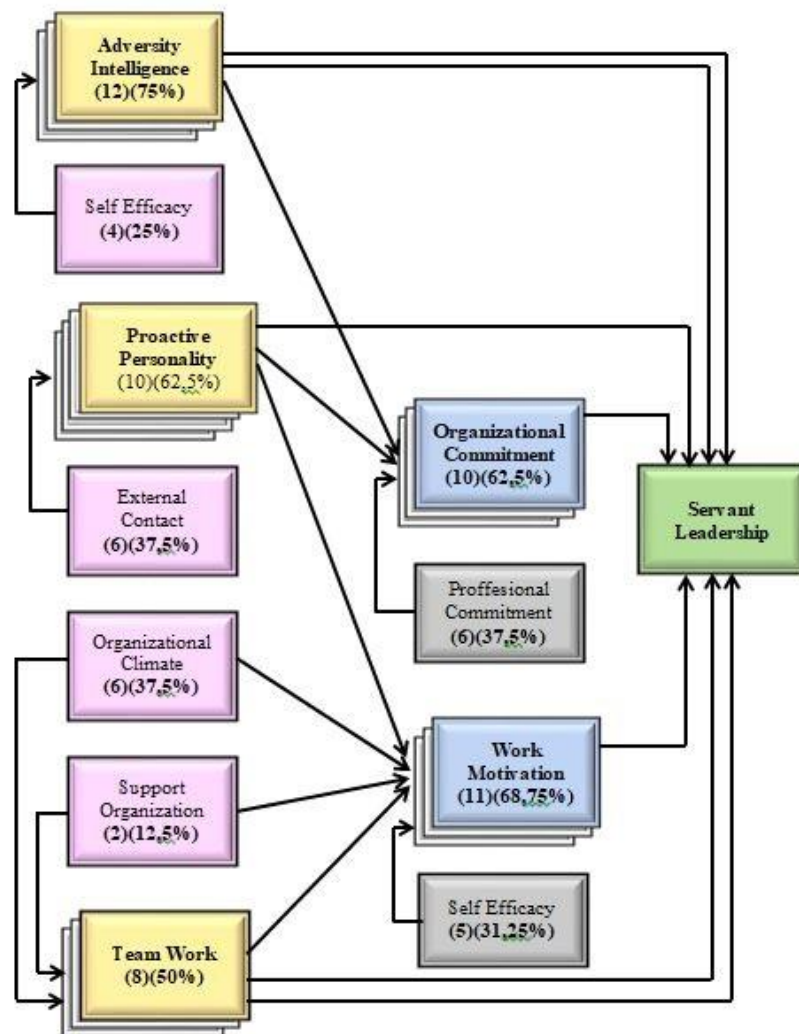


Figure 2. Variables obtained from qualitative research

Based on the factors or variables found, a constellation of the influence of these variables on the resources to be strengthened was compiled to produce a research hypothesis. Qualitative research was conducted at 16 (Sixteen) private vocational schools in Bogor Regency. Qualitative research was conducted for 3 (three) months, starting from August 14 to October 28, 2025, in stages starting from the preparation of the research proposal to determining the findings of the research hypothesis.

Quantitative research was conducted on the principals of private vocational schools in Bogor Regency with a population of 352 principals, with a sample of 188 principals calculated using the Cochran formula. Data collection in this study used a research instrument in the form of a questionnaire distributed to principals as research respondents. The research instrument items were derived from the research indicators whose conditions would be explored. Before being distributed to respondents, the research instrument was first tested to determine its validity and reliability. The validity test was carried out using

the Pearson Product Moment technique, while the reliability test was calculated using the Alpha Cronbach formula.

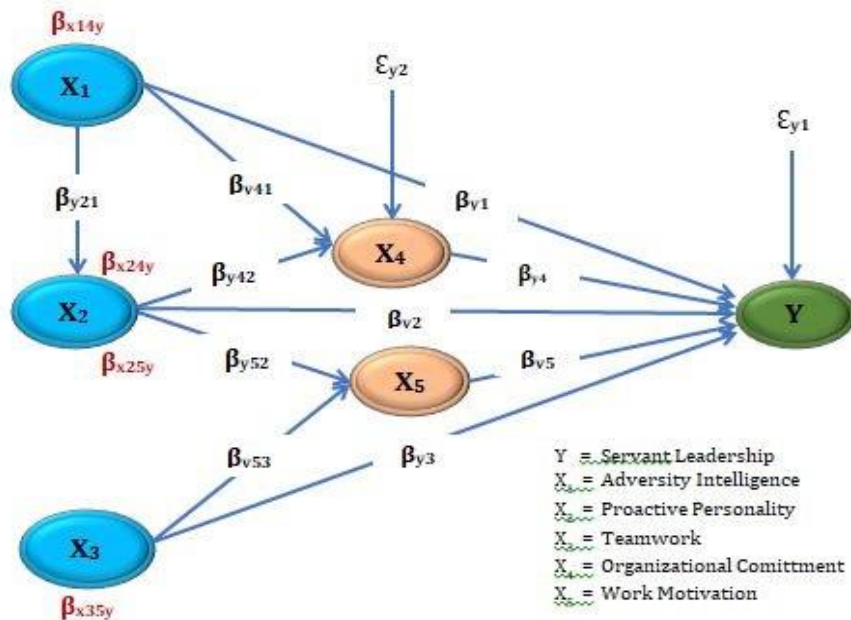


Figure 3. Framework of Thinking / Constellation of Research Variables

The framework of thinking can be interpreted as a depiction of the researcher's thought process that provides an explanation of the object (variable/focus) of the problem, why the researcher has an assumption as stated in the research hypothesis. Based on the research constellation that has been confirmed by the Expert, a framework of thinking or constellation can be compiled. After the data is collected, the next step is to carry out a homogeneity test, normality test, linearity test of the regression model, correlation analysis, analysis of direct and indirect influences, and statistical hypothesis testing, then SITOREM analysis is carried out. Based on the framework of thinking / constellation of research variables above, the following statistical mathematical model can be compiled:

- [1] Substructural Equation 1 : $\hat{y} = \beta_{y1x1} + \beta_{y2x2} + \beta_{y3x3} + \beta_{y4x4} + \beta_{y5x5} + \epsilon_y$
- [2] Substructural Equation 2 : $X_4 = \beta_{41x4} + \beta_{42x4} + \epsilon_4$
- [3] Substructural Equation 3 : $X_5 = \beta_{52x5} + \beta_{53x5} + \epsilon_5$
- [4] Substructural Equation 4 : $X_2 = \beta_{21x1} + \epsilon_2$

RESULT AND DISCUSSION

Based on the results of the statistical description analysis for the research variables, it can be revealed about the symptoms of data centralization as listed in the following table:

Table 1. Summary of Statistical Description of Research Variables

No	Description	X ₁	X ₂	X ₃	X ₄	X ₅	Y
1.	Mean	122.91	126.75	122.80	121.05	126.2	118.6
2.	Standard Error	1.19771	1.75	1.771	1.21728	1.253	0.97
3.	Median	126.5	134	130	124	130	123
4.	Mode	130	150	149	121	136	129
5.	Stand Deviation	16.422	24.0	24.29	16.6906	17.18	13.38
6.	Sample Variance	269.68	576.04	590.22	278.57	295.2	179.0
7.	Kurtosis	1.648	1.6490	0.5498	0.58266	0.85	0.191
8.	Skewness	-1.3927	-1.490	-0.777	-0.9844	-1.04	-1.020
9.	Range	81	101	101	70	77	59
10.	Minimum Score	64	52	59	74	75	77
11.	MaximumScore	145	153	160	144	152	136

Note: Adversity Intelligence (X₁); Proactive Personality (X₂); Teamwork (X₃); Organizational Comittment(X₄); Work Motivation (X₅); Servant Leadership (Y).

a. Uji Model Regresi

The overall calculation results of the regression model in this study can be seen in the summary in the following table:

Table 5. Regression Model

No	Relationship Model Between Variables	Regression Model	Test Results
1.	Y on X ₁	$\hat{Y} = 1,162 + 0,664 X_1$	Significant
2.	Y on X ₂	$\hat{Y} = 1,833 + 0,487 X_2$	Significant
3.	Y on X ₃	$\hat{Y} = 2,121 + 0,416 X_3$	Significant
4.	Y on X ₄	$\hat{Y} = 1,433 + 0,598 X_4$	Significant
5.	Y on X ₅	$\hat{Y} = 1,358 + 0,611 X_5$	Significant
6.	X ₄ on X ₁	$X_4 = 0,920 + 0,721 X_1$	Significant
7.	X ₄ on X ₂	$X_4 = 1,562 + 0,554 X_2$	Significant
8.	X ₅ on X ₂	$X_5 = 1,631 + 0,548 X_2$	Significant
9.	X ₅ on X ₃	$X_5 = 2,008 + 0,452 X_3$	Significant
10.	X ₂ on X ₁	$X_2 = 0,731 + 1,180 X_1$	Significant

11.	Y on X ₁ through X ₄	$\hat{Y} = 3,412 + 0,365 X_1 + 0,328 X_4$	Significant
12.	Y on X ₂ through X ₄	$\hat{Y} = 5,145 + 0,342 X_2 + 0,197 X_4$	Significant
13.	Y on X ₃ through X ₅	$\hat{Y} = 4,677 + 0,304 X_2 + 0,264 X_5$	Significant
14.	Y on X ₃ through X ₅	$\hat{Y} = 4,308 + 0,195 X_3 + 0,409 X_5$	Significant

b. Significance Test of Regression Model

The overall calculation results of the linearity test of the regression model in this study can be seen in the summary in the following table:

Table 2. Summary of the Results of the Significance Test of the Regression Model

No	Relationship Model Between Variables	F _{hitung}	F _{tabel}		Test Results
			α=0.05	α=0.01	
1.	Y on X ₁	17,562	3,952	6,939	Very Significant
2.	Y on X ₂	27,153	3,952	6,939	Very Significant
3.	Y on X ₃	40,134	3,952	6,939	Very Significant
4.	Y on X ₄	24,399	3,952	6,939	Very Significant
5.	Y on X ₅	26,564	3,952	6,939	Very Significant
6.	X ₄ on X ₁	5,931	3,952	6,939	Significant
7.	X ₄ on X ₂	12,070	3,952	6,939	Very Significant
8.	X ₅ on X ₂	17,157	3,952	6,939	Very Significant
9.	X ₅ on X ₃	23,067	3,952	6,939	Very Significant
10.	X ₂ on X ₁	16,906	3,952	6,939	Very Significant
11.	Y on X ₁ through X ₄	14,551	3,952	6,939	Very Significant
12.	Y on X ₂ through X ₄	18,218	3,952	6,939	Very Significant
13.	Y on X ₃ through X ₅	20,402	3,952	6,939	Very Significant
14.	Y on X ₃ through X ₅	15,885	3,952	6,939	Very Significant

PATH ANALYSIS

The influence of the lane as a whole by combining the results of the analysis on each substructure, can be described as follows:

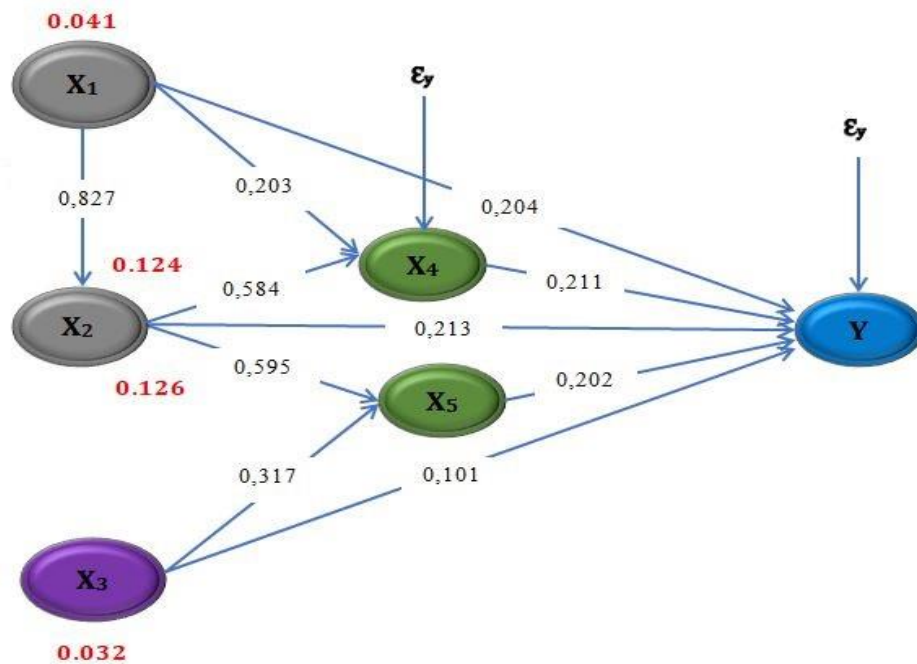


Figure 4. Path Analysis Results

The influence between the independent variables and the dependent variables when viewed from the path analysis, then the relationship is a functional relationship where Servant Leadership (Y) is formed as a result of the working of the Adversity Intelligence function (X_1), Proactive Personality (X_2), Teamwork (X_3), Organizational Commitment (X_4) and Work Motivation (X_5). The discussion of the research results can be described as follows:

[1] Direct influence between Adversity Intelligence Variable (X_1) on Servant Leadership Variable (Y)

From the calculation results, the path coefficient value (β_{y1}) = 0.204 was obtained, with t_{count} = 3.629 while t_{table} at the real level α = 0.05 obtained t_{table} = 1.972, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of Adversity Intelligence variable (X_1) on Servant Leadership (Y), meaning that the stronger Adversity Intelligence (X_1) in the individual principal will increase the principal's Servant Leadership (Y)

[2] Direct influence between Proactive Personality Variable (X_2) on Servant Leadership Variable (Y)

From the calculation results, the path coefficient value (β_{y2}) = 0.213 was obtained, with t_{count} = 2.879 while t_{table} at the real level α = 0.05 obtained t_{table} = 1.972, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of the Proactive Personality variable (X_2) on Servant Leadership (Y), meaning that the stronger the Proactive Personality (X_2) in the individual principal will increase the Servant Leadership of the principal (Y)

[3] Direct influence between Teamwork Variable (X_3) on Servant Leadership Variable (Y)

From the calculation results, the path coefficient value (β_{y3}) = 0.101 was obtained, with t_{count} = 4.237 while t_{table} at the real level $\alpha = 0.05$ obtained $t_{table} = 1.972$, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a positive direct influence of Teamwork variable (X3) on Servant Leadership (Y), meaning that the stronger Teamwork (X3) in individual principals will increase the Servant Leadership of principals (Y)

[4] Direct Influence Between Organizational Commitment Variable (X4) on Servant Leadership Variable (Y)

From the calculation results, the path coefficient value (β_{y4}) = 0.211 was obtained, with t_{count} = 3.848 while t_{table} at the real level $\alpha = 0.05$ obtained $t_{table} = 1.972$, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of the organizational commitment variable (X4) on Servant Leadership (Y), meaning that the stronger the commitment to the organization (X4) in the individual principal will increase the principal's Servant Leadership (Y)

[5] Direct Influence Between Work Motivation Variable (X5) on Servant Leadership Variable (Y)

From the calculation results, the path coefficient value (β_{y5}) = 0.202 was obtained, with t_{count} = 3.987 while t_{table} at the real level $\alpha = 0.05$ obtained $t_{table} = 1.972$, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of the Work Motivation variable (X5) on Servant Leadership (Y), meaning that the stronger the Work Motivation (X5) in the individual principal will increase the Servant Leadership of the principal (Y)

[6] Direct influence between Adversity Intelligence Variable (X1) on Commitment to Organization (X4)

From the calculation results, the path coefficient value (β_{y41}) = 0.203 was obtained, with t_{count} = 2.389 while t_{table} at the real level $\alpha = 0.05$ obtained $t_{table} = 1.972$, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of the Adversity Intelligence variable (X1) on commitment to the organization (X4), meaning that the stronger the Adversity Intelligence (X1) in the individual principal will increase the commitment to the principal's organization (X4)

[7] Direct influence between Proactive Personality Variable (X2) on Organizational Commitment Variable (X4)

From the calculation results, the path coefficient value (β_{y42}) = 0.584 was obtained, with t_{count} = 6.869 while t_{table} at the real level $\alpha = 0.05$ obtained $t_{table} = 1.972$, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of the Proactive Personality variable (X2) on commitment to the organization (X4), meaning that the stronger the Proactive Personality (X2) in the individual principal will increase the commitment to the principal's organization (X4)

[8] Direct influence between Proactive Personality Variable (X2) on Work Motivation Variable (X5)

From the calculation results, the path coefficient value (β_{y52}) = 0.595 was obtained, with t_{count} = 9.133 while t_{table} at the real level $\alpha = 0.05$ obtained $t_{table} = 1.972$, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of the Proactive Personality variable (X2) on Work Motivation (X5), meaning that the stronger the Proactive Personality (X2) in the individual principal will increase the principal's Work Motivation (X5)

[9] Direct Influence Between Teamwork Variable (X3) on Work Motivation Variable (X5)

From the calculation results, the path coefficient value (β_{y53}) = 0.317 was obtained, with t_{count} = 3.323 while t_{table} at the real level $\alpha = 0.05$ obtained $t_{table} = 1.972$, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of the Teamwork variable (X3) on Work Motivation (X5), meaning that the stronger the Teamwork (X3) in the individual principal will increase the principal's Work Motivation (X5)

[10] Direct Influence Between Adversity Intelligence Variable (X1) on Proactive Personality Variable (X2)

From the calculation results, the path coefficient value (β_{21}) = 0.827 was obtained, with t_{count} = 20.046 while t_{table} at the real level $\alpha = 0.05$ obtained $t_{table} = 1.972$, then $t_{count} > t_{table}$ means H_0 is rejected and H_1 is accepted. Thus, there is a direct positive influence of the Adversity Intelligence variable (X1) on Proactive Personality (X2), meaning that the stronger the Adversity Intelligence (X1) in the individual principal will increase the Proactive Personality of the principal (X2)

[11] Indirect Influence Between Adversity Intelligence Variable (X1) on Servant Leadership Variable (Y) through Commitment to the Organization (X4)

From the calculation results of the indirect influence, the path coefficient value (β_{x14y}) = 0.041 was obtained, then H_0 was rejected and H_1 was accepted. Thus, there is an indirect positive influence between the Adversity Intelligence variable (X1) on Servant Leadership (Y) through commitment to the organization (X4), meaning that the stronger the Adversity Intelligence (X1) in the individual principal will strengthen the principal's servant leadership (Y) through increased commitment to the organization (X4)

[12] Indirect Influence Between the Proactive Personality Variable (X2) on the Servant Leadership Variable (Y) through Commitment to the Organization (X4)

From the results of the calculation of the indirect influence, the path coefficient value (β_{x24y}) = 0.124 is obtained, so H_0 is rejected and H_1 is accepted. Thus, there is an indirect positive influence of the proactive personality variable (X2) on Servant Leadership (Y) through commitment to the organization (X4), meaning that the stronger the proactive personality (X2) in the individual principal will strengthen the principal's servant leadership (Y) through increased commitment to the organization (X4)

[13] Indirect Influence Between Proactive Personality Variable (X2) on Servant Leadership Variable (Y) through Work Motivation (X5)

From the results of the calculation of the indirect influence, the path coefficient value (β_{x25y}) = 0.126 was obtained, so H_0 was rejected and H_1 was accepted. Thus, there is an indirect positive influence between the proactive personality variable (X2) on Servant Leadership (Y) through Work Motivation (X5), meaning that the stronger the proactive personality (X2) in the individual principal, the stronger the principal's servant leadership (Y) through increased Work Motivation (X5)

[14] Indirect Influence Between Teamwork Variable (X3) on Servant Leadership Variable (Y) through Work Motivation (X5)

From the results of the calculation of the indirect influence, the path coefficient value (β_{x25y}) = 0.032 was obtained, so H_0 was rejected and H_1 was accepted. Thus, there is a positive indirect positive influence of the Teamwork variable (X3) on Servant Leadership (Y) through Work Motivation (X5), meaning that the stronger the Teamwork (X3) in the individual principal, the stronger the servant leadership of the principal (Y) through increasing Work Motivation (X5).

Tabel 8. Hipotesis Penelitian

No	Hypotesis	Path	Statistic Test	Decision	Conclusion
1.	Adversity Intelligence (X1) to Servant Leadership (Y)	0,204	$H_0: \beta_{Y1} \leq 0$ $H_1: \beta_{Y1} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive
2.	Proactive Personality (X2) to Servant Leadership (Y)	0,213	$H_0: \beta_{Y2} \leq 0$ $H_1: \beta_{Y2} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive
3.	Teamwork (X3) to Servant Leadership (Y)	0,101	$H_0: \beta_{Y3} \leq 0$ $H_1: \beta_{Y3} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive
4.	Organizational Commitment (X4) to Servant Leadership (Y)	0,211	$H_0: \beta_{Y4} \leq 0$ $H_1: \beta_{Y4} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive
5.	Work Motivation (X5) to Servant Leadership (Y)	0,202	$H_0: \beta_{Y5} \leq 0$ $H_1: \beta_{Y5} > 0$	H_0 rejected H_1 accepted	Influential Directly

						Positive
6.	Adversity Intelligence (X1) to Organizational Commitment (X4)	0,203 0	$H_0: \beta_{X_4X_1} \leq 0$ $H_1: \beta_{X_4X_1} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive	
7.	Proactive Personality (X2) to Organizational Commitment (X4)	0,584 0	$H_0: \beta_{X_4X_2} \leq 0$ $H_1: \beta_{X_4X_2} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive	
8.	Proactive Personality (X2) to Work Motivation (X5)	0,595 0	$H_0: \beta_{X_5X_2} \leq 0$ $H_1: \beta_{X_5X_2} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive	
9.	Teamwork (X3) to Work Motivation (X5)	0,317 0	$H_0: \beta_{X_5X_3} \leq 0$ $H_1: \beta_{X_5X_3} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive	
10.	Adversity Intelligence (X1) to Proactive Personality (X2)	0,827	$H_0: \beta_{X_2X_1} \leq 0$ $H_1: \beta_{X_2X_1} > 0$	H_0 rejected H_1 accepted	Influential Directly Positive	
11.	Adversity Intelligence (X1) to Servant Leadership (Y) Organizational Commitment (X4)	0,011	$H_0: \beta_{YI} \leq 0$ $H_1: \beta_{YI} > 0$	H_0 rejected H_1 accepted	Influence Indirectly Positive	
12.	Proactive Personality (X2) to Servant Leadership (Y) through Organizational Commitment (X4)	0,124	$H_0: \beta_{YI} \leq 0$ $H_1: \beta_{YI} > 0$	H_0 rejected H_1 accepted	Influence Indirectly Positive	
13.	Proactive Personality (X2) towards Servant Leadership (Y) through Work Motivation (X5)	0,126	$H_0: \beta_{YI} \leq 0$ $H_1: \beta_{YI} > 0$	H_0 rejected H_1 accepted	Influence Indirectly Positive	

14.	Teamwork (X3)	towards	0,032	$H_0: \beta_{Y1} \leq 0$	H_0 rejected	Influence
	Servant Leadership (Y)			$H_1: \beta_{Y1} > 0$	H_1 accepted	Indirectly
	through Work Motivation (X5)					Positive

OPTIMAL SOLUTION FOR STRENGTHENING SERVANT LEADERSHIP

Based on the results of statistical hypothesis testing, determination of indicator priorities, and calculation of indicator values that have been described above, a recapitulation of research results can be made which is an optimal solution in strengthening the Principal's Servant Leadership as follows:

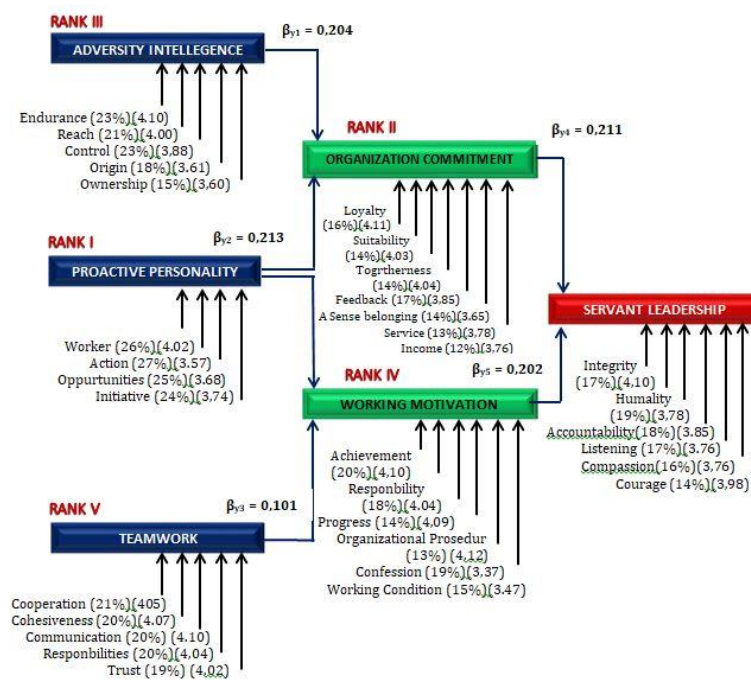


Figure 5. Constellation of Research Variables and Indicators

CONCLUSION

The implication of the conclusion above is that if servant leadership is to be improved, it is necessary to develop adversity intelligence, proactive personality, teamwork, and increased organizational commitment, as well as work motivation. School supervisors, school organizing institutions and the Education Office need to foster principals in strengthening servant leadership by providing appropriate direction to strengthen the development of adversity intelligence, proactive personality, and teamwork, as well as increasing commitment to the organization and work motivation in accordance with the results of this study.

DATA AVAILABLE

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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AUTHOR CONTRIBUTION

AH Writing -Review & Editing, Methodology, Validation, and Supervision; Conceptualization, Writing -Original Draft, Methodology, Formal analysis, Editing, and Visualization; Writing -Review & Editing, Validation, and Supervision.

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