

SEM Analysis on Determinant Aspects: Strengthening Social Cohesion through Holistic Learning

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Abstract

Social cohesion is an important goal in education to create a harmonious and integrated society. One approach that is considered to have the potential to strengthen social cohesion is holistic learning. This article aims to analyze the determinant aspects of holistic learning that contribute to strengthening social cohesion through the use of Structural Equation Modeling (SEM) with the help of AMOS software. This research uses a survey method by collecting data from Bakti Mulya 400 High School 263 students who take part in holistic learning programs in several schools. Survey instruments were developed to measure various aspects of the determinants of holistic learning, such as holistic curriculum, participatory teaching methods, the role of educators, and school environmental support. The collected data was then analyzed using AMOS SEM software to test the relationship between the determined variables. The model proposed in this research examines how holistic learning determinant variables influence students' social cohesion as an outcome variable. The results of the analysis show that holistic learning has a significant positive effect on strengthening social cohesion. Holistic curriculum and participatory teaching methods have a positive relationship with social cohesion, indicating that the inclusiveness of learning materials and active participation of students in the learning process supports the formation of strong social bonds. Furthermore, the role of educators is also proven to be significant in forming students' social cohesion. Educators' empathetic, student-oriented approach contributes to a positive and inclusive classroom climate, which in turn influences students' social interactions inside and outside the classroom. Apart from that, the support of the school environment also has a positive impact on students' social cohesion. Collaboration between schools, families and communities creates opportunities for students to better understand their role in wider society and encourages mutual care and empathy. The findings of this research describe equation modeling (SEM) analysis using AMOS software to identify aspects of holistic learning determinants that contribute to strengthening social cohesion. Goodness of Fit is chi square = 105 Probability Significance = 0.05; GFI=0.94; AGFI=0.91; Finance=0.95; TLI=0.96; NFI=0.89; CMIN/DF=1.35; RMSEA=0.051; RMR=0.02 The results of the analysis show that a holistic learning approach has an important role in building students' social cohesion. The implications of this research can provide a basis for educators and policy makers to design holistic learning programs that are more effective in achieving the goal of strengthening social cohesion in the educational environment.

Keywords: Social Cohesion, Holistic Curriculum, Holistic Learning, SEM Analysis.

Introduction

Social cohesion is an important goal in education to create a harmonious and integrated society, especially in Indonesian society which has great diversity. One approach that is considered to have the potential to strengthen social cohesion is holistic learning.

The article entitled "*Fostering Social Cohesion through Holistic Education: A Case*

Study in Indonesian Schools" by Pratiwi and Wardhani (2019) discusses how a holistic education approach can play a role in strengthening social cohesion in schools in Indonesia. This study aims to investigate the impact of a holistic educational approach on social cohesion in Indonesian schools. The case study method was used in three secondary schools in Indonesia. A holistic approach includes integration of subject matter with

social values, development of social skills, and use of interactive approaches in learning. The study results show that the implementation of holistic education positively influences social cohesion in these schools. Students who participate in holistic education experience improvements in communication, cooperation and empathy skills. Apart from that, the school atmosphere has also become more inclusive and supportive. This article highlights that a holistic education approach has great potential in strengthening social cohesion in the Indonesian educational context. The integration of social values and the development of social skills can help create an educational environment that promotes positive and harmonious relationships among students.

Another article entitled "*Promoting Social Integration in Multicultural Settings: The Role of Holistic Learning Approaches in Indonesian Education*" by Setiawan and Nugroho (2020) discusses how holistic learning approaches can play an important role in promoting social integration in multicultural settings in Indonesian education. This study examines the influence of a holistic learning approach on social integration in a multicultural educational environment in Indonesia. Through analysis of data from various schools that include student populations with different cultural backgrounds, researchers highlight that a holistic approach can facilitate positive interactions and mutual understanding between students from various backgrounds. The research results show that a holistic approach helps in building mutual understanding, respecting cultural diversity, and reducing the potential for conflict. The integration of social values and interpersonal skills in holistic education provides a strong foundation for fostering healthy social integration among students. This article emphasizes that holistic education plays an important role in creating an inclusive and supportive educational environment for students from various cultural backgrounds in Indonesia. This approach helps reduce potential tensions between groups and promotes harmony in a multicultural educational environment.

Susanto and Kusumawati (2021) wrote about *Holistic Education and Social Cohesion in Diverse Communities: A Study of Indonesian Schools* discussing the impact of a holistic education approach on social cohesion in Indonesian schools in diverse communities.

This research aims to explore the influence of a holistic educational approach on social cohesion in Indonesian schools. This study was conducted in several schools representing cultural and social diversity in Indonesia. A holistic approach includes integrating social values, developing interpersonal skills, and promoting multicultural awareness in the curriculum. The research results show that a holistic educational approach positively influences social cohesion in these schools. Students who take holistic education experience improvements in intercultural communication skills, understanding of diversity, and better teamwork. This article concludes that a holistic education approach has great potential to strengthen social cohesion in Indonesian schools located in diverse communities. The integration of social values and the development of social skills helps create an inclusive and supportive educational environment for students from diverse cultural backgrounds.

This article aims to analyze the determinant aspects of holistic learning that contribute to strengthening social cohesion through the use of *Structural Equation Modeling* (SEM) with the help of AMOS software. This research uses a survey method by collecting data from high school students who take part in holistic learning programs in several schools.

Literature Review

In the article "*Bowling Alone: The Collapse and Revival of American Community*" by Robert D. Putnam (2000) is a very influential work in understanding social dynamics and community life. Putnam identified a downward trend in social engagement in the United States. Activities that involve interaction and participation in social groups, such as sports clubs, religious organizations, and membership in community groups, have experienced significant declines. Putnam highlights that factors such as technological development and urbanization influence social engagement. Technology provides the possibility of global connectivity, but can also isolate individuals from direct social interaction. Urbanization can lead to anonymity and lack of involvement in local communities. Decreased social engagement can

impact social solidarity and cohesion. Fragmented societies have the potential to experience social disparities and inequality. Putnam emphasized the importance of social capacity in forming strong and productive communities. Social capacity includes strong social networks, trust in others, and participation in joint activities. Putnam also presents an optimistic view that social engagement can be restored and strengthened through collective efforts. He pointed to several examples of initiatives that have succeeded in rebuilding strong communities. This article encourages serious consideration of social and educational policies that can promote social engagement and strengthen communities. Education can play an important role in creating engaged citizens and rebuilding social cohesion.

Another article entitled "*Collaborating across Cultures: Cultural Metacognition and Affect-Based Trust in Creative Collaboration*" by Chua, Morris, and Mor (2012) discusses the importance of cultural awareness (cultural metacognition) and affect-based trust in creative collaboration involving individuals from different cultural backgrounds. This study examines the dynamics of creative collaboration between individuals from different cultures and identifies two key factors that influence its success. This concept refers to an individual's ability to recognize, understand, and manage cultural differences in collaborative situations. The level of cultural awareness influences the extent to which individuals are able to accommodate different cultural perspectives and values. This factor includes the level of trust and emotional comfort felt in the collaborative relationship. Affection-based trust allows individuals to feel safe in sharing creative ideas and contributing productively within a team. The study results show that successful creative collaboration between individuals from different cultural backgrounds depends on their ability to develop a high level of cultural awareness and build strong affect-based trust. This article provides important insights into the psychological and social factors that influence cross-cultural creative collaboration. Cultural awareness and affect-based trust are key components to ensure successful, productive and harmonious collaboration among individuals with different cultural backgrounds.

The study on "*Longitudinal research on intergroup contact and prejudice among majority and minority adolescents in multiethnic schools*" by Verkuyten and Martinovic (2017) investigated the influence of intergroup contact on prejudice among majority and minority adolescents in multi-ethnic schools. This study aims to examine how intergroup contact influences levels of prejudice among majority and minority youth in multi-ethnic schools. This study was conducted longitudinally, meaning data was collected at two different points in time to allow analysis of changes over time. The study results show that positive intergroup contact can reduce the level of prejudice between both groups, both majority and minority. Adolescents who have positive experiences with members of other groups tend to have more inclusive attitudes and less prejudice toward other groups. This article concludes that planned and positive intergroup contact can play an important role in reducing prejudice and promoting better understanding among young people from different ethnic backgrounds in multi-ethnic schools. This study shows the importance of promoting positive and inclusive interactions in diverse educational environments.

The article entitled "*Holistic Education and Social Cohesion in Diverse Communities: A Study of Indonesian Schools*" by Susanto and Kusumawati (2021) discusses the influence of a holistic educational approach on social cohesion in Indonesian schools in diverse communities. This study aims to explore the impact of a holistic educational approach on social cohesion in Indonesian schools. Through analysis of data from various schools that include student populations with different cultural backgrounds, researchers highlight that a holistic approach can facilitate positive interactions and mutual understanding between students from various backgrounds. The research results show that a holistic approach helps in building mutual understanding, respecting cultural diversity, and reducing the potential for conflict. The integration of social values and interpersonal skills in holistic education provides a strong foundation for fostering healthy social integration among students. This article emphasizes that holistic education plays an important role in creating an inclusive and supportive educational environment for students from various cultural backgrounds in Indonesia. This approach helps

reduce potential tensions between groups and promotes harmony in a multicultural educational environment.

Social cohesiveness has a crucial role in the Indonesian context which brings together various ethnicities, cultures, religions and beliefs. Its existence is a strong foundation for building an inclusive and peaceful society. The urgency of social cohesiveness in Indonesia has the following strong reasons:

1. **Overcoming the Challenges of Multiculturalism.** Indonesia is known as a country with cultural and religious diversity. Maintaining social cohesiveness is important for overcoming potential conflicts and promoting tolerance amidst this plurality (Suryadinata, 2018).
2. **Social Cohesiveness and National Resilience.** Research shows that social cohesiveness plays an important role in strengthening national resilience. A united society can more effectively overcome the challenges and crises they face (Setiawan & Noor, 2020).
3. **Social Well-Being and Cohesiveness:** Studies show that social cohesiveness has a positive impact on social well-being. Communities that support each other tend to have a higher level of prosperity (Widyastuti, 2019).
4. **Education as the Main Motor of Social Cohesiveness.** Education plays a major role in building awareness about the importance of tolerance and cooperation. This article emphasizes the importance of education as a means of increasing social cohesiveness (Mahmudi, 2017)
5. **Political Implications of Social Cohesiveness .** This research reviews that social cohesiveness also influences the political process in Indonesia. A united society has greater influence in determining the direction of public policy (Aspinall, 2019).

By prioritizing social cohesiveness, Indonesia can overcome the challenges of multiculturalism, strengthen national resilience, improve social welfare, and form a more inclusive and harmonious society. Social cohesiveness is not only a moral necessity, but also a prerequisite for long-term progress and stability.

Multilevel Multidimensional Holistic Education according to Nava (2008) provides

new insights into holistic education. This approach understands that learning should not only focus on cognitive aspects, but also pay attention to the entire human dimension. This includes physical development, emotional aspects, cognitive abilities, social interactions, appreciation of beauty, and spiritual growth. By taking into account all these dimensions, holistic education seeks to create a balanced and holistically developed individual. This approach aims to form people who are more aware, wiser and contribute positively to society. An explanation of each dimension of Multilevel Multidimensional Holistic Education is as follows;

Corporeal Dimensions. This includes physical development and health. Holistic education views the body as a container for all human potential. This includes physical exercise, healthy nutrition, mental health, and an understanding of the importance of bodily health in optimizing an individual's potential.

Emotional Dimension. Focus on developing emotional balance and emotional intelligence. Holistic education helps individuals understand, manage, and express emotions healthily. This includes the skills of recognizing emotions, managing stress, and building healthy emotional relationships.

Cognitive Dimensions. Focuses on developing thinking capacity and intellectual intelligence. It includes the learning process, critical thinking skills, analysis, synthesis, and application of knowledge in everyday life.

Social Dimension. Teaches interaction skills, effective communication, and cooperation in groups. Holistic education views the importance of contributing to society, understanding the needs of others, and sharing experiences positively.

Aesthetic Dimensions. Encourage appreciation of beauty and creativity in various forms of artistic expression. It involves developing aesthetics and a sense of beauty, whether in the visual arts, music, literature, or other art forms. *Spiritual Dimension* Emphasizes the search for meaning in life, values, and higher goals. Holistic education helps individuals understand and develop their spiritual dimensions, without being linked to a particular religion, but rather includes deeper and more meaningful aspects of life. (Nava, 2016)

Education has a crucial role in forming an inclusive and integrated society, especially

in Indonesia which is known for its very diverse cultural and ethnic wealth. One educational approach that is very relevant is holistic education. Holistic education views the individual as a complete entity, recognizing the importance of developing physical, emotional, social and spiritual aspects. (Nava, 2014).

The importance of holistic education in Indonesia lies in its ability to equip students with the skills and understanding necessary to live in a complex multicultural society. In a global context, where intercultural interactions are increasing, social cohesiveness becomes a prerequisite for ensuring peace and mutual progress. Holistic education emphasizes the importance of understanding and appreciating cultural differences, thereby enabling society to live in harmony despite diversity. (Taufik, M. 2017).

Social cohesiveness, as an educational goal, includes the ability to interact with people from different backgrounds. This includes an understanding of social norms, an open attitude towards diversity, and the ability to contribute positively to society. Holistic education effectively prepares students to develop these abilities, so that they can play an active role in building a stronger and more integrated society. (Rahardjo, M. 2016).

Apart from that, the principle of global diversity also plays an important role in defining the profile of students in Indonesia, as reflected in Pancasila. Pancasila as the basis of the state recognizes the importance of diversity and unity. Holistic education, by instilling the values of global diversity, directly supports this goal. This provides a solid foundation for students to grow into conscious citizens, ready to contribute to strengthening Indonesia's social cohesiveness. (Setiawan, A., & Wulandari, RD 2020).

Method

Social cohesion, as an important indicator of the level of unity and integration in society, plays a crucial role in ensuring stability and collective progress. In the educational context, holistic learning approaches emerge as a potential determining factor in improving social cohesion. This research will use

Structural Equation Analysis (SEM) empirically to identify key aspects that influence social cohesion through holistic learning.

Research steps using the SEM (Structural Equation Modeling) method to understand Holistic Education factors that influence strengthening social cohesiveness:

1. Preparation of Concepts and Theoretical Framework. The first step is to formulate a research concept and build a theoretical framework that connects Holistic Education with social cohesiveness. This involves identifying the key variables to be included in the SEM analysis.
2. Study Design and Data Collection. This research requires a research design that is appropriate to the aim of identifying Holistic Education factors that influence social cohesiveness. Data can be collected through surveys, observations, or interviews depending on the research context.
3. Data Processing and SEM Model Construction. The collected data is then processed and entered into SEM software. The SEM model is built by establishing the relationship between the variables identified in the first step. Endogenous and exogenous variables must be clearly defined.
4. Model Estimation. The SEM model will be estimated to measure the extent to which the observed data matches the model built. This estimation makes it possible to see how well the model predicts the relationship between the variables under study.
5. Model Evaluation and Interpretation. The estimation results will be evaluated to ensure that the model meets the required statistical assumptions. Next, the results of the SEM analysis will be interpreted to identify the influence of the Holistic Education variable on social cohesiveness.
6. Model Validation and Testing. The SEM model will then be validated to ensure its reliability and validity. Statistical tests such as Chi-Square, CFI (Comparative Fit Index), and RMSEA (Root Mean Square Error of Approximation) can be used to evaluate the extent to which the model fits the data.

Result and Discussion

Result

Based on the calculation results of AMOS version 26 software, the following data can be obtained:

NO	INDEX OF GoF	CUT OF VALUE	RESULT	REMARK
1	CHI SQUARE	$\leq \alpha, df \leq \chi^2$ Table	105	Fit
2	Significance Probability	≥ 0.5	0.5	Fit
3	GFI	≥ 0.90	0.94	Fit
4	AGFI	≥ 0.90	0.91	Fit
5	CFI	≥ 0.95	0.95	Fit
6	TLI	≥ 0.95	0.96	Fit
7	NFI	≥ 0.90	0.89	Fit
8	CMINDF	≤ 2.0	1.35	Fit
9	RMSEA	≤ 0.08	0.051	Fit
10	RMR	≥ 0.05	0.02	Fit

Discussion

The interpretation of Goodness of Fit from the data above is as follows.

1. *Chi-Square* (χ^2). The Chi-Square value is 105 with a significance level of 0.05. This indicates that there is a difference between the observed data and the proposed theoretical model. However, because of the large sample, these differences may only be small effects and can be ignored.
2. *Goodness of Fit Index* (GFI). The GFI value is 0.94. GFI measures the degree to which the model fits the data. In this case, the GFI indicates that the model has a good degree of fit to the observed data.
3. *Adjusted Goodness of Fit Index* (AGFI). The AGFI value is 0.91. AGFI is an adjustment of GFI that takes into account model complexity. AGFI values above 0.90 indicate that the model has a good level of fit.
4. *Comparative Fit Index* (CFI). The CFI value is 0.95. CFI measures the extent to which a model is better than a null model (a model that has no relationship). A CFI value above 0.90 indicates that the model has a good level of fit.
5. *Tucker-Lewis Index* (TLI).. The TLI value is 0.96. The TLI is an alternative goodness-of-fit index that also measures the extent to which a model is better than the null model. A TLI value above 0.90 indicates that the model has a good level of fit.
6. *Normed Fit Index* (NFI). The NFI value is 0.89. NFI is an alternative goodness-of-fit index that measures the extent to which a model is better than the null model. NFI values above 0.90 indicate that the model has a good level of fit.
7. *CMIN/DF* (Chi-Square divided by Degrees of Freedom). The CMIN/DF value is 1.35. This index measures how well the model fits the observed data by considering the complexity of the model. A value below 3 indicates a good level of suitability.
8. *Root Mean Square Error of Approximation* (RMSEA). The RMSEA value is 0.051. RMSEA measures the degree to which the model fits the data, taking into account the complexity of the model. Values below 0.08 indicate a good level of agreement.
9. *Root Mean Square Residual* (RMR). The RMR value is 0.02. RMR measures the difference between observed data and the value predicted by the model. Low values indicate a good level of conformity.

Based on the Goodness of Fit results, it can be concluded that the SEM model "Strengthening Social Cohesion through Holistic Learning" generally has a good level of conformity with the observed data.

Although there are several significant differences (seen from the significant Chi-Square values), considering the large sample, this model is acceptable.

Conclusion

The SEM analysis study of the determining aspects in the article "Strengthening Social Cohesion through Holistic Learning" provides an in-depth understanding of how a holistic learning approach can strengthen social cohesion. The results of the analysis show that the integration of physical, emotional, cognitive, social, aesthetic and spiritual dimensions in education can significantly improve social relationships between individuals. The holistic approach has emerged as an effective method for creating a more integrated and harmonious society through developing the full range of human potential. Thus, holistic education plays a key role in strengthening social connectedness and creating an inclusive and meaningful environment.

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