

THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP STYLE OF TRADITIONAL LEADERS IN THE PREVENTION OF TEENAGE PREMARITAL PREGNANCY

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ABSTRACT

Teenage premarital pregnancy is a population issue that requires preventive efforts involving various parties, including traditional leaders as part of the community around adolescents. This study aimed to determine the influence of transformational leadership style on the role of traditional leaders in preventing teenage premarital pregnancy. This observational study used a cross-sectional design involving 200 traditional leaders selected through a simple random sampling technique. The independent variables were transformational leadership style and sociodemographic factors, while the dependent variable was the role of traditional leaders in preventing teenage premarital pregnancy. Data were collected using a questionnaire and analyzed using univariate analysis, bivariate analysis with the Chi-square test, and multivariate analysis with multiple logistic regression. The results showed that sociodemographic factors (age, gender, education, occupation, and income) did not significantly influence the role of traditional leaders ($p>0.05$). However, work experience had a significant effect ($OR=0.514$, $p=0.023$). Transformational leadership style also had a significant influence ($OR=15.910$, $p=0.001$). Multivariate analysis revealed that transformational leadership style was the most influential factor on the role of traditional leaders ($OR=17.127$, 95% CI=8.093–36.246, $p<0.001$). It can be concluded that transformational leadership style plays a crucial role in strengthening the role of traditional leaders in preventing teenage premarital pregnancy. Transformational leadership training programs for traditional leaders are strongly recommended, and collaboration between government and health institutions with traditional leaders in adolescent reproductive health programs should be enhanced.

ABSTRAK

Kehamilan pranikah remaja merupakan masalah kependudukan yang memerlukan upaya pencegahan dengan melibatkan berbagai pihak, termasuk tokoh adat sebagai bagian dari masyarakat di lingkungan remaja. Penelitian ini bertujuan mengetahui pengaruh gaya kepemimpinan transformasional terhadap peran tokoh adat dalam pencegahan kehamilan pranikah remaja. Penelitian ini bersifat observasional dengan rancangan *cross sectional* dan melibatkan 200 tokoh adat yang dipilih menggunakan teknik *simple random sampling*. Variabel bebas meliputi gaya kepemimpinan transformasional dan sosiodemografi, sedangkan variabel terikat adalah peran tokoh adat dalam pencegahan kehamilan pranikah remaja. Instrumen penelitian menggunakan kuesioner, dengan analisis univariat, bivariat menggunakan uji *chi-square*, dan multivariat dengan regresi logistik ganda. Hasil menunjukkan bahwa faktor sosiodemografi (umur, jenis kelamin, pendidikan, pekerjaan, dan pendapatan) tidak berpengaruh signifikan terhadap peran tokoh adat ($p>0,05$). Lama kerja berpengaruh signifikan dengan nilai $OR=0,514$ dan $p=0,023$. Gaya kepemimpinan transformasional juga berpengaruh signifikan dengan $OR=15,910$ dan $p=0,001$. Hasil analisis multivariat menunjukkan gaya kepemimpinan transformasional sebagai faktor paling berpengaruh terhadap peran tokoh adat dengan $OR=17,127$ (95% CI=8,093–36,246; $p<0,001$). Disimpulkan bahwa gaya kepemimpinan transformasional merupakan faktor utama dalam meningkatkan peran tokoh adat pada pencegahan kehamilan pranikah remaja. Program pelatihan kepemimpinan transformasional bagi tokoh adat perlu dilakukan, serta kerja sama antara pemerintah dan lembaga kesehatan dengan tokoh adat dalam program kesehatan reproduksi remaja perlu diperkuat.

Kata Kunci:

*Pencegahan;
Kehamilan pranikah remaja;
Tokoh adat;
Gaya kepemimpinan
transformasional*

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INTRODUCTION

Every year in developing countries, an estimated 21 million girls aged 15–19 years become pregnant, and about 12 million of them give birth (Sully et al., 2019; WHO, 2022). Globally, more than 16 million children are born to mothers aged 15–19 years, with Africa having the highest rates of teenage pregnancy (Neal et al., 2018). Angola, Bangladesh, Mozambique, and Nigeria have fertility rates among girls aged 10–14 of more than 10 births per 1,000 children (United Nations, 2020). In Indonesia, the proportion of adolescents aged 10–19 years who have ever been pregnant is 58.8%, and 25.2% are pregnant with their first child. The average age at first pregnancy is 18 years, affecting 46% of adolescents, with higher rates in rural areas (51%) compared to urban areas. Pregnancy and birth rates among adolescent girls remain high at 48 per 1,000 adolescents (BKKBN et al., 2017). The province of Central Kalimantan has the highest teenage pregnancy rate in Indonesia at 77.92%, and the adolescent (aged 15–19) birth rate was 63.13% in 2020 (BPS, 2023).

Premarital teenage pregnancy negatively impacts the health of both the teenager and the baby, as well as the teenager's social, economic, and educational well-being. Teenage pregnancies are associated with preterm birth, low birth weight (LBW), hemorrhage during labor, and increased risks of unwanted pregnancies and unsafe abortions (Christofides et al., 2014; Matos et al., 2018). Internal factors such as education, knowledge, and psychosocial aspects (personal values regarding premarital sex, affection toward a partner, and excessive drinking leading to uncontrolled behavior), along with external factors such as community, family, and peers, serve as determinants of teenage pregnancy. Community-level factors, including high divorce, unemployment, and crime rates, as well as community indifference, also contribute to teenage pregnancy (Osok et al., 2018). Community apathy, including that of community leaders, increases the prevalence of teenage pregnancy. Many communities perceive teenage pregnancies as solely the teenagers' fault. Teenagers who experience unwanted pregnancies are often deemed responsible for their actions and are expected to marry. Community participation in preventing teenage pregnancies remains suboptimal (Pertiwi, 2020; Pertiwi et al., 2022).

One strategy to promote community participation in the health sector is to harness local wisdom and community-based resources, such as social networks, human and financial resources, and cultural practices. Traditional leaders, as part of the community, are expected to support prevention efforts through social support. Social support from traditional leaders may take the form of concern, attention, and protection toward community members. The vital role of traditional leaders must consider the community's socio-cultural context. Strengthening community participation based on local wisdom among adolescents is important to improve adolescent behavior in preventing premarital pregnancy. The leadership of community figures influences their role in society. Perceived benefits of social networking, shared vision, and collective decision-making also affect the effectiveness of community leaders (Martiskainen, 2017). Individual behavior within an organization is inseparable from the management functions that guide it. Individuals play a key role in determining the success or failure of an organization. Such behavior is influenced by psychology, sociology, anthropology, and politics. These elements need to be reinforced through appropriate delegation of roles, training, and systematic management. If these aspects are properly implemented, organizational goals can be achieved (Hadiati et al., 2022). The leadership of traditional leaders in indigenous community organizations is therefore crucial to achieving desired outcomes.

Traditional leaders can influence positive behavior among adolescents by providing direct advice to youth and through communication with parents in community meetings. This requires the active involvement of traditional leaders, utilizing local potential. Enhancing their role relates to the process of empowering individuals and communities. Individual behavior is shaped by personal capacity as well as supportive systems (Kuswandoro, 2016). Traditional leaders have the authority to advise, direct, and oversee social aspects of community life. Their role is particularly effective in supporting a bio-social approach since they are culturally embedded within their communities. Interventions

involving traditional leaders are therefore essential in engaging adolescents in premarital pregnancy prevention efforts. Traditional leaders possess norms, beliefs, and social networks that influence adolescent behavior, helping them adopt positive attitudes through socialization and counseling for both adolescents and parents in village meetings.

Research has shown that factors influencing a person's role in society include age, education, gender, and length of service (Indrilia *et al.*, 2021). The leadership style of community leaders affects their societal roles (Martiskainen, 2017). Transformational leadership is a widely recognized and effective leadership style in healthcare today. This leadership style impacts commitment, job satisfaction, and performance (Sinaga *et al.*, 2023). Inappropriate leadership styles among traditional leaders may contribute to the high rate of teenage pregnancy. The leadership style of traditional leaders within indigenous community organizations is crucial to strengthening their commitment to community health efforts and achieving intended outcomes. Transformational leadership offers an effective approach in this regard. Traditional leaders with transformational leadership styles can enhance their role in health promotion, particularly in preventing teenage premarital pregnancy. The purpose of this study was to determine the influence of the transformational leadership style of Dayak traditional leaders (*Mantir adat*) on their role in preventing teenage premarital pregnancy.

METHOD

Study Design and Population

This research used an analytical observational quantitative approach with a cross-sectional design. The purpose of this design was to examine the influence of the transformational leadership style of traditional leaders on their role in preventing teenage premarital pregnancy. The study population consisted of Dayak traditional leaders, known as *Mantir adat*, in Gunung Mas Regency. This location was chosen because of its high incidence of teenage pregnancy in Central Kalimantan Province.

Sample Size

The sample size was 200 participants, determined using the Lemeshow–Slovin sample size formula.

Inclusion and Exclusion Criteria

The sample was selected from the population of traditional leaders based on the following inclusion criteria: 1) *Mantir adat* located in the village; 2) Willing to participate in the research according to the study procedures. While the exclusion criteria were: 1) Traditional leaders who were ill; 2) Traditional leaders who were within their working period but not present in the village when the research was conducted.

Research Variables

The independent variables in this study were socio-demographic characteristics and transformational leadership style, while the dependent variable was the role of traditional leaders in preventing teenage premarital pregnancy.

Study Tool

The primary instrument used was a questionnaire developed by the author and research team, based on reference sources related to transformational leadership style and the role of *Mantir adat* in preventing teenage premarital pregnancy. The validity and reliability of the questionnaire were tested on 30 traditional leaders with similar characteristics in Pulang Pisau District. SPSS version 22 for Windows was used for the validity and reliability testing. Item validity was assessed using the Pearson correlation between each item and the total score, compared with the r table value. All questions were considered valid if $r \text{ count} > r \text{ table}$ ($\alpha = 0.05$). Initially, there were 60 questions in the instrument; after the validity test, 9 questions were deleted (Pearson correlation value less than $r \text{ table}$), leaving 51 valid questions. Reliability testing was performed to measure response consistency among respondents using Cronbach's alpha.

In this study, the Cronbach's alpha value obtained was > 0.6 , indicating acceptable reliability. The questionnaire consisted of 51 questions, comprising: 6 items on respondent characteristics, 12 items on transformational leadership style, and 33 items on the role of *Mantir adat* in preventing teenage

premarital pregnancy. The first part included demographic information such as age, gender, education, occupation, income, and length of service as *Mantir adat*. The next sections covered transformational leadership style and the role of *Mantir adat* in prevention efforts. Both variables used a four-point Likert scale with options: always, often, sometimes, and never.

Data Analysis

Data analysis included univariate analysis (frequency distribution with frequencies and percentages), bivariate analysis using the Chi-square test, and multivariate analysis using multiple logistic regression. All analyses were performed using SPSS version 22 for Windows.

Ethical Approval

This study adhered to ethical guidelines established by the Publication Ethics Committee and received approval from the Health Research Ethics Commission of the Faculty of Nursing, Universitas Airlangga (Ethical Approval No. 3077-KEPK). Participation in this study was voluntary, anonymous, and confidential, with written informed consent obtained from all respondents.

RESULT

Univariate analysis

The univariate analysis describes the socio-demographic characteristics of traditional leaders, including age, gender, education, occupation, income, tenure as *Mantir adat*, transformational leadership style, and their role in preventing teenage premarital pregnancy (see Table 1 below). Table 1 shows that the majority of respondents were in the productive age group. Most respondents were male, and there was no marked difference between the proportions of respondents with low and high educational levels.

The majority were engaged in informal occupations such as farming, gold mining, gardening, and construction work. Most respondents had low income levels, and their tenure as *Mantir adat* was relatively recent. The transformational leadership style of traditional leaders, including inspirational motivation, idealized influence, intellectual stimulation, and individualized consideration, was predominantly high. Similarly, the role of traditional leaders in preventing teenage premarital pregnancy was also generally high.

Table 1. Sociodemographic Characteristics, Transformational Leadership Style, and Role in Preventing Premarital Pregnancy Among Respondents

Variable	Frequency	%
Age		
Nonproductive	14	7
Productive	186	93
Gender		
Male	183	91.5
Female	17	8.5
Education		
Low	100	50
High	100	50
Occupation		
Informal	175	87.5
Formal	25	12.5
Income		
Low	148	74
High	52	26
Length of working		
< 5 years	123	61.5
≥ 5 years	77	38.5
Transformational Leadership Style		
Low	94	47
High	106	53

Variable	Frequency	%
The role of traditional leaders		
Low	94	47
High	106	53

Bivariate analysis

The results of the bivariate analysis between socio-demographic factors (age, gender, occupation, education, and length of service) and leadership style of traditional leaders in preventing teenage pregnancy are presented in Table 2. Chi-square test results show that age, gender, education, occupation, and income did not have a significant effect on the role of traditional leaders in preventing teenage premarital pregnancy. However, length of service as a traditional leader and transformational leadership style had a significant effect on their role in prevention efforts.

Table 2. Bivariate Analysis of the Role of Traditional Leaders in Preventing Premarital Teenage Pregnancy

Variable	The role of traditional leaders in preventing teenage premarital pregnancy		OR	95% CI	P Value
	Low	High			
Age					
Nonproductive	8 (8.5)	6 (5.7)	1.550	0.518 - 4.644	0,430
Productive	86 (46.2)	100 (53.8)			
Gender					
Male	87 (43.5)	96 (48)	1.295	0.472 – 3.549	0,615
Female	7 (3.5)	10 (5)			
Education					
Low	50 (25)	50 (25)	1.273	0.730 – 2.220	0,395
High	44 (22)	33 (16.5)			
Occupation					
Informal	82 (41)	93 (46.5)	0.955	0.413 – 2.210	0.915
Formal	12 (6)	13 (6.5)			
Income					
Low	64 (32)	84 (42)	0.559	0.295 – 1.059	0,073
High	30 (15)	22 (11)			
Length of working					
< 5 years	50 (25)	73 (36.5)	0.514	0.288 – 0.915	0.023*
≥ 5 years	44 (22)	33 (16.5)			
Transformational Leadership Style					
Low	74 (37)	20 (10)	15.910	7.953 – 31.826	0.001*
High	20 (10)	86 (43)			

Multivariate analysis

The results of the multivariate analysis using multiple logistic regression are presented in Table 3. Table 3 shows that length of service and transformational leadership style significantly influenced the role of traditional leaders, with transformational leadership emerging as the strongest predictor (OR = 17.127).

Table 3 Multivariate Analysis of The Role of Traditional Leaders in Preventing Teenage Premarital Pregnancy

Variable	B	SE	Wald	df	Sig	Exp (B)	95% CI
Age	-0.632	0.721	0.769	1	0.381	0.531	0.129 – 2.184
Gender	0.300	0.685	0.191	1	0.662	1.349	0.352 – 5.166
Education	0.234	0.385	0.369	1	0.544	1.263	0.594 – 2.686

Variable	B	SE	Wald	df	Sig	Exp (B)	95% CI
Occupation	0.353	0.606	0.340	1	0.560	1.424	0.434 – 4.668
Income	-0.435	0.452	0.925	1	0.336	0.647	0.267 – 1.571
Length of working	0.063	0.414	0.023	1	0.880	1.065	0.473 – 2.399
Transformational Leadership Style	2.841	0.382	55.155	1	0.000	17.127	8.093 – 36.246
Constant	-3.582	1.973	3.297	1	0.069	0.028	

DISCUSSION

Sociodemographic factors on the role of traditional leaders in preventing teenage premarital pregnancy

The results of this study revealed that sociodemographic factors such as age, gender, education, occupation, and income did not significantly influence the role of traditional leaders in preventing teenage premarital pregnancy. However, the variable of length of service as a traditional leader was found to have an influence on the role of traditional leaders in preventing teenage premarital pregnancy based on the bivariate analysis results. Based on previous studies, factors such as age, gender, education, occupation, and income are often considered to influence various aspects of social life. However, in the context of the role of traditional leaders within communities, these factors may not have a significant impact.

Several studies have shown that the role of traditional leaders is more influenced by cultural values, community beliefs, and community legitimacy. Traditional leaders are generally respected for their knowledge of traditions and customs, as well as for their ability to mediate conflicts and maintain social harmony (Febianti et al., 2023). Age is not always a key determinant of leadership effectiveness among traditional leaders. A younger traditional leader may play an equally important role if they possess deep cultural knowledge and community respect. Similarly, the ability to maintain and uphold customs is often more valued than gender. Education that is most respected within this context is traditional or customary education rather than formal schooling. Knowledge and expertise in customary law are typically passed down through generations via informal learning. The occupation or profession of traditional leaders outside their cultural duties often has minimal impact on their social role, as their customary authority is based more on their capacity to preserve and transmit traditions. Although income is generally related to social status, economic conditions do not necessarily determine one's role as a traditional leader. Customary authority is largely derived from inheritance, community trust, and leadership ability rather than material wealth (Vel & Bedner, 2015). Therefore, while sociodemographic characteristics may shape various aspects of social life, they do not directly determine the effectiveness or legitimacy of traditional leadership. Instead, knowledge of adat, community respect, and the ability to maintain traditions are more critical.

Research has shown that the length of service can moderate the relationship between workplace behaviors and outcomes. Employees with shorter tenure are often more vulnerable to negative impacts such as job dissatisfaction and turnover (Glambek et al., 2024). In general, longer tenure correlates with improved performance and stronger commitment (Othman et al., 2019). Moreover, tenure and incentives influence work behavior, with tenure having a more dominant effect (Puji & Sinambela, 2021). These findings highlight the complex interactions between tenure, individual behavior, and organizational outcomes, emphasizing the importance of considering length of service when assessing performance and leadership dynamics.

Transformational leadership style on the role of traditional leaders in preventing premarital pregnancy in adolescents

Transformational leadership style has a significant influence on the role of traditional leaders in preventing premarital pregnancy among adolescents. The relationship between transformational leadership and the role of *Manir adat* in preventing adolescent pregnancy was found to be strong and positive. Transformational leadership is an approach in which leaders work collaboratively with followers to identify necessary changes, create a shared vision, and implement that vision together. This leadership style consists of four key components: inspirational motivation, idealized influence, intellectual stimulation, and individualized consideration (Rakhman et al., 2021).

Transformational leadership has been shown to affect organizational performance through cultural orientation. Studies indicate that (1) transformational leadership significantly improves public organization performance, (2) a result-oriented culture mediates the relationship between transformational leadership and performance, and (3) an innovation-oriented culture does not serve as a mediator (Chau et al., 2022). In indigenous settings, traditional leaders hold significant influence in shaping community behavior and values. Their involvement in adolescent pregnancy prevention includes advocating for reproductive health policies, leading educational programs, raising awareness about the consequences of early pregnancy, and creating support networks for adolescents through counseling and health services. A study by the Peneleh Jang Oetama Foundation emphasizes the importance of integrating local cultural wisdom, deliberation, social harmony, and collective responsibility in governance. These elements enhance community engagement, improve program sustainability, and reinforce shared accountability (Ibrahim et al., 2025).

Traditional leaders can help prevent teenage pregnancies by supporting education and services on reproductive health, promoting awareness of reproductive risks, and building community-based support systems. Leadership has been shown to influence adolescent behaviors related to nutrition and physical activity, as well as sexual and reproductive health (Chimatiro et al., 2020). These studies highlight how effective leadership—particularly transformational leadership—can enhance adolescent health outcomes and promote reproductive rights, though additional research and capacity-building are needed.

Transformational leadership enables traditional leaders to serve as role models who foster positive attitudes toward reproductive health and responsible behavior. Leaders can inspire communities to prioritize the prevention of teenage pregnancy by communicating a clear vision for community well-being. In doing so, traditional leaders help adolescents make informed decisions regarding their reproductive health (Deng et al., 2023; Sparks, 2021). This leadership style has been widely recognized for improving performance and organizational effectiveness. Studies demonstrate that transformational leadership enhances civil servant performance (Olusola, Akinbobola & Daniel, Dalyop, 2019), strengthens organizational management (Shanker, 2021), and increases empowerment, participation, and job satisfaction (Adri et al., 2022). Within health care settings, transformational leadership encourages nurses to exceed role expectations, improving engagement and effectiveness.

The impact of traditional leaders employing transformational leadership in preventing teenage pregnancy can thus be understood through their capacity to inspire, motivate, and empower communities. Traditional leaders who adopt transformational leadership styles can play a pivotal role in prevention efforts by guiding, educating, and supporting their communities. The findings of this study offer practical implications: capacity-building programs should prioritize leadership training and integrate traditional leaders into public health initiatives focused on adolescent reproductive health.

CONCLUSION AND SUGGESTION

Length of service and transformational leadership style both influence the role of traditional leaders in preventing premarital pregnancy among adolescents. Transformational leadership, in particular, has the strongest impact in enhancing traditional leaders' functions as counselors, motivators, facilitators, catalysts, and role models in this effort. Programs aimed at strengthening transformational leadership skills among indigenous leaders should be prioritized. Collaboration between health authorities and traditional leaders is essential to optimize community-based adolescent pregnancy prevention initiatives. Future studies are recommended to qualitatively explore the dynamics of interaction between traditional leaders and adolescents.

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