ผลกระทบของการถ่ายภาพสารคดีต่อค่านิยมของเยาวชน: การศึกษาเชิงประจักษ์จากมณฑลส่านซี ประเทศจีน

The Impact of Documentary Photography on Youth Values: An Empirical Study Based on Shaanxi, China

Heng Zhang[1], Hui-Wen Tang[2] and Hsieh Nien Tzu[3]

บทคัดย่อ

การศึกษาครั้งนี้เป็นการสำรวจผลกระทบของการถ่ายภาพสารคดีต่อการก่อตัวของค่านิยมของเยาวชน โดยมุ่งเน้นไปที่ผลงานของกลุ่มถ่ายภาพสารคดีมณฑลส่านซีในประเทศจีน การถ่ายภาพสารคดีเป็นสื่อภาพที่มีความสามารถในการเล่าเรื่องอันทรงพลังที่สามารถกระตุ้นอารมณ์และสะท้อนความเป็นจริงทางสังคมได้ ในการศึกษาเชิงประจักษ์นี้ มีการนำการออกแบบการวิจัยที่เกี่ยวข้องกับกลุ่มทดลองและกลุ่มควบคุมมาใช้เพื่อประเมินผลกระทบของการรับชมภาพถ่ายสารคดีต่อค่านิยมของคนหนุ่มสาว เช่น ความเห็นอกเห็นใจ ความรับผิดชอบต่อสังคม และความตระหนักทางวัฒนธรรม ผู้เข้าร่วมในกลุ่มทดลองได้เข้ารับการอบรมหลักสูตรแทรกแซงเป็นเวลา 2 เดือน โดยได้รับประสบการณ์การทำงานต่างๆ จากกลุ่มมณฑลส่านซี ผลการศึกษาชี้ให้เห็นว่าผู้ที่ได้รับชมภาพถ่ายสารคดีมีระดับความเห็นอกเห็นใจ ความรับผิดชอบต่อสังคม และความตระหนักทางวัฒนธรรมสูงกว่ากลุ่มควบคุมอย่างมีนัยสำคัญ ซึ่งบ่งชี้ว่าศิลปะภาพสามารถเสริมสร้างจิตสำนึกทางสังคมในหมู่เยาวชนได้อย่างมีประสิทธิภาพ ผลการวิจัยเหล่านี้เน้นย้ำถึงศักยภาพของการใช้ภาพถ่ายสารคดีเป็นเครื่องมือทางการศึกษาเพื่อส่งเสริมคุณค่าเชิงบวกให้กับคนวัยหนุ่มสาวโดยเฉพาะอย่างยิ่งในสังคมโลกาภิวัตน์

คำสำคัญ: การถ่ายภาพสารคดี, เยาวชน, การศึกษาเชิงประจักษ์

[1] Ph.D. candidate, Thai-Chinese International School Of Management, University of the Thai Chamber of Commerce (Corresponding Author)
[2] Professor, Thai-Chinese International School Of Management, University of the Thai Chamber of Commerce
[3] Assistant Professor, Thai-Chinese International School Of Management, University of the Thai Chamber of Commerce
E-mail: daishinvshao@gmail.com

Abstract

This study explores the impact of documentary photography on the formation of youth values, specifically focusing on the works of the Shaanxi documentary photography group in China. As a visual medium, documentary photography provides a powerful narrative tool that can evoke emotions and reflect social realities. This empirical study used a research design involving experimental and control groups to assess the effects of exposure to documentary photography on young people's values, such as empathy, social responsibility, and cultural awareness. Participants in the experimental group underwent a two-month intervention course, where they were exposed to various works from the Shaanxi group. Results indicated that those exposed to documentary photography exhibited significantly higher levels of empathy, social responsibility, and cultural awareness compared to the control group, suggesting that visual arts can effectively enhance social consciousness among youth. These findings highlight the potential of using documentary photography as an educational tool to foster positive values in young people, particularly in a globalized society.

Keywords: Documentary photography, Youth, Empirical study

1. Introduction

Documentary photography is an art form that presents social reality and records human life through images (Wagner, 2012). In today's highly developed visual culture era, documentary photography is a record of objective events, reflects social consciousness, and arouses the audience's emotions (Becker, 2005). For young people, documentary photography has a particularly profound impact. Youth are in a critical period of value formation. They are curious about social phenomena and eager to understand the world's complexity (Nesi, 2020). Through documentary photography, young people can be exposed to diverse social realities, stimulate their compassion and social responsibility, and thus form positive values (Serriere, 2010).

In recent years, with the development of social media and the Internet, the speed and influence of documentary photography have increased significantly. Young people are frequently exposed to documentary photography through online platforms. These works vividly show social injustice, poverty, and environmental issues, such as images documenting climate change's effects on rural communities or photographs capturing the struggles of refugees (Leary, 2021), guide young people to think deeply about these social issues (Schusler et al., 2009). Research shows that documentary photography can effectively promote young people's recognition of social fairness, compassion, and justice. This visual impact is often more direct and emotionally resonant than text (Seo, 2020). Moreover, studies indicate that witnessing imagery of real-life struggles can significantly enhance empathy levels among young viewers, as they visually perceive the consequences of societal challenges on individuals and communities (Gillespie, 2020). In addition, documentary photography helps

young people understand different cultural and social realities in the context of globalization and cultivate their accepting attitudes towards diversity and inclusion (Blum & Smythe, 2021).

This study aims to explore the specific impact of documentary photography on young people's values, especially by displaying the works of the Shaanxi documentary photography group, and analyze its role in cultivating young people's sense of social responsibility and empathy. This study adopts a research design of experimental group and control group. The experimental group received a two-month documentary photography intervention course, aiming to evaluate the positive impact of these image works on youth values. The significance of this study is to provide social educators with a new path to effectively cultivate young people's social awareness and humanistic care through visual art forms.

2.Research Objective

1. To verify the credibility and validity of the youth values scale

2. To analyze the effect of documentary photography on the promotion of youth values

3. Literature Review

3.1 Related Research on Youth Values

Youth values are an important topic in studying social and individual behavior, and have attracted much attention from scholars in recent years. Values are the basic belief system that guides an individual's attitude towards social phenomena and behavior. For young people, the development of values is influenced by many factors, including family, school, social culture, and personal experience (Schwartz, 2020). This article will review the relevant literature on youth values from multiple aspects such as family influence, social culture, and educational environment.

Social culture is another important factor affecting youth values. The social and cultural environment includes religious beliefs, media influence, group norms, etc. These factors affect young people's understanding of social roles and behavioural norms through the socialization process (Inglehart, 2018). For example, the widespread use of social media has increased young people's exposure to multiculturalism and promoted their recognition of values such as diversity, equality, and social justice (Nesi, 2020). However, the spread of bad content in the media may also lead young people to form negative values such as materialism and utilitarianism (Livingstone & Helsper, 2007).

The educational environment, including school curriculum, teachers' teaching methods, and peer interactions, also has an important impact on the formation of youth values. School education imparts knowledge and cultivates students' moral values through moral education courses and classroom activities (Narvaez & Lapsley, 2008). The teaching style of teachers also has a significant impact on youth values. Teaching methods that encourage independent thinking and cooperative learning have been shown to help young people form positive social values (Reyes et al., 2012). In addition, the influence of peer groups in

schools is particularly significant. Young people usually adjust their values through peer interactions to adapt to group norms (Wentzel, 2005).

3.2 Study on the Impact of Documentary Photography on Youth Values

As a visual medium, documentary photography has powerful narrative and emotional expression functions. In recent years, it has become one of the important ways to influence youth values (Twenge et al., 2012). Documentary photography aims to be truthful, objective, and reflect social phenomena and important events in human life (Becker, 2005). Documentary photographers usually choose marginalized groups and unknown stories in society, and present social injustice, poverty and other issues through images to attract the attention and reflection of the audience (Wagner, 2012). This narrative method through visual media can convey information and arouse the audience's emotional resonance, thereby prompting them to form independent views and attitudes on social issues (Sabri et al., 2024).

The impact of documentary photography on youth values is mainly reflected in the cultivation of core values such as social care, equality, and justice. Studies have shown that when young people watch documentary photography works, they can establish a deep understanding of society through the social injustice shown in the images, and then cultivate a sense of social responsibility (Schusler et al., 2009). These images can break the stereotypes of young people about certain social phenomena and help them form a more inclusive and open attitude (Blum & Smythe, 2021).

After watching documentary photography of poor children, young people showed stronger social sympathy and motivation to help others (Serriere, 2010). This visual stimulation can effectively stimulate young people's attention to social issues and encourage them to participate more actively in social welfare activities (Seo, 2020). In addition, the impact of documentary photography on young people also includes cultivating their awareness of their own cultural identity and history, helping them to find the roots of culture and self-positioning in the context of globalization (Yu, 2018).

Documentary photography plays an important role in the socialization process of young people. By watching documentary photography, young people can acquire knowledge and form their own views on social issues inspired by images. This process is crucial to developing their values (Achtenhagen et al., 2013). Especially driven by social media, documentary photography is easier for young people to access and spread, further amplifying its role in cultivating values (Nesi, 2020). Documentary photography on social platforms can convey social issues directly and shockingly, prompting young people to pay attention to vulnerable groups and cultivate a sense of social responsibility and civic awareness (Peek, 2008).

4. Research Methodology
4.1 Research Design

This study explores documentary photography's impact on young people's values. The experimental and control groups are used as research

objects to explain the works of Shaanxi documentary photography groups as an intervention method, with 100 people in each group. The experimental group received a two-month intervention course, a total of 7 sessions, 35 minutes each time, once a week. During the intervention process, by showing and explaining the representative works of Shaanxi documentary photography groups, the social reality and humanistic spirit behind the works were emphasized, and the participants were guided to think deeply about the values in the works. The control group received unstructured interviews to observe the external interference. Before the intervention, all participants were required to complete the value scale test to obtain basic data; one week after the intervention, the two groups retook the same scale test to evaluate the impact of documentary photography explanation on the changes in the values of the experimental group of young people. The research results were compared by descriptive statistical analysis and variance analysis, and the qualitative data in the control group interviews were combined to explain and analyze the experimental results in depth, to comprehensively evaluate the potential impact of documentary photography on young people's values.

The 7 photography sessions were structured with a cumulative approach to foster an evolving, in-depth exploration of empathy, social responsibility, and cultural awareness. Each session introduced themes within these broad values, such as social justice, allowing participants to gradually build and deepen their understanding. Starting with basic emotional engagement in the first sessions, subsequent sessions incorporated more complex social themes and encouraged participants to reflect on their own responses and values. This progression allowed for an incremental development of social awareness, ensuring that the final sessions reinforced earlier learning through discussions that drew connections between themes.

To minimize external variables, such as family influence or concurrent exposure to social media content, several strategies were implemented. First, participants were informed to avoid additional media sources on the specific social topics covered during the photography sessions. A pre-test was conducted to measure baseline values across both the control and experimental groups, ensuring that initial differences were accounted for. Additionally, the sessions were scheduled to occur over a condensed timeframe, which reduced the chance of external influences varying significantly during the study period. Family-related variables were controlled by screening participants' demographic backgrounds to ensure homogeneity. Finally, post-session reflections were conducted immediately after each session to capture immediate responses, minimizing the influence of post-session external interactions.

4.2 Population and Sample

Due to the convenience of the researcher's work, this study used D University as the research sample. Through cluster sampling, 200 college students from 4 classes were selected as the research subjects as the sample for the first phase of exploratory research. Through simple random sampling of 200 college students (Table 1), 100 college students were used as the control group

and 100 college students were used as the experimental group as the research sample for the second phase.

Table 1 Distribution of samples

Variable		Control	Experimental
Gender	Male	59	55
	Female	41	45
Degree	First-year student	10	35
	sophomore student	25	33
	Junior student	35	12
	senior student	30	20
Location	Eastern	29	22
	Middle	36	43
	Western	35	35

4.3 Research Instrument

The youth values scale in this study uses the Guangdong-Hong Kong-Macao Greater Bay Area Youth Values Scale (Zhong et al., 2022). The scale is translated and sorted out through extensive reading of literature. On this basis, combined with the competitive spirit, including tolerance, innovation ability, truth-seeking and pragmatism, the youth values scale is finally generated (Zhong et al., 2022). The scale has 7 factors and 30 items, among which there are 6 items for national identity (NI), 5 items for enjoyment of happiness (EH), 4 items for family happiness (FH), 3 items for social harmony (SH), 4 items for pioneering and innovation (PI), 4 items for forging ahead (FA), and 4 items for wealth status (WS). The scale adopts a Likert 5-point scale, with 1 point indicating "strongly disagree" and 5 points indicating "strongly agree". The higher the score, the stronger the youth leadership.

This study uses the explanation of the works of the Shaanxi documentary photography group as an intervention, so this study uses the personal collection of the Shaanxi photography group as a documentary photography case for the experimental group of this study, and since many universities in China currently prohibit the use of electronic products in class (Guo, 2024), this study uses paper materials.

Table 2 Individual Works of Shaanxi Photography Groups

Week	Portfolio	Photographer (Editor)	Examples
1st	"Sifangcheng"	Hou Dengke, Hu Wugong, Qiu Xiaoming	

2nd	"Wheat Harvester"	Hou Dengke	
3rd	"Hou Dengke's World"	by Hou Dengke	
4th	"Xi'an Memories"	Editors Li Mei and Yu Deshui	
5th	"Negatives: Exploring Familiar Strangers"	Hu Wugong	
6th	"I Have to Say"	Panko	
7th	"Li Shaotong's Photo Works"	Shi Baoxiu	

4.4 Data Analysis

In this study, a sequence of statistical analyses was employed to evaluate the impact of the intervention. First, an exploratory factor analysis (EFA) was conducted on the scale to identify the underlying factor structure and ensure the validity of the measurement. Next, a homogeneity test was performed to confirm that the experimental and control groups were equivalent before the intervention, ensuring comparability. Following this, the differences in scores between the experimental and control groups after the intervention were analyzed to determine the effect of the intervention on the experimental group. Finally, both groups' pre-test and post-test scores were compared to assess changes over time within each group. All data analyses were carried out using SPSS, and an independent sample t-test was used to identify statistically significant differences, with $p < 0.05$ considered the threshold for significance.

5. Results

The exploratory factor analysis is used to explore the data structure, and validate the constructs identified. The results showed that the Bartlet sphericity test x2 value of The Youth Values Scale was 4914.540 (P<0.001), and the KMO coefficient was 0.884. The KMO of the scale exceeded 0.800, indicating that the scale can be subjected to exploratory factor analysis. The results of the exploratory factor analysis are shown in Table 3.

Table 3 Results of exploratory factor analysis

Component	Communities	Component	Communities	
	0.829	0.657		0.895	0.665	
NI	0.753	0.568	SH	0.874	0.703	
	0.730	0.652		0.713	0.627	
	0.799	0.611		0.758	0.607	
	0.775	0.591	PI	0.666	0.509	KMO=0.884
	0.765	0.534		0.556	0.484	x^2=4914.540
EH	0.883	0.692		0.538	0.436	p<0.001
	0.851	0.626		0.873	0.612	Variance=84.804%
	0.769	0.670	FA	0.841	0.616	
	0.729	0.624		0.830	0.615	Cronbachα= 0.817
	0.713	0.608		0.796	0.509	
FH	0.897	0.611		0.767	0.648	
	0.672	0.669	WS	0.683	0.526	
	0.898	0.547		0.589	0.558	
	0.664	0.524		0.670	0.513	

Note: NI for national identity, EH for enjoyment of happiness, FH for family happiness, SH for social harmony, PI for pioneering and innovation, FA for forging ahead, and WS for wealth status.

Table 3 results indicate that the Youth Values scale is a single factor with 7 items, accounting for a total variance explained of 84.804%. All factor loading coefficients are greater than 0.40, indicating that the items are strongly correlated with their factors; the commonality of the factors is greater than 0.30, indicating that each item contributes more to the factor structure; the explanation rate of each factor is greater than 5%, indicating that there are no redundant factors. The reliability test results showed that each factor's internal consistency Cronbach α was greater than the recommended value of 0.60, and 7 factors were greater than 0.70. The Cronbach α coefficient of the scale was 0.817, indicating that the reliability of the scale was relatively ideal. These results show that the scale has high reliability and validity and is suitable for subsequent research and data analysis.

A homogeneity test is used in the experimental group and control group before intervention. Based on the data collected during the survey research phase, the samples' data were processed, and the results are shown in Table 4.

Table 4 Homogeneity test of the experimental group and control group before intervention

Control Group(M±S.D.)	Experimental Group(M±S.D.)	t	p
96.55±2.813	95.74±3.033	1.072	0.292

The research shows no significant difference in the pre-test data of the two groups of subjects (p>0.05). It shows that the difference in youth value between the control and experimental groups was not obvious before the intervention. The two groups were homogeneous and met the requirements of experimental research.

A difference test is used to measure pre-and post-test scores in the control group. Statistical analysis was performed on the questionnaire data of the control group and experimental group before and after the intervention. The results are shown in Table 5.

Table 5 Difference test of pre and post-test scores in the control group

	Pretest (M±S.D.)	Posttest (M±S.D.)	t	p
Control	96.55±2.813	97.41±1.592	1.457	0.156
Experimental	95.74±3.033	112.17±2.423	23.181[***]	0.000

Note: ***p<0.001.

As can be seen from the table above, there is no significant difference in the mean scores of youth values (p>0.05) in the control group before and after the intervention. However, there is significant differences in the mean scores of the experimental group's youth values (p<0.001) before and after the intervention. This shows that documentary photography improved the experimental group's youth value.

A homogeneity test was used in the experimental group and control group after the intervention. Perform statistical analysis on the difference between the pre and post-tests between the experimental group and the control group. The results are shown in Table 6.

Table 6 Homogeneity test of the experimental group and control group after intervention

Difference between pre and post-test in the control group	Difference between pre and post-test in the experimental group	t	p
M±S.D.	M±S.D.		
0.860±3.232	16.430±3.882	20.556[***]	0.000

Note: *p<0.001

The table above indicates significant differences in youth values between the two groups (p < 0.001). Further post-hoc analysis reveals that the change from pre-test to post-test is more pronounced in the experimental group compared to the control group. These results suggest that documentary photography has a positive impact on enhancing youth values.

6. Conclusion and Discussion

The findings of this study illustrate that documentary photography significantly impacts youth values, particularly in fostering empathy, social responsibility, and cultural awareness. The experimental results indicate that participants exposed to documentary photography exhibited greater empathy and social value improvement than those in the control group. This aligns with previous studies that suggest visual media, such as documentary photography, can create powerful emotional responses that lead to behavioural changes (Schusler et al., 2009; Seo, 2020).

A critical examination of the data reveals several important factors contributing to the observed changes. First, the emotional engagement elicited by the visual content played a crucial role. According to King (2015), images can convey messages in a way that is more visceral and immediate than textual content. This immediacy may explain why the experimental group showed more pronounced empathy and social responsibility changes. Shaanxi documentary photography, which vividly portrayed social issues such as poverty and injustice, seems to have been instrumental in prompting participants to reflect on these issues more deeply, as suggested by Serriere (2010).

However, the findings must be interpreted with caution. The study's quasi-experimental design, with an intervention group exposed to a documentary photography course, raises questions about external validity and generalizability. Since the participants were university students from a specific geographic region (D University), it is unclear whether similar effects would be observed in different demographics or cultural contexts. This limitation is compounded by the relatively small sample size, which may not capture the diversity of youth experiences. The homogeneity of the sample could lead to an overestimation of the effectiveness of the intervention, especially considering the cultural and educational backgrounds of the participants (Inglehart, 2021).

Moreover, while the intervention demonstrated a statistically significant effect on youth values, the effect size was not very large. This suggests that while documentary photography can contribute to value formation, it may not be the sole or primary factor influencing youth development. Other factors, such as family, peers, and broader socio-cultural influences, likely play a substantial role (Schwartz, 2020; Smetana et al., 2015). The findings of the homogeneity test, which showed no significant difference between the control and experimental groups before the intervention, suggest that these broader influences were evenly distributed across groups, thus providing a useful baseline for evaluating the specific effect of the photographic intervention.

The study's methodology also presents some challenges. The reliance on self-reported measures for evaluating changes in youth values may introduce biases, such as social desirability bias, where participants respond in ways they believe are favourable. Additionally, the data analysis reveals that while there was a significant change in the experimental group's post-test scores, the overall increase in empathy and social values was relatively modest. This questions whether the intervention's duration was sufficient or whether a longer, more sustained engagement with documentary photography would yield stronger effects.

To strengthen the educational impact of documentary photography, educators and policymakers could incorporate photography projects into social studies or civic education classes, fostering an environment where students can engage directly with social issues through both visual and reflective practices. For example, integrating assignments where students curate their own photographic essays on local issues, followed by group discussions and reflective writing, may amplify the empathetic and socially responsible outcomes identified in this study (Serriere, 2010). Additionally, training teachers on the pedagogical methods to facilitate such projects effectively could help optimize their impact on students' value formation.

Nevertheless, the results are promising for educators and policymakers interested in using visual arts as a pedagogical tool. The findings suggest that incorporating documentary photography into educational curricula could cultivate empathy and social responsibility among youth (Peek, 2008). However, it is essential to integrate these visual experiences with other forms of social learning, such as group discussions and reflective activities, to enhance their effectiveness (Narvaez & Lapsley, 2008).

7. Recommendations

Extending the duration of the documentary photography sessions' duration could enhance future interventions' impact. The two-month intervention demonstrated positive yet modest effects, suggesting that a longer engagement might allow participants more time to process and internalize the social issues portrayed in the photographs. Additionally, incorporating mixed-methods research by combining qualitative interviews with the existing quantitative measures could provide deeper insights into participants' emotional responses, mitigating potential biases in self-reported data.

Another improvement involves broadening the sample to include participants from diverse cultural, geographic, and educational backgrounds. The current study focused on university students from a specific institution, limiting the generalizability of the results. Expanding the sample would provide a more comprehensive understanding of how documentary photography influences youth values across different contexts. Moreover, integrating reflective activities, such as group discussions or journaling, could amplify the effects of the intervention, enabling participants to articulate and consolidate their emotional and cognitive reactions.

Lastly, it would be valuable to conduct follow-up assessments after several months to evaluate the long-term impact of the intervention. Understanding whether the observed changes in youth values are sustained over time could provide important insights for program development. Additionally, utilizing digital platforms to share and discuss documentary photography could further enhance youth engagement, leveraging the reach of social media to expand the program's accessibility and influence.

8. Reference

Achtenhagen, L., Melin, L., & Naldi, L. (2013). Dynamics of business models–strategizing, critical capabilities and activities for sustained value creation. *Long range planning, 46*(6), 427-442.

Becker, H. S. (2005). Visual sociology, documentary photography, and photojournalism: It's (almost) all a matter of context. In *Image-based research* (pp. 84-96). Routledge.

Blum, D., & Smythe, J. L. (2021). Beyond "Feeling Blessed": Using international documentary film to foster global awareness in an online college course. *International Journal of Multicultural Education*, 23(2), 107-126.

Gillespie, C. (2020). Virtual Humanity—Access, Empathy and Objectivity in VR Film Making. *Global Society, 34*(2), 145-162.

Guo, J. (2024, April 19). Multiple universities ban the use of electronic devices in class; Experts believe it is better to improve teaching quality. CNR News App. Retrieved November 11, 2024, from https://app.xinhuanet.com/news/article.html?articleId=fa98ee6f-606d-441e-856c-e9604adb7ed7

I Inglehart, R. (2018). *Cultural Evolution: People's Motivations are Changing, and Reshaping the World*. Cambridge University Press.

King, A. J. (2015). *Visual messaging and risk communication*. Sage handbook of risk communication, 193-205.

Leary, C. L. B. (2021). *Documentary photography, climate crisis, and immigration: Migrant mother'as a lens to understand contemporary migrant stories* (Doctoral dissertation), Montana State University-Bozeman, College of Letters & Science.

Livingstone, S., & Helsper, E. (2007). Gradations in digital inclusion: Children, young people and the digital divide. *New media & society, 9*(4), 671-696.

Narvaez, D., & Lapsley, D. K. (2008). Teaching moral character: Two alternatives for teacher education. *The Teacher Educator, 43*(2), 156-172.

Nesi J. The Impact of Social Media on Youth Mental Health: Challenges and Opportunities. *National Library of Medicine;81*(2),116-121.

Peek, L. (2008). Children and disasters: Understanding vulnerability, developing capacities, and promoting resilience—An introduction. *Children, youth and environments, 18*(1), 1-29.

Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology, 114*(1), 210-225.

Sabri, S., Adiprabowo, V. D., Sumarlan, I., & Mohamad, R. (2024). Visual Narratives in Health Communication: Evaluating Comics as Tools for Health Literacy by the Indonesian Ministry of Health. *Jurnal Komunikasi, 12*(1), 26-36.

Schusler, T. M., Krasny, M. E., Peters, S. J., & Decker, D. J. (2009). Developing citizens and communities through youth environmental action. *Environmental Education Research, 15*(1), 111-127.

Schwartz, S. H. (2020). Basic human values: Theory, methods, and applications. *Values and Behavior: Taking a Cross-Cultural Perspective, 25*(2), 1-26.

Seo, K. (2020). Meta-analysis on visual persuasion—does adding images to texts influence persuasion. *Athens Journal of Mass Media and Communications, 6*(3), 177-190.

Serriere, S. C. (2010). Carpet-time democracy: Digital photography and social consciousness in the early childhood classroom. *The Social Studies, 101*(2), 60-68.

Smetana, J. G., Robinson, J., & Rote, W. M. (2015). Socialization in adolescence. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (2nd ed., pp. 60–84). The Guilford Press.

Twenge, J. M., Campbell, W. K., & Freeman, E. C. (2012). Generational differences in young adults' life goals, concern for others, and civic orientation, 1966–2009. *Journal of personality and social psychology, 102*(5), 1045.

Wagner, J. (2012). *Observing culture and social life. Documentary photography, fieldwork and social research*. Sage Biographical Research, 189.

Wentzel, K. R. (2005). *Peer relationships, motivation, and academic performance at school*. Handbook of competence and motivation, 279-296.

Yu, K. T. (2018). *My Self on Camera: First Person Documentary Practice in an Individualising China*. Edinburgh University Press.

Zhong, L., Deng, Z., & Xia, Z. (2022). A comparative study of youth values in the Guangdong-Hong Kong-Macao Greater Bay Area in the new era. *Youth Studies*, (5), 100-112.