

# Remembering the Past for Better Future: Positive Effect of Nostalgia on Hope

Arsrilisa Reina Putri<sup>1</sup>, Esther Widhi Andangsari<sup>1\*</sup>, Evi Afifah Hurriyati<sup>1</sup>, Rani Agias Fitri<sup>1</sup>, and Meilani Dhamayanti<sup>2</sup>

<sup>1</sup> Psychology Department, Faculty of Humanities, Bina Nusantara University, Jakarta, Indonesia 11480

<sup>2</sup> Marketing Communication Program, Communication Department, Faculty of Digital Communication and Hotel & Tourism, Bina Nusantara University, Jakarta, Indonesia 11480

**Abstract.** Living in uncertainty situation is not easy for some human being. It gives effect for mental health and decreasing hope for sustainability harmonize living. Surprisingly, some people could live positively during crisis. It becomes a model on 'how can we live such a tough situation'. This study explored the positive effect of nostalgia on hope during crisis such as the COVID-19 pandemic. The research applied predictive-correlational quantitative method with 315 emerging adulthoods from Indonesia having an age range from 18-25 years. Hope was measured using The Herth Hope Index (HHI) developed by Herth, adapted to the Indonesian version in the COVID-19 pandemic context by the authors. Meanwhile nostalgia was measured using the Indonesian version of State Functions of Nostalgia Scale which was adapted by Abraham, Ali, Andangsari, and Hartanti from Hepper, Ritchie, Sedikides, and Wildschut. Result has shown that nostalgia had a significant positive effect on hope. It can be concluded that nostalgia significantly gave a positive effect on hope during the uncertainty situation like the COVID-19 pandemic. Reminiscing a nostalgic memory that happened before the pandemic occurred help young people to eliminate negative mood, increase self-esteem, increase a perception of social relationships, and develop a perception towards the meaning of life which make someone less anxious.

## 1 Introduction

Every era has a crisis faced by many people, such as World War one and two, economic crisis, and the newest one is COVID 19 pandemic. People can generate various reactions to the crisis they face including any reaction related to mental health. According to a survey done by Indonesian Psychiatric Association [1], 64.8% of the respondents experienced few psychological issues, such as anxiety, depression, and trauma. Besides that, economic recession was also said to be one of the issues that was experienced by many people during the pandemic. Certainly, it has become a public concern because no matter what the situation is, they need income for living. A study by Dharmayanti, et al. [2] stated that socioeconomic status is associated with mental health. The changes and uncertainties that come with the COVID-19 pandemic allow one to become hopeless. However, there were not few people also still trying to withstand and adapt to the situation. A good hope level is the reason why they are still able to hold on.

Hope was defined by Snyder [3] as one's capacity on attaining a strategy to achieve goals and on motivating oneself through the desire to achieve goals using the strategy. Snyder also stated that someone with a higher hope level has a higher chance to achieve better academic results, activity level, physical health, psychological adjustment, and psychotherapy.

According to Dufault and Martocchio [4], hope is not an innate trait and doesn't only have one dimension, but it is something dynamic and has more than one dimension. By that, it can be concluded that hope can be found in every person. What differs is the level of hope itself. The high and low level of hope can be measured by its three factors, those are temporality and future, positive readiness and expectancy, and interconnectedness [5]. Individuals with a positive perception about the future, positive expectation of the future, and the feeling of being connected to oneself and others indicate a higher hope level. Whereas on the contrary, a lower hope level is indicated by less positive perception about the future, less positive expectation of the future, and less feeling of being connected to oneself and others. The higher the hope level is, the better one's resistance is, even if they are faced with hard circumstances. The statement before was supported by a study done by Huen, et al. [6] which stated that hope can play a role as a factor that prevents the emergence of suicidal ideas and behavior.

To increase hope level, nostalgia is needed. This statement was supported by a study done by Batcho [7] which stated that nostalgia has a role in maintaining one's hope. Nostalgia was considered to have an important role in one's well-being. According to Hepper, et al. [8], nostalgia is a complex emotion that involves a mix of cognitive and affective feelings felt in the past and is often triggered by memories from the past, conversation with other people, or loneliness. Hepper, et

\* Corresponding author: [esther@binus.edu](mailto:esther@binus.edu)

al [7]. also said that there are evidence that show the importance of nostalgia in one's life and psychological functions. They stated that there are four psychological functions of nostalgia, such as positive affect, self-regard, social connectedness, and existential meaning. According to those four functions, it can be concluded that with nostalgia someone can obtain positive effects. Davis [9] stated that nostalgia appears because there is a feeling of longing for positive memories when a person experiences unwanted changes in life. Davis also said that nostalgia is not something for the past, but for the future. In their study, Sedikides and Wildschut [10] stated that nostalgia motivates someone. Nostalgia has an important role in various kind of motivation, such as generalized motivation, localized motivation, and action-oriented motivation. Sedikides and Wildschut added that nostalgia functions as something that can be used to encourage someone to do something now or in the future. Other than motivation, nostalgia also has an effect on optimism. This statement is supported by a study done by Sedikides and Wildschut which stated that nostalgic individuals have a higher optimism about their health.

Nostalgia doesn't just appear. Usually in study, a trigger that can cause nostalgia is required. For example, memories, songs, etc. For their study, Sedikides and Wildschut [10] used the Event Reflection Task to trigger nostalgia on their participants. Stephan, et al. [11] used a method where they give an instruction to the participants to write three songs and artists who make them feel nostalgic the most. Stephen, et al. also used the lyrics of the song to trigger nostalgic memories on participants. According to the result of a study done by Cheung, Sedikides, and Wildschut [12], induced nostalgia increased optimism. Therefore, this study used memories that happened before the COVID-19 pandemic as the trigger of the emergence of nostalgia. Instruction used in this study is based on the instruction from instrument proposed by Hepper, et al [8], where the participants were asked to fill the questionnaire while reminiscing memories that they think are the most nostalgic. By that, it can be seen whether nostalgic memories cause a positive effect or not.

Based on the description above, it can be seen that hope and nostalgia are two different elements that have an important role in one's psychological well-being. By reminiscing a nostalgic memory, someone can get a positive effect that serves to increase hope level. This study wanted to see what makes someone survive in the midst of the COVID-19 pandemic? Whether the positive effect from reminiscing nostalgic memories has an effect on hope level during the pandemic? Whether by reminiscing nostalgic memories can motivate someone to maintain the hope level so that individuals reach a goal which is to coexist with COVID-19 until it gets better?

### 1.1 Objectives

The objective of this study is to find empirical evidence the effect of positive nostalgia on hope. This study needed to be done because during the pandemic season that is full of changes and uncertainty, there is a

possibility for someone to become hopeless and give up before the situation gets better. Based on the description before, hope acts as a resilience factor that sustains and prevents the emergence of suicidal ideation and behavior. By knowing the positive effect of nostalgia on hope, we can know whether reminiscing nostalgic memories can be a strategy to maintain hope during this uncertain time like this pandemic and others crisis that human being could face. Thus, the hypothesis of this study: *Nostalgia plays a role to predict hope.*

## 2 Literature Review

### 2.1 Hope

Hope is a multidimensional and dynamic life force which is described by beliefs and expectations in achieving goals in the future [4]. Hope is described as a positive condition where someone obtains a motivation from an active interaction between the desire and strategy to achieve the goals [3]. Social experts had been trying to describe, measure, and study hope with various methods and in results hope was understood as expectation or perception towards the goals and the future. Other definitions of hope described hope as an emotion that might help individuals to maintain their beliefs during hard times [13].

Herth [5] proposed that hope consists of three factors, they are temporality and future, positive readiness and expectancy, and interconnectedness. First, temporality and future talks about someone's positive perception towards the future. Individuals with a positive perception about their future have a more positive view of their life, short- and long-term goals, and belief that the hardships they are experiencing at the moment will get better eventually. Second, positive readiness and expectancy indicated by the presence of belief that there is a solution to every problem, reminiscing happy or nostalgic memories, direction in life, and belief that their life is still valuable regardless of the hardships they are facing at the moment. Last but not least, interconnectedness talks about one's perceived connectedness with oneself and others. By being connected with themselves, individuals will feel more comfortable due to the presence of a good assurance and mental resistance. Other than that, individuals with a good perceived connectedness with oneself and others usually know how to give and receive love.

### 2.2 Nostalgia

Hepper, et al. [8] explained nostalgia as a complex emotion that involves the mixture of cognitive and affective from the past and its appearance often triggered by past memories, conversation with others, or loneliness. They also explained that nostalgia has four important functions on someone's psychological well-being. First, it reduces the negative mood. Second, it protects oneself from defensive response threats resulting in the increase of self-regard. Third, it increases one's perceived social relation, interpersonal

skill, and social support. Last, nostalgia increases one's perception about life and eliminates anxiety.

Based on a study done by Sedikides and Wildschut [11] there is a connection between nostalgia and motivation. They grouped the benefits of nostalgia in one's well-being into three forms of motivation. First, generalized motivation which explains that nostalgia fosters a sense of youthfulness, increases inspiration and awareness about new opportunities, and encourages someone to muster up courage in taking a risk. Second, localized motivation which explains that nostalgia encourages one's self-development, raises intrinsic motivation, and encourages individuals to reach their goals. Third, action-oriented motivation which explains that reminiscing a nostalgic memory from past organizations improves the meaning of work on workers with high burnout level. By improving the meaning of work, the workers will have less desire to quit work. Action-oriented motivation also explains that nostalgia increases altruism and indirectly causes a behavior change, for example reducing alcohol intake.

### 3 Methods

This is quantitative research with correlational predictive design. The linear regression itself is a statistical process of finding linear equation that produces a value of how much the predictive contribution given by X (predictor) to Y (criterion) accurately [14]. Before a further analysis to the linear regression, a reliability test was conducted on the two instruments used. The reliability test on the Herth Hope Index (12 items) that was adapted into Indonesian language resulted in  $\alpha=0.83$ . The item-rest correlation ranging from 0.13 to 0.67. One of the items (no. 7) was deleted because the item-rest correlation is not good (0.13). The reliability test was re-done on the Herth Hope Index (11 items) and resulted in  $\alpha=0.84$ .

The same reliability test conducted on the Indonesian language version of State Functions of Nostalgia Scale that was adapted by Abraham, et al. [15] resulted in  $\alpha=0.96$ . The coefficient alpha from each dimension (4 dimensions) ranged from  $\alpha=0.90$  to  $\alpha=0.92$ .

### 4 Data Collection

There are 315 emerging adults whose age range from 18 to 25 years old ( $M=21$ ,  $SD=1.95$ ), 13.87% male and 86.03% female. From 315 emerging adulthoods, it was recorded that 10.16% of the participants had been infected and 89.84% had never been infected with COVID-19. Nevertheless, every participant has something in common, that is they feel affected by the pandemic, whether it is physically, psychologically, and their daily activities.

This study used the convenience sample technique which is categorized in the nonprobability sampling. The study was done via online questionnaire which link was distributed via social media, such as Instagram, Twitter, and LINE. The questionnaire was opened for those who are willing to participate and in accordance

with the requirements. The questionnaire consisted of four sections, those are informed consent, personal identity, the Herth Hope Index, and the State Functions of Nostalgia Scale.

In the first section, there is a brief explanation about the study and the fact that data will only be used for study purposes only. There is also a brief explanation about how the personal identity of each participant will be kept confidential. Meanwhile the second section consists of three questions. Starting from gender, whether the participant has been infected with COVID-19 or not, and perceived effects during the pandemic.

The third section consists of questionnaires from the Herth Hope Index that was proposed by Herth [5] to measure hope. This instrument consists of 11 items which are divided into three dimensions, those are inner sense of temporality and future, inner positive readiness and expectancy, and interconnectedness with self and others. This instrument used the 4 point scale (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree) with possible total score ranging from 12 to 48. The higher the total score is, the higher one's hope level is. The Herth Hope Index was adapted into Indonesian language as well as to the context of the COVID-19 pandemic.

The last section of the questionnaire consisted of the State Functions of Nostalgia Scale that was proposed by Hepper, et al. [8] and adapted to Indonesian language by Abraham, et al. [15] to measure nostalgia. This instrument consists of 16 items which are divided by four dimensions, those are positive affect, self-regard, social connectedness, and meaning in life. A higher total score indicates a higher positive effect felt from the nostalgic memory that was reminisced. Before filling out the 16 items, participants were told to reminisce about a perceived most nostalgic memory that happened before the pandemic. The participants had to write it in a short-essay form. There were some minor changes on the instruction so that it is suitable for the COVID-19 pandemic context.

## 5 Results and Discussion

### 5.1 Numerical Result

Questionnaire distribution was done via online, so the gender ratio couldn't be controlled. The percentage of female participants was seen to be way higher than male participants (Table 1). The big difference in percentage is suspected due to agreeableness trait of each participant. Costa, Terracciano, and McCrae [16] proposed that females have a higher agreeableness level than male. But that doesn't mean males don't have the agreeableness trait, it's just that based on the study the level of agreeableness trait in male is not as high as it is in females.

One of the participant requirements in this study is that participants must feel personally affected by the COVID-19 pandemic, whether it is physically, mentally, or in daily activities. It can be seen from the descriptive analysis (Table 1), that almost 90% of the

participants had not been affected with the COVID-19 but they feel affected by the pandemic itself regardless.

**Table 1.** Descriptive Data

Data	f	%	Mean	Modes	SD	Min	Max
Age			21	21	1.95	18	25
Gender							
Male	44	13.97					
Female	271	86.03					
Infected with COVID-19							
Had been	32	10.16					
Never been	283	89.84					
Hope			31.22	32	5.94	15	44
Nostalgia			77.68	96	15.58	26	96

In the questionnaire, there was a question about what kind of effects that were experienced by each participant during the pandemic. Participants were able to choose more than one answer for this question. The answer consisted of 11 choices ; they are: 1). was said to be people under observation (*ODP*)/patients under surveillance (*PDP*), 2). was tested positive for COVID-19, 3). a family member was said to be people under observation (*ODP*)/patients under surveillance (*PDP*), 4). a family member was tested positive for COVID-19, 5). work termination, 6). not able to do a face-to-face (offline) class, 7). dropout from school, 8). increased anxiety, 9). declining economy, 10). none, and 11). others.

**Table 2.** Combination of effects felt during the COVID-19 pandemic that appear the most

Combination of effects felt during the COVID-19 pandemic that appear the most	f	%
N	315	100
4, 6, 8, 9	13	4.13
6	31	9.84
6, 8	40	12.7
6, 8, 9	49	15.56
6, 9	21	6.67

Note. Data above is 5 combination of effects that appear the most

Description :

4 = There are family member who get infected with COVID-19

6 = Not able to do a face-to-face (offline) class

8 = Increased anxiety

9 = Economic decline

According to a few combinations recorded, it can be seen which effect combination appears the most (Table 2). There is a unique pattern seen in the results, that is how the 6th effect (not able to do a face-to-face class) appeared in every combination. Since the age target for

this study is young people with age ranging from 18 to 25 which is still a school age (High School or University), it is suspected to be the factor why the majority of participants felt that their learning method was affected during the pandemic. Followed by the next two effects that also appear the most in the combination (Table 2), they are the 8th effect (increased anxiety) and 9 (declining economy). Those two effects appeared on 3 out of 5 combinations that appear the most (Table 2). With the appearance of this unique pattern (Table 2), it shows that not only physical health was affected, but mental health and daily activities were also affected by the pandemic.

**Table 3.** Hope and Nostalgia Category Scale

Variable	Mean	Formul a	Category	f	%
Hope	31.22	X < M	X < 31 Lower	138	44
		X ≥ M	X ≥ 31 Higher	177	54
Nostalgia	77.68	X < M	X < 78 Lower	133	42
		X ≥ M	X ≥ 78 Higher	182	58

It shows on table 3 that even with the presence of the effects experienced during the pandemic, such as affecting one's physical health, mental health, and daily activities, more than 50% of young people (N=315) have a higher hope level during the COVID-19 pandemic. There are 44% of young people who have a lower hope level which means they have a lower belief and expectation in reaching a goal in the future. Meanwhile 56% others have a higher hope level which means they have a higher belief and expectation in reaching a goal in the future. Young people with higher hope level were indicated by a higher positive perception about the future, expectation of the future, and the feeling of being connected to oneself and others. Table 3 also shows that by reminiscing a nostalgic memory that happened before the pandemic occur, more than 50% young people (N=315) have a higher nostalgia level. There are 42% young people with lower nostalgia level, which indicates that the nostalgic memories are less likely to have positive effects. Meanwhile 58% others have higher level of nostalgia which indicates that the nostalgic memories are likely to have positive effects on oneself. Positive effects that were felt including eliminating negative mood, protecting oneself from the threat of defensive response which resulting in higher self-esteem, increasing the perception of social bonds, and increasing the perception towards life and eliminating anxiety.

**Table 4.** Category of Nostalgia Memories

Category	f	%
Comfort and sense of security	115	36,51
Social relationships	89	28,25
Past memories	80	25,4
Longing	10	3,18
Fond memories	7	2,22
Success	6	1,91

Homesick	2	0,64
Want to go back in time, want to live in the past	2	0,64
Distress, anxiety, pain, nausea, heart-wrenching	1	0,32
The past	1	0,32
Mixed feelings	1	0,32
Childhood experiences, youth, school	1	0,32
Total	315	100

Note. Responses to the question about the most nostalgic memory that happened before the COVID-19 pandemic has been coded using the category of memories proposed by Hepper, et al. [8].

When the participants were given the instruction to reminisce a nostalgic memory that happened before the COVID-19 pandemic occurred, the memories that appear the most are those who fall into the category of comfort and sense of security, social relationships, and past memories. The instruction was used as a trigger of the occurrence of nostalgia. By reminiscing a nostalgic memory while filling out the questionnaire, it can be shown whether reminiscing a nostalgic memory results in a positive effect on the participant or not.

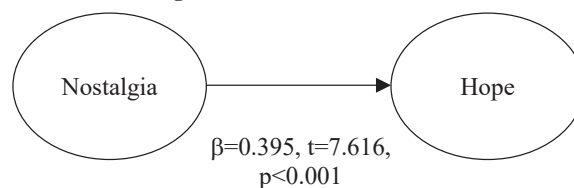
Between the major three categories (Table 4), comfort and sense of security is seen to be the most often category to appear. Memories that were categorized in this category were memories about being able to go out or do daily activities without feeling anxious and using a mask. Memories that were categorized in social relationships were memories about being able to hang out and spend some quality time with closed ones face-to-face. Last but not least, memories that were categorized in past memories were memories about activities that can be done before the pandemic occurred, such as offline class and concert.

**Table 5.** Regression Calculation

	Sum of square	df	Mean of square	F	Significance level
Positive nostalgia → hope	1730.913	1	1730.913	58.003	< .001
			$\beta$	t-value	Significance level
Positive nostalgia → hope			0.395	7.616	<.001

Simple linear regression was used to predict nostalgia on hope. Based on the analysis, there is a significant regression  $R^2=0.156$ ,  $F(58.003, 1)$ ,  $p<.001$ . The prediction of the hope level of young people equals to 0.395 (nostalgia), which means that the hope level of young people increases by 39.5% when nostalgia causes a positive effect.

**Figure 1.** Model Measurement



The positive effect obtained from reminiscing a nostalgic memory can be used as one's resistance system. With that positive effect, young people can maintain their hope level even though the pandemic hasn't come to an end. This statement is in line with a study done by Batcho [17] who proposed that nostalgia has a role in maintaining hope. To maintain hope during the pandemic, positive effects from reminiscing a nostalgic memory is needed. Reminiscing a nostalgic memory eliminates negative mood and with that young people's positive perception towards the future might develop. Another positive effect is that the self-esteem of the young people may increase which makes them feel like their life is more valuable. Having that kind of attitude helps young people to face a condition whether good or bad and to develop a positive expectation towards their life. The positive effect of reminiscing a nostalgic memory also helps young people on increasing their perception of their social relationships. A good perception of social relationships makes young people feel connected with themselves or others and feel the fact that they are not alone even though the pandemic makes it less easy for people to interact face-to-face. Finally, the positive effect of reminiscing a nostalgic memory also helps young people to develop their perception of life or to find the meaning of life and eliminate anxiety during the COVID-19 pandemic. It results in a more positive perception towards their future.

Description above proved that reminiscing a nostalgic memory brings positive effects to individuals. Being nostalgic is not always bad and it doesn't always cause sadness to someone. We can always make use of nostalgia during this COVID-19 pandemic to make ourselves even stronger than before. Sadly, nostalgia doesn't appear automatically anytime. But that shouldn't be a concern because we can always trigger the presence of nostalgia by having a conversation about the past with our closed ones, reading our old diaries, using our old perfume, listening to our favourite songs in the past, or even seeing old photos and videos. By doing that we'll be triggered to reminisce a memory that personally feels nostalgic to us, and we may realize how strong and happy we were in the past, and the fact that if we overcame hardships in the past, we will be able to overcome our current and future obstacles too.

Based on result of this study showed that nostalgia has a role in maintaining one's hope. Memories from the past such as nostalgic memories, could give effect on hope. This study did not ask participants to remember the past through posts on social media. It became the limitation of this study. The authors did not control the behavior of remembering the past. The young people as social media users actively, could have the positive benefit from social networking sites to get their

nostalgic memories. This study has the implication that social networking technology connects the two when individuals face difficult times of the Covid 19 pandemic. Nostalgia is often triggered by memories from the past, conversations with other people, or loneliness. This situation also occurred during the Covid 19 pandemic, where people were connected to social networking technology during physical social restrictions. Social networking technology can of course reduce feelings of negative emotions and loneliness during physical social restrictions. However, through technology, society 5.0 is connected to various information about Covid 19, or connected to social networks, which can lead to hope for individuals to get social support and gain positive energy for face crisis. This positive welfare condition is important in the post-pandemic phase in order to maintain individual immunity and strengthen mentality for facing any kind of uncertainty situation.

## 6 Conclusion

Based on the study, it can be concluded that the positive effect of reminiscing a nostalgic memory significantly plays a role on one's hope level while facing crisis or uncertainty situation. Reminiscing a nostalgic memory that happened before the pandemic occurred help young people to eliminate negative mood, increase self-esteem, increase a perception of social relationships, and develop a perception towards the meaning of life which make someone less anxious.

These are a few suggestions that can be used as a reference on the next study: 1). it is better to use the experiment method to study nostalgia; 2). give the participants some knowledge about the definition of nostalgia used in the study so that the perception towards nostalgia between the researcher and the participant is in line; 3). it is better not to limit the nostalgic memories into a certain context when the study uses the State Functions Nostalgia Scale proposed by Hepper, et al. [8]. By that, the researcher will be able to know more in-depth memories that make someone able to maintain their hope level; 4). study another variable other than nostalgia which is likely to have a role on hope level, such as, positive affect, life satisfaction, optimism, self-esteem, and social support.

## 7 Acknowledgment

This study is funded by BINUS International Research Grand number 017/VR.RTT/III/2021 and Dr. Esther Widhi Andangsari, M. Si., Psikolog as the Team Leader for this research team.

## References

- [1] Indonesian Psychiatric Association, 5 bulan pandemi covid-19 di Indonesia. Available: [http://pdkji.org/img\\_lain/infografik3.jpg](http://pdkji.org/img_lain/infografik3.jpg), Accessed on April 18, 2022.
- [2] I. Dharmayanti, D. H. Tjandrarini, P. S. Hindayangsih, and O. Nainggolan, Pengaruh kondisi kesehatan lingkungan dan sosial ekonomi terhadap kesehatan mental di Indonesia, *Jurnal Ekologi Kesehatan*, vol.17, no.2, pp.64-74, 2018.
- [3] C. R. Snyder, Target article: hope theory: rainbows in the mind, *Psychological Inquiry: An International Journal for the Advancement of Psychological Theory*, vol.1, no.4, pp.249-275, 2002.
- [4] K. Dufault, and B. C. Martocchio, Symposium on compassionate care and the dying experience. Hope: its spheres and dimensions, *The Nursing clinics of North America*, vol.20, no.2, pp.379-391, 1985.
- [5] K. Herth, Development and refinement of an instrument of hope, *Research and Theory for Nursing Practice*, vol.5, no.1, pp.39-51, 1991.
- [6] J. M. Y. Huen, B. Y. T. Ip, S. M. Y. Ho, P. S. Yip, F., Hope and hopelessness: the role of hope in buffering the impact of hopelessness on suicidal ideation, *PLOS ONE*, vol.10, no.6, 2015.
- [7] K. I. Batcho, The role of nostalgia in resistance: a psychological perspective, *Qualitative Research in Psychology*, vol.18, no.2, pp.227-249, 2018.
- [8] E. G.Hepper, T. D. Ritchie, C. Sedikides, and T. Wildschut, Odyssey's end: Lay conceptions of nostalgia reflect its original homeric meaning, *Emotion*, vol.12, no.1, pp.102-119, 2012.
- [9] F. Davis, *Yearning for yesterday: A sociology of nostalgia*, The Free Press, 1979.
- [10] C. Sedikides, and T. Wildschut, The motivational potency of nostalgia: the future is called yesterday, *Advances in Motivation Science*, vol.7, pp.75-111, 2020.
- [11] E. Stephan, C. Sedikides, T. Wildschut, T., W. Y. Cheung, Routledge, C., and Arndt, J., Nostalgia-evoked inspiration: mediating mechanisms and motivational implications, *Personality and Social Psychology Bulletin*, vol.41, no.10, pp.1395-1410, 2015.
- [12] W. Y. Cheung, C. Sedikides, and T. Wildschut., Induced nostalgia increases optimism (via social-connectedness and self-esteem) among individuals high, but not low, in trait nostalgia, *Personality and Individual Differences*, vol.90, pp.283-288, 2016.
- [13] S. J. Lopez, S. Rose, C. Robinson, S. C. Marques, & J. PAIS, Measuring and promoting hope in schoolchildren. In *Handbook of positive psychology in schools* (pp. 55-68). Routledge, 2009.
- [14] F. J. Gravetter, and L. B. Forzano, *Research methods for the behavioral science*, 4<sup>th</sup> Edition., Wadsworth, 2012.
- [15] J. Abraham, M. M. Ali, E. W. Andangsari, and L. E. P. Hartanti, Confirmatory factor analysis of celebrity worship, digital literacy, and nostalgia: Dataset of Indonesians, *Data in Brief*, vol.33, 2020.
- [16] P. T., Jr Costa, A. Terracciano, and R. R. McCrae, Gender differences in personality traits across cultures: Robust and surprising findings, *Journal of Personality and Social Psychology*, vol.81, no.2, pp.322-331, 2001.
- [17] K. I. Batcho, The role of nostalgia in resistance: A psychological perspective. *Qualitative Research in Psychology*, 18(2), 227-249, 2021.