The Myth of Numbers in Generation Z in the 4.0 Industry Era (Case Study Student of FKIP University Dr. Soetomo Surabaya)

Ninik Mardiana Universitas Dr. Soetomo Surabaya City, Indonesia <u>ninik.mardiana@unitomo.ac.id</u>

Abstract—Generation Z is a generation surrounded by advances in digital development. Those who were born between 1995 - 2015 enter the category generation Z, which in cultural development tends to think positively rather than believe in myths that prevail in society. One of the myths that prevail in society is the myth about numbers. In some societies, numbers are believed to bring good luck and some believe to bring bad luck. The purpose of this article is to describe the view of the myth of numbers in generation Z in the industrial era 4.0. Using a questionnaire method and tabulation of descriptive statistical data, data about Generation Z's perceptions of the myth of numbers will be presented. The results of this study can be used as a reference for generation Z's mindset towards the myths that prevail in society as one of the folklores and urban legends. More than 50% of FKIP students as generation Z stated that they knew but did not believe in the predicate of unlucky and lucky numbers. Their knowledge is obtained from information spread on the internet, films, and television. Each individual has a favorite number spread between 1-10. The number 7 dominates as a number that many are chosen as the favorite number based on their beliefs which are associated with religious knowledge.

Keywords— number myth, generation Z, industrial 4.0 era, quantitative, descriptive.

I. INTRODUCTION

In Indonesia, the term industry 4.0, which relies on digital (cyber) technology and automation technology has had a vibrant presence in the last five years. Digital technology as the mainstay of the 4.0 era was welcomed by its presence, especially during the Covid 19 pandemic. According to Pratiknyoⁱ (2020), six months before the Coronavirus Covid 19 attack was declared a pandemic, most Indonesians took it lightly and only considered discourse about the industrial era 4.0. This is due to the unpreparedness of its community resources. When the pandemic strikes and the PSBB (Large-Scale Social Restriction) is implemented, the all-digital industry 4.0 paradigm is suddenly needed and has the opportunity to be realized.

Reporting from Baenanda ⁱⁱ (2019) the 4.0 industrial revolution started from the Hannover Trade Fair, in 2011, that the industry has entered into innovations, which in the end brought a series of social, political, cultural, and economic changes. An era where everything is completely relying on digital progress. If the era before industry 4.0 relied on machines to make human life easier, currently machines are controlled by remote digital systems and integrated with other digital systems via the internet network. The industrial 3.0 era, relies on digital electronics and information technology, which allows the internet to develop rapidly as a sign of the information age. Next, in the industrial era 4.0, digital technology is collaborated not only for information, but also automation of machines, Artificial Intelligence (AI), genetic manipulation, robots, system integration, and the use of big data. With this kind of reality, of course, it brings consequences in many fields, be it the social, economic, educational, health, political, cultural, and others.

On the other hand, in the demographic sector, there is an era called Generation Z. The generation according to KBBIⁱⁱⁱ (online) is all people who have roughly the same time of life; force; derivative. The term Generation Z is a generation born after the millennial Y). generation (generation The Y generation classification is formed for those born in 1980 - 1990, or early 2000. Generation Z is a generation that has a birth range between 1990 - 2015 (on the official Kominfo website^{iv}). Generation Z is those who were born in an era of digital technology that has developed at twice the rate of the previous generation. It is not surprising that Generation Z is referred to as iGen (I generation), Net gen (Internet

generation), Tech gen, digital natives, and plurals. This is because the generation born between 1995 - 2015 have been familiar with digital devices since childhood. Admittedly or not, the technology accompanies that the development of generation Z has influenced their personalities.

According to Kusumapraja v (2020), the peculiarities of generation Z are compared to the millennial generation, namely (1) generation Z is considered to have a lower focus than the millennial generation; (2) Generation Z is more multi-tasking than the millennial generation; (3) Generation Z has a way of thinking and has a more global view than the millennial generation; (4) Generation Z is more realistic while millennial generation is more idealistic; (5) Generation Z is more courageous in entrepreneurship, the millennial generation is more comfortable choosing career paths employees in companies; as (6)Generation Ζ prefers to work independently, the millennial generation tends to arrange a circular work table to make collaboration easier; (7) Generation Z prefers to invest or save, while millennials focus on finding experiences, for example, the process of buying goods and like traveling; (8) Generation Z prefers to keep personal info, while millennial likes to share info, opinions, and updates on their lives.

Looking at the problem of numerology, the science related to numbers, from time to time there have been many discussions about numbers, both discussed rationally and irrationally. Rationally, these numbers have usually been discussed in the field of mathematics, with all the evidence for the emergence of mathematical operational patent formulas. As for irrationality, numbers are usually associated with things related to taste, instinct, psychology, astrology, mysticism, superstition, and common sense (practical thinking). In the irrational area, numbers seem to be burdened with factors beyond reason that were originally neutral, suddenly they have certain predicates.

In the case of Javanese tradition, for example, it is known as the weton count. Birthdays are marked with certain numbers associated with certain basic characteristics. Birth, death, mate, travel, the direction of sustenance are calculated based on weton (number of days). In Javanese tradition, there is a record of a special weton. For example, Saturday Pahing is considered to have a superior weton. Saturdays are marked with 9 and most are 9. If there are 18 Saturday numbers, Pahing is the highest number among all wetons. The belief that applies to people who are born on Saturday Pahing is the character of kings, noble. The weton calculation is still believed to be a guideline for Javanese people who are firm holders of Javanese traditions.

In today's modern life too, the role of numbers in the irrational category is still believed to be a symbol of luck. This is evident in modern people when choosing a card number for their cell phones. There are many reasons why choosing a certain number, for example, according to the date or year of birth, lucky numbers, or just choosing one that is easy to remember (this is usually because there are no choices). In that sense, everyone still uses their taste choice to determine their cell phone card number.

Some multi-stores buildings in urban areas, sometimes these buildings avoid naming the floors with the number 4 or 13 labels. In certain ethnic beliefs, the number 4 is considered an unlucky number, a number that does not bring luck. Likewise, the number 13 is also avoided to label the level of a multistorey building. Building owners avoid the number 13 because it is considered an unlucky number. This shows that when people in modern life are allowed to choose numbers, taste, and irrational things are still taken into consideration for the determination.

Even though the industrial era has become increasingly sophisticated, with

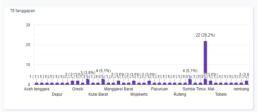
the presence of the industrial era 4.0 which relies on digital technology, and generations moving to follow the pattern of progress, numbers will always be part of humans. In generation Z, those born into the digital age, do they know about some numbers with unlucky and lucky titles? Where do they know the predicates of unlucky and lucky numbers? If they know, do they believe in things that carry certain numbers with certain predicates? The article aimed to describe the pattern of knowledge and belief of Generation Z on the problem of the myth of numbers that is predicated on bad luck and profit. The benefits of this description are as a reference for mapping thought patterns and forming beliefs on other myths or just common sense.

To find out the patterns of knowledge and patterns of belief in a myth (especially about numbers) that occur in the surrounding community, the method used was descriptive quantitative, by exploring the respondent's data using a questionnaire. It is because it is still in the covid-19 pandemic era, which makes faceto-face impossible, the questionnaire is distributed online (online) by using the google form application. This questionnaire contained closed and open questions. Closed questions were presented by giving 3 answer options between yes, no, and maybe. Giving the

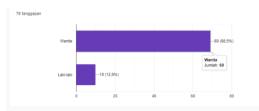
option "maybe", because it answer involves the level of individual confidence. Open questions are questions explore long answers that from respondents about certain reasons and explanations. The selected respondents were students of FKIP, University Dr. Soetomo Surabaya, which is included in the criteria for generation Z (born in 1998-2002). From the respondents' answers, it will be processed in data tabulation using descriptive statistics.

II. FINDING AND DISCUSSION

Of the 78 respondents who managed to enter the data tabulation, female respondents were 69 or 88.5%, respondents while male were 9 respondents or 11.5%. In reality, as a student who later aims to become a teaching profession, it is dominated by women than men. From the questionnaire data, it was revealed that 55 students, or around 70.5% were born in Java, the remaining 29.5% of respondents were born outside Java.

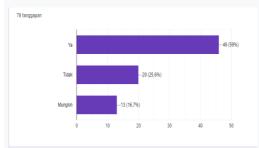


Picture 1: diagram data of the origin of the respondent's answer



Picture 2: Diagram of respondents by gender (note: wanita= female, laki-laki=male, jumlah= amount)

When asked about whether or not there are lucky and unlucky numbers, 46 respondents answered they knew, 20 respondents answered they did not know, the remaining 12 respondents answered doubtfully.



Picture 3: Diagram of respondents' statements regarding knowledge of unlucky numbers and lucky numbers. (Note: Ya= Yes. Tidak= No. Mungkin=maybe/ doubtful)

Meanwhile, when the question was continued whether they believed some numbers brought luck and some brought unluck, 49 respondents answered they did not believe it, 21 respondents answered doubtfully, and 8 respondents answered believed. Of the 8 respondents who answered that they believed, two of them were Javanese (all male), and six respondents were from outside Java (female).



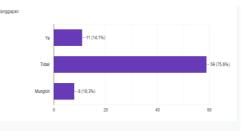
Figure 4: Diagram of respondents about the belief in unlucky numbers and lucky numbers. (Note: Ya, percaya= yes, believe; Tidak percaya= not believe, mungkin= perhaps)

In the view of the wider community, the number 13 is predicted to be an unlucky number. In an article written by Hariyanto^{vi}, it is stated that the British and American people have a saying "Thirteen is an unlucky number". From the respondents' answers, it was obtained data that 80.8% or as many as 63 respondents did not believe, 12.8% or as many as 10 respondents answered believed, the rest were doubtful. From the answers of those who chose not to believe, on average they reasoned that it was just a myth, some answered because they had never experienced the bad luck associated with the number 13, the rest argued that all numbers were good, only human thoughts. For those who believe that the number 13 is unlucky, three respondents stated that they had experienced an unlucky incident related to number 13. Seven people believed based on their knowledge from information obtained from around the community. Respondents who are in doubt due to the influence of existing phenomena around the community.

ya, percaya	(12,8%)			
Tidak percaya			-63 (80,8%)	
Menurut saya bagi seseorang yang percay				
Mungkin -1 (1,3%)				
Saya tidak tahu pasti —1 (1,3%)				
ada kemungkinan —1 (1,3%)				
Seimbang -1 (1,3%)				
0	20	40	60 8	80

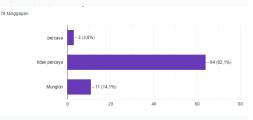
Picture 5: The respondent's diagram regarding belief in the number 13 is an unlucky number (Note: ya, percaya= yes, believe; tidak percaya = not believe; mungkin= perhaps)

In the view of Chinese society, number 4 is believed to be an unlucky number. A total of 59 respondents said they didn't know. 10 respondents answered they knew, and seven respondents answered maybe. They were asked where they get knowledge about number 4 and its predicate. Consistent answers are given by responses that do not know because they do not know. Respondents who answered that they knew, obtained data that their knowledge of the number 4 was obtained from films, from the public, from news on television, from the internet, from phenomena in multistorey buildings, from airplane seat numbers. Respondents who answered were doubtful, arguing because of the influence of information from the surrounding community.



Picture 6: Diagram of respondents regarding knowledge of the number predicate 4 (Note: ya= yes; Tidak= No; Mungkin= perhaps)

Asked further whether the respondent believed that the number 4 brought bad luck? A total of 64 respondents said they did not believe it, three respondents believed it, and 11 respondents answered doubtfully. Of the three respondents who believed, because it came from their knowledge of number 4.Respondents who did not believe, on average reasoned that this was just a myth and had never experienced strange things related to number 4. Respondents answered they were doubtful due to a phenomenon in a society that sometimes avoids number 4.



Picture 7: Respondent diagram of the belief that number 4 is unlucky (Note: percaya= believe; tidak percaya= not believe; mungkin= perhaps)

In the view of Chinese society, according to Hariyanto (2013) that the

number 3,6,8,9 is a lucky number. When respondents are asked whether they believe that the number 8 is a lucky number? A total of 46 respondents said they did not believe it, 6 respondents said they believed it, and 26 respondents doubtfully answered (maybe). Furthermore, as many as 58 respondents considered the number neutral, not bad luck or bringing luck. Nine respondents answered that they did not believe in neutral numbers. The rest, 11 respondents hesitated, argued between believing and not believing.

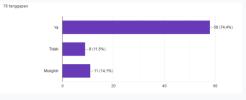
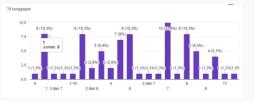


Figure 8: Diagram of the respondent's statement that the figure is neutral. (Note: ya = yes; Tidak= No, Mungkin = perhaps)

Exploring further questions on respondents as generation Z, from numbers 1-10, which one is their favorite number? All numbers that stretch between 1 and 10 are the respondents' favorite numbers, without exception. Number 1 is chosen as the favorite number of 8 respondents. Number 2 is chosen as the favorite number, as many as 8 respondents. Respondents who chose 3,4, 5, 6 as their favorite numbers were 5, 2, 7, and 8 respondents. Respondents who choose number 7 as their favorite number

are 10 respondents. Number 8 as the favorite number was chosen by 8 respondents. 5 respondents chose 9 as their favorite number and 4 respondents chose 10 as their favorite number. The rest of the respondents chose more than two or even three numbers to make their favorite numbers. Only one respondent did not choose any number as a favorite number, because all numbers were special.



Picture 9: Diagram of respondents' statements about their favorite numbers (Note: jumlah = count)

III. CONCLUSION

More than 50% of Dr. FKIP students of Dr. Soetomo University, who are also generation Z figures, said they knew about the unlucky and lucky numbers.

More than 50% of Dr. FKIP students of Dr. Soetomo Unversity as the generation Z did not believe in the predicates carried on several numbers about bringing bad luck or luck. They consider unlucky and lucky numbers to be a myth.

Knowledge and beliefs about the predicate of unlucky and lucky numbers do not

depend on the ethnicity of origin of FKIP students of Dr. Seotomo University. Their knowledge is obtained from information spread on the internet, films, and television.

FKIP University Dr. Soetomo, each individual has a favorite number spread between 1-10. The number 7 dominates as a number that many are chosen as the favorite number based on their beliefs related to their religious knowledge.

REFERENCES

- Pratiknyo, Yuwono Budi. 2020. Covid-19 Memuluskan Era Revolusi Industri 4.0 (daring). http://www.ubava.ac.id/2018/content/artic les detail/289/Covid-19-Memuluskan-Era-Revolusi-Ind<u>ustri-4-0.html</u>. Accessed 25 Oktober 2020.
- [2] Baenanda, Listhari. 2019. Mengenal Lebih Jauh Revolusi Industri 4.0 (daring). <u>https://binus.ac.id/knowledge/2019/05/me</u> <u>ngenal-lebih-jauh-revolusi-industri-4-0/</u>. Accessed 25 Oktober 2020.
- Kamus Besar Bahasa Indonesia (daring). 2012-2019. <u>https://kbbi.web.id/</u>. Accessed 3 November 2020
- [4] . Kementerian Komunikasi dan Informatika RI. 2016. Mengenal Generasi Milenial (daring). <u>https://www.kominfo.go.id/content/detail/</u> <u>8566/mengenal-generasi-</u> <u>millennial/0/sorotan_media</u>. Diakses tanggal 25 Oktober 2020.
- [5] Kusumapraja, Alexander. 2020. Ini Dia 8 Perbedaan Antara Generasi Milenial dan Gen Z (daring). <u>https://www.cosmopolitan.co.id/article/rea</u> <u>d/7/2020/21101/ini-dia-8-perbedaanantara-generasi-millennial-dengan-gen-z</u>. Diakses tanggal 3 November 2020.
- [6] Hariyanto, Howie Yukuri. 2013. Pandangan Mahasiswa UniversitasKristen Petra terhadap Angka Sial dan Angka Keberuntungan. Century, vol.1, no.1 (ojs). Accessed 3 November 2020.
- [7] Pratiknvo. Yuwono Budi. 2020. Covid-19 Memuluskan Era Revolusi Industri 4.0 (daring).

http://www.ubava.ac.id/2018/content/a<u>rtic</u> les detail/289/Covid-19-Memuluskan-Era-Revolusi-Ind<u>ustri-4-0.html. Accessed</u> 25 Oktober 2020.

- [8] Baenanda, Listhari. 2019. Mengenal Lebih Jauh Revolusi Industri 4.0 (daring).<u>https://binus.ac.id/knowledge/201</u> <u>9/05/mengenal-lebih-jauh-revolusiindustri-4-0/</u>. Accessed 25 Oktober 2020.
- Kamus Besar Bahasa Indonesia (daring). 2012-2019. <u>https://kbbi.web.id/</u>. Accessed 3 November 2020
- [10] Kementerian Komunikasi dan Informatika RI. 2016. Mengenal Generasi Milenial (daring). <u>https://www.kominfo.go.id/content/detail/ 8566/mengenal-generasimillennial/0/sorotan media</u>. Diakses tanggal 25 Oktober 2020.
- [11] Kusumapraja, Alexander. 2020. Ini Dia 8 Perbedaan Antara Generasi Milenial dan Gen Z (daring). <u>https://www.cosmopolitan.co.id/article/rea</u> <u>d/7/2020/21101/ini-dia-8-perbedaanantara-generasi-millennial-dengan-gen-z.</u> Diakses tanggal 3 November 2020.
- [12] Hariyanto, Howie Yukuri. 2013. Pandangan Mahasiswa UniversitasKristen Petra terhadap Angka Sial dan Angka Keberuntungan. Century, vol.1, no.1 (ojs). Accessed 3 November 2020.