



## IMPACT OF COVID-19 PANDEMIC ON THE FINANCIAL

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### Abstract

The spread of Covid-19 in Indonesia has caused disruption in all sectors, including the economic sector. One of the economic sectors currently in the spotlight is the declining per capita income, while consumption must continue to run to meet daily life. The study aims to identify the financial behavior of Muhammadiyah people in Medan before and after the Covid-19 pandemic, especially in the aspects of consumption, cash flow management, saving, investment, and credit management. In addition, it measures whether there are differences in the financial behavior of Muhammadiyah people in Medan before and after the covid-19 pandemic, so that it can be a reference for what form of financial behavior should be. The impact of the Covid-19 pandemic is certainly a force majeure situation that can occur anytime and anywhere. Even though there are still many other force majeure events that can occur. It is a quantitative approach, with a statistically correlated parametric test (t test), if the data is not normal, then the Wilcoxon test is carried out. Based on the results of the study, it was found that there were significant differences between the financial behavior of Muhammadiyah people in Medan before and during the Covid-19 pandemic.

**Keywords:** Financial Behavior, Covid-19 Pandemic, Medan

## INTRODUCTION

The emergence of financial behavior is the impact of a person's desire to fulfill his life needs in accordance with the level of income earned, therefore the importance of financial behavior for the sustainability of one's business and one's life in meeting daily needs (Kholilah, 2013). Often, a person's failure to manage finances is not due to a person's low income, but rather the individual's ignorance of allocating income to certain posts (Sari, 2015).

The Covid-19 pandemic has a direct impact on the income of the Indonesian. As many as 84 percent of Indonesian feel a decrease in income. In fact, 3 out of 10 people claim their income has decreased by more than 50 percent compared to before this pandemic. Even so, 49 percent of Indonesians are optimistic that their income will increase again in the next six months. Soeprapto Tan, Managing Director of Ipsos Indonesia, said that due to the Covid-19 pandemic, economic growth in Indonesia in the first quarter of 2020 slowed down compared to the previous year. This is due to a decrease in domestic demand and household consumers, as well as a low investment ratio (Setiawan, 2020).

A survey was conducted by Snapcart to see how much impact the corona virus had on the lifestyles of Indonesians. Conducted on 17<sup>th</sup>-28<sup>th</sup> March 2020, a survey involving 2000 men and women aged 15-50 years in 8 major cities in Indonesia (Jakarta, Bandung, Semarang, Surabaya, Medan, Palembang, Makassar, and Manado) showed that the virus pandemic Corona has the biggest impact on people's social life. Followed by career or work factors and changes in travel or vacation plans due to the Covid-19.

From a survey conducted by RB Consulting (2020), as many as 48 percent of respondents admitted that their social life was disrupted due to the Covid-19. Indonesian people who are used to living together and the thick social interaction are trying to find a way out to keep socializing despite the physical distancing policy. The use of digital technology is the answer that makes people now start to depend on their interactions through cyberspace. Lately, many social media and sports applications involve online sports activities. Thus, creating an atmosphere as if exercising together, when in fact at home.

One's plans for vacations are certainly disrupted and even changed. Tourism is the third sector affected by the Covid-19. Automatically, there is a decrease in visitors. A

number of hotels eliminate buffets because there are no visitors. It means that spending on raw materials for restaurants in hotels is reduced, which has an impact on the lower-class economy. Specifically, this survey does not explain the existence of an economic downturn. Rather, it shows the changing style of consumers who rely on digital options. As many as 24 percent of respondents were forced to change their conventional shopping habits to online. Therefore, there is an increase in online shopping activity among the community (Diawanti, 2020).

DBS Bank stated that the Covid-19 pandemic had a significant effect on consumer shopping trends. Reduced activities outside the home and social interactions make consumers use their income more for savings and investments. Based on the results of a DBS Bank survey, savings and investment are the top two answers from respondents when asked what they will spend their money on in the next 3-6 months. The majority of respondents answered that they would use their money for savings as the top priority, and investment as the second priority. In the midst of a pandemic like today, consumers tend to be careful in spending their money (Malik, 2020). In addition to the two items above, consumers spend their additional income on basic needs such as food and other household needs. Meanwhile, for other needs such as eating at restaurants, traveling and shopping for luxury goods, it is not a top priority.

The Indonesia Stock Exchange (IDX) reported that the number of Indonesian capital market investors listed at PT Kustodian Sentral Efek Indonesia (KSEI) as of July 2020, which consists of stock, mutual funds and bond investors, has grown by 22 percent from 2019, to become 3.02 million investors. The condition of the Covid-19 pandemic did not dampen the interest of investors to trade shares. It is indicated by the increase in the daily average number of stock retail investors making transactions from March to July 2020. There was 82.4 percent increase in the number of investors to 93,000 in July 2020 compared to March 2020 of 51,000. The number of retail investors who transacted in July was above the average for active retail investors since the beginning of 2020 of 65,000 retail investors. According to the IDX, in the midst of the Covid-19 pandemic and the dynamics of global financial markets throughout the first semester of 2020, the Composite Stock Price Index (JCI) and the majority of the global stock exchange benchmark indexes experienced a significant decline (Dance, 2020).

The number of poor people in North Sumatra rose to 1.28 million people in March 2020. This figure rose 0.12 points from 8.63 percent in September 2019 to 8.75 percent as of March 2020. The data is obtained from the Official News. Statistics as seen from the website of the Central Statistics Agency (BPS) of North Sumatra, Wednesday (15/7/2020). The percentage of poor people in urban areas in March 2020 is said to be 8.73 percent and 8.77 percent in rural areas. The percentage of poor people in the city rose by 0.34 points, while in the village it fell 0.16 points compared to the data in September 2019.

In general, the poverty rate in North Sumatra decreased both in terms of number and percentage, except in September 2013, September 2014 to September 2015 which was triggered by the increase in the price of basic goods as a result of the increase in fuel prices and the increase in March 2020 as a result of from the Covid-19 pandemic (Fadhil, 2020).

Head of the Central Statistics Agency (BPS), Suhariyanto said that there had been a decline in people's income during the Covid-19 pandemic. Based on the survey results, even the decline in income occurred in all levels of society from the bottom to the top. The impact of Covid-19 is deeper on low-income people, because their income is reduced, so consumption patterns are reduced. The deepest decline occurred in low-income residents with incomes in the range of 1.8 million per month or about seven out of 10 people (70.53%) with low incomes decreased their income. Meanwhile, three out of 10 (30.34%) experienced a decline (Putra, 2020)

As many as 70% of respondents said their gross household income had fallen in the past month due to the Covid-19 pandemic. Meanwhile, the rest still have the same income (27%), some even have an increase (1%). Saiful Mujani Research and Consulting (SMRC) conducted this survey on 1.2 thousand respondents spread across 34 provinces in Indonesia on 9-12 April 2020 (Lidwina, 2020).

The Central Statistics Agency (BPS) of North Sumatra recorded the open unemployment rate (TPT) in August 2020 of 6.01% or as many as 508 thousand people. The working population was recorded at 6.842 million people, a decrease of 170 thousand people from August 2019. Employment fields that experienced an increase in percentage were the trade sector (0.86% points) and other services (0.37% points). Meanwhile, other sectors experienced a decline, particularly the education services sector (0.46% points), manufacturing industry (0.35% points), and enterprise services (0.33% points). During the

past year (August 2019–August 2020), the percentage of formal workers fell by 4.63% points. Meanwhile, the percentage of underemployed workers increased by 2.73% points, and the percentage of part-time workers increased by 3.22% points.

Data in BPS from the working age population which reaches 10, 703 million there are 1.23 million people affected by Covid-19 or 11.51 percent. It consists of unemployment due to Covid-19 (107 thousand people), BAK due to Covid-19 (39 thousand people), temporarily not working because of Covid-19 (64,000 people), and working residents who have reduced working hours due to Covid-19 (1.02 million people) (Swisma, 2020).

The subjects studied in this study were Muhammadiyah people in Medan, their financial behavior before and after the covid-19 pandemic. Financial behavior has become a very important issue today regarding the impact of Covid-19. In managing finances requires knowledge in running it, besides the ability of individuals to be able to make effective decisions regarding personal finances is a useful thing for financial management. Family financial management is very important because failure to manage finances will have a negative impact in the long run.

## **REVIEW OF LITERATURE**

### **Financial Behavior**

Financial behavior was recognized and developed by Professor Robert J. Shiller of Yale University in 1981. Another pioneer of financial behavior is a professor of economics and behavioral science from the University of Chicago, Richard H. Thaler. Financial behavior is a new way of thinking in understanding financial economic phenomena (Thaler, 2017). It is a relatively new field of science. The theory is ready to replace neoclassical theory as the dominant paradigm used to understand people's investing behavior in today's capitalist world. It considers psychological and sociological factors as an important foundation in making one's financial decisions. Thus, behavioral finance is the study of how psychology impacts financial decisions in households, markets and organizations (Copur, Zeynep, 2015). (Ricciardi & Simon, 2000) disclose the interdisciplinary relationships that integrate behavioral finance as follows:

**Figure 1**  
**Behavioral Financial Interdisciplinary Relationship**



a) **Psychology**. It studies a person's behavior and mental processes. Along with this process will affect the human physical, mental condition, and a person's external environment; b) **Sociology**. It studies a person's social behavior within the scope of individuals and groups. It covers the basic influence of social relationships and attitudes of a person; c) **Finance**. This discipline concentrates on how to create value and make decisions related to finance, capital allocation, acquisition, investment and managing financial resources with the aim of welfare; d) **Behavioral finance theory** is the application of psychology to the discipline of finance. An approach that explains how humans invest or deal with financial problems is influenced by psychological factors. Financial behavior is the result of psychological interactions with financial behavior and performance of all types of investor categories, and that investors should be more careful in making investments so as not to make mistakes in making decisions, and be emotionally affected, tend to be effective in using the money they have, such as making a budget, saving money and controlling spending, investing, and paying obligations on time.

In the preparation of the Indonesian financial literacy index, the Financial Services Authority (Finance, 2013) also includes observations on financial behavior. Financial behavior seen in a survey conducted by OJK includes how respondents: a) Maintain their financial condition, for example how often do they check their savings book and keep records of their household expenses and income; b) Financial management, such as how to deal with financial difficulties; c) Financial planning, for example preparing for retirement; d) Make choices according to the needs of the various types of insurance products available and how they can continue to access and obtain the required financial information.

The objectives of the existence of financial behavior are as follows: a) Measure and manage finances by making a financial budget to make it more controllable; b) Measuring the effectiveness of achieving financial goals; c) Become a reference or pillar in achieving financial planning.

The following are some of the common benefits of having good financial behavior: a) Can control expenditure items to be more efficient; b) Become a learning control and feedback by making a budget for this month and the following month; c) Help to correct the mistakes made to avoid the use of financial products that are not in accordance with the needs.

### **Behavioral Financial Aspects**

Dew & Xiao (2011) explained that there are four things that can affect a person's financial behavior, namely:

#### **Consumption**

According to Gregory (2003), consumption is expenditure by households on goods and services. A person's financial behavior can be seen from how the person carries out his consumption activities, such as what he buys and why he buys it.

#### **Cash flow management**

Cash flow is an indicator of financial health which means a person's ability to pay all the costs he has. It is balanced between cash inflows and expenses. Cash flow is measured by the timeliness of a person in paying attention to the time record of payments and making budgets and planning for the future (Hung, Angela, Andrew M Parker, 2009).

#### **Savings and investment**

Savings is the part of income that is not consumed in a certain period. someone does because someone does not know what will happen in the future, so money must be saved to pay for unexpected events (Ilfita, 2021). In other words, investing means allocating or investing resources today with the aim of getting benefits in the future (Lusardi, Annamaria, Pierre Carl Michaud, 2017).

## Credit Management

Debt management is a person's ability to take advantage of debt to improve his welfare. So, debt management is more about how someone uses debt for something productive, not for consumption purposes.

In this study, the financial behavior discussed is related to financial management practices (applications in financial management). Financial behavior measured in research subjects is seen from behavior related to decisions in the use of financial products that are officially available in Indonesia.

Financial behavior in this study is defined as a person's ability to plan, manage and make decisions related to consumption and financial management (cash-flow management), savings and investment, and credit management (loans). The category of assessment that will be used to measure this behavioral aspect of finance is based on the total value obtained by the respondent.

**Table 1**  
**Categorization of Financial Behavior Level**

Category	Mark	Information
Well	$\geq 60\%$	shows the level of Islamic financial behavior in individuals is at a good level
Not good	$< 60\%$	shows the level of Islamic financial behavior in individuals is at a less good level

## Relevant Research

Research conducted by Hilgert, Hogart and Beverly (2009) in (Hung, Angela, Andrew M Parker, 2009), they added financial behavior and financial literacy to a questionnaire in the National Survey of Consumer Finances. Here, the Financial Practice Index is based on behavior in four variables: cash flow management, credit management, savings, and investment behavior. They then compared the index with financial literacy scores and found that people with higher levels of financial literacy also had a higher Financial Practice Index. It indicates that there is a positive relationship between financial behavior and financial literacy, although the direction of causality is not clear.

(Lusardi, Annamaria, Pierre Carl Michaud, 2017) in his research examines the importance of financial literacy for the economy based on theory and evidence (facts that



occur). The study also looks at the impact of financial literacy on economic decision making in the United States and several other countries. The results indicate that there are enormous benefits from financial literacy. According to this study, financial literacy affects financial decision making, and decisions are directly related to the financial behavior of respondents.

Previous research was also conducted by (Gunawan, Ade, 2019) looking at the effect of financial literacy levels and lifestyle on financial behavior in students in Medan. The results indicate that there is a strong influence of the level of financial literacy on the lifestyle of students, and there is also a strong influence between the level of financial literacy of students on their financial behavior.

(Lusardi, Annamaria, S. Mitchel, 2011) conducted research on the level of financial literacy in several countries in the world. The results show that in the world, the understanding of financial literacy is still very underestimated or not considered, especially in financial management and retirement planning. Female respondents have a lower level of financial literacy than male respondents. Meanwhile, in terms of age, young and old respondents have lower levels of financial literacy compared to middle-aged respondents.

(Van Rooij, Maarten, Annamaria Lusardi, 2011) in his research found that the respondents have basic financial knowledge and very little on basic financial concepts. The majority of respondents find it difficult to distinguish between several investment products, especially investments in the capital market and the basics of risk diversification. The study found that financial literacy strongly influences individual financial decisions, and respondents who have low levels of financial literacy are much less likely to invest in stocks.

According to (Schresbeg, 2013) financial literacy increases along with increased income, it is also reinforced by the results of research conducted by (Nidar, Sulaeman Rahman, 2012) stating that the level of monthly income affects financial literacy.

## **RESEARCH METHOD**

### **Research Sites**

The research was conducted in Medan which consists of 31 branches, namely:

**Table 2**  
**List of Muhammadiyah Organization Branches in Medan**

No.	Branch	No.	Branch
1	Belawan	17	Percut Sei Tuan
2	Kampung Dadap	18	Perumnas Helvetia
3	Kampung Durian	19	Perumnas Medan II
4	Kota Matsum	20	Perumnas Simalingkar
5	Medan Amplas	21	Pulo Brayan Darat
6	Medan Baru	22	Pulo Brayan Sekitarnya
7	Medan Deli	23	Sei Deli
8	Medan Denai	24	Sidorame Barat
9	Medan Helvetia	25	Sidorame Timur
10	Medan Johor	26	Sukaramai
11	Medan Kota	27	Sunggal
12	Medan Marelan	28	Tanjung Sari
13	Medan Sunggal	29	Tegal Rejo
14	Medan Tembung	30	Tegal Sari II
15	Pahlawan Perjuangan	31	Teladan
16	Pasar Merah		

Source: Muhammadiyah Medan, 2018

### Population and Sample

The population is the Muhammadiyah extended family in Medan. The sampling process in this study used a purposive sampling method, with the following sample criteria: a) Respondents are active members of Muhammadiyah organizations in Medan; b) Membership is proven by having a membership card of an organization under the Muhammadiyah family; c) Respondents have been members of the Muhammadiyah organization for more than one year, and play an active role in organizational activities.

The number of samples required must be representative of the population. In this study, the number of population is unknown, and sampling will be carried out based on the research tools used. This research uses Statistical Product and Service Solutions (SPSS) in processing its data to test whether there is an influence of the covid-19 pandemic on the financial behavior of Muhammadiyah people in Medan seen from the form of financial behavior before and after the Covid-19 pandemic. Imam Ghozali (2018) recommends that the ideal sample size is in the range of 100 to 200 people. Thus, the sample targets the number of samples in the range of 100 to 200 people (Ghozali, 2018).

### **Data Collection Technique**

Data collection techniques include: a) Observation, namely observing various phenomena in the object of research related to financial behavior; b) Interview, which is giving questions directly to the respondents who were sampled in this study; c) Questionnaire, which is giving a questionnaire containing several questions consists of five dimensions, namely: consumption (CS), cash-flow management (CFM), savings (SV), investment (IN) and loans (CM), each dimension consisting of 2 (two) statement items.

### **Analysis Method**

The analysis method was carried out with a two-average difference test instrument which aims to determine whether the financial behavior of the Muhammadiyah people in Medan before the Covid-19 pandemic and after the Covid-19 pandemic there is a significant difference. The test used is a two-party test, and the use of hypothesis analysis tests is determined after knowing the results of the normality test. If the data is normally distributed, the test used is the t test (correlated parametric statistics), if the data is not normally distributed, the test is used Wilcoxon (correlated non parametric statistics).

## **RESULTS AND DISCUSSION**

The reserachers processed data from the answers to the questionnaires distributed to the people of Percut Sei Tuan District with a total of 20 statement items related to the Financial Behavior variable. The number of respondents selected was 100 people for filling out the questionnaires related to the statements of these variables. It was based on using the Likert scale method, with the highest score of 5 indicating the answer strongly agrees and the lowest score being 1 to indicate the answer strongly disagree. Thus, this provision applies to calculating the Financial Behavior variable which will be examined. The characteristics that become the identity of the respondents in the research consist of differences in gender, age, place of residence, education, type of work, and amount of income, and the name of the respondent is not included because it is to provide convenience to the respondent in filling out the questionnaires distributed. The data of the respondents are summarized in the following table:

**Table 3**  
**Characteristics of Respondents' Identity**

	Characteristics	Frequency	Percentage
<b>Gender</b>	Man	50	50%
	Woman	50	50%
<b>Age</b>	18-24	91	91%
	25-30	4	4%
	31-35	1	1%
	>35	4	4%
<b>Education</b>	Elementary School	-	
	Junior High School	-	
	Senior High School/ Vocational School	27	27%
	D3/S1/S2/S3	73	73%
<b>Type of work</b>	Businessman	5	5%
	Private employees	22	22%
	PNS/TNI/POLRI	3	3%
	Online Shop/Reseller	10	10%
	Other	60	60%
<b>Total Income</b>	IDR 3,000,000 - IDR 4,000,000	74	74%
	IDR 4,000,000 – IDR 5,000,000	13	13%
	>Rp5.000.000	13	13%

Source: Data Processing Results (2021)

Based on the data in the table above, it shows that female and male respondents have the same percentage, namely 50% or as many as 50 women and 50 men, this shows that both of them are very concerned about financial problems. The number of people aged 18-24 has a higher percentage, namely 91%, this is because young people pay more attention to financial management than people whose age is >30.

With a percentage of 73% or equivalent to 73 people with D3/S1/S2/S3 education, it is stated that people who come from universities are the majority because they understand more and get more economic concepts and financial behavior during lectures. As mentioned by (Saraswati, Rispantyo, & Kristianto, 2017) stated that learning in higher education plays an important role in the process of forming student financial literacy. Effective and efficient learning will help students have the ability to understand, assess, and act in their financial interests. For the characteristics of the type of work, it is dominated by people who have other jobs with a percentage of 60% and private employees with 22%.

For the last characteristic, the amount of income is dominated by people who earn Rp. 3,000,000 - Rp. 4,000,000 with a percentage of 74%. This shows that people with incomes equal to the minimum wage are more careful in managing their finances.

## Normality Test Results

This test aims so that this study can determine whether or not it is normally distributed between the independent variables and the dependent variable or both.

Kolmogorov Smirnov test criteria for normality test.

If the significance **value is**  $> 0.05$ , then the data is **normally distributed**.

If the significance **value is**  $< 0.05$ , then the data is **not normally distributed** (Juliandi et al., 2014, p. 55).

The following are the results of the normality test for all variable data in the study using Kolmogorov Smirnov and probability plots as follows:

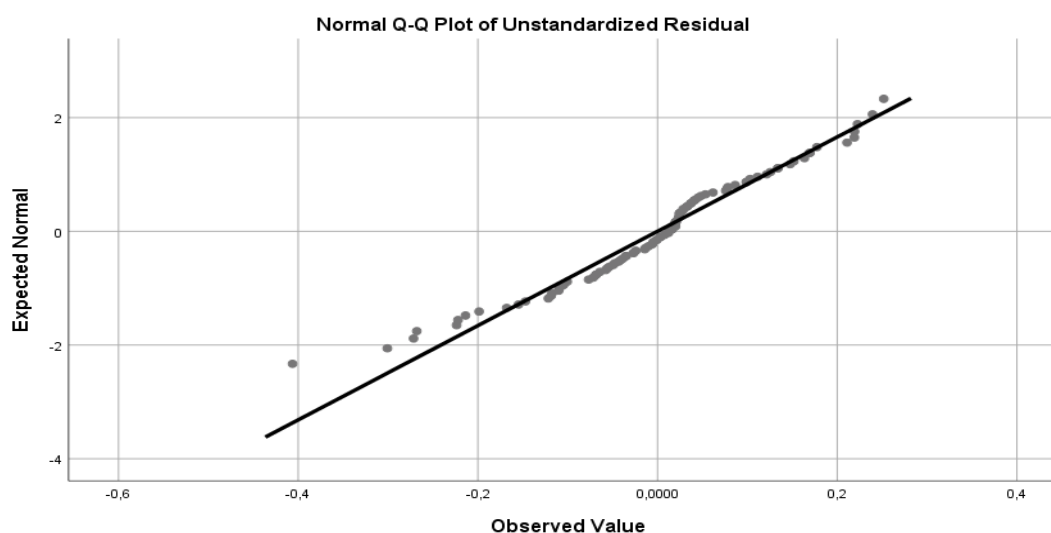
**Table 4**  
**Normality Test**

Tests of Normality						
	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Unstandardized Residual	0.086	100	0.063	0.969	100	0.017
Lilliefors Significance Correction						

Source: Data Processing Results (2021)

Based on table 5.4, it shows that the value of Sig. is 0.063. This value is greater than the significance value of  $0.063 > 0.05$ . Thus, it can be concluded that the data used in this study is normally distributed.

**Figure 2**  
**Probability Plot**



Based on Figure 2, the data used is normally distributed because it can be seen that the points spread close to or follow the diagonal line.

### Result of Homogeneity of Variance Test Using Levene's Test

The Levene test or Levene test for equality of variance is used to test whether the samples have the same variance. To find out whether the two samples are homogeneous or not, it is necessary to test the homogeneity of the variance first with a significant level of = 5%.

By looking at the significance probability value: a) Significance probability  $< 0.05$ , then the variance of the two groups of data is not homogeneous; b) Significance probability  $> 0.05$ , then the variance of the two groups of data is homogeneous.

The analysis of the Levene test results is carried out by determining the test hypothesis first, namely: a)  $H_0$  : The variance of the two populations is homogeneous; b)  $H_1$  : The variance of the two populations is not homogeneous.

The following are the results of the homogeneity test for the overall variable data using the Levene test

**Table 5**  
**Homogeneity Test Results**

Test of Homogeneity of Variances					
		Levene Statistics	df1	df2	Sig.
Pandemic Results	Based on Mean	0.047	1	198	,828
	Based on Median	0.060	1	198	,807
	Based on Median and with adjusted df	0.060	1	197,690	,807
	Based on trimmed mean	0.050	1	198	,823

Based on the data above, it can be seen that the value of Sig. is 0.828. This value is greater than the significance value of  $0.828 > 0.05$ . So it can be concluded that the data used in this study came from the same or homogeneous population.

### Hypothesis testing

Hypothesis testing is an analysis of collecting data that is relevant to the formulation of related problems, then processing and analyzing data to test the truth of the hypothesis (Noor, 2017 p. 24). Since the data that has been analyzed is normally distributed and homogeneous, it will then be tested using correlated parametric statistics or paired sample t-test. Paired t-test (paired t-test) is one method of testing the hypothesis that uses data that is

not independent (pairs). As for what is meant by independent or paired data, the object of research is subjected to two different treatments so as to produce two kinds of samples from the first and second treatments or in other words the data in the second sample is a change from the first sample data (Effendi & Wardhani, 2016).

Paired t-test in this study was used to analyze the financial behavior of Muhammadiyah people in Medan before and after the Covid-19 pandemic.

Decision-making: a) If the significance value (2-tailed)  $< 0.05$  indicates a significant difference between the initial variable and the final variable; b) If the significance value (2-tailed)  $> 0.05$  indicates that there is no significant difference between the initial variable and the final variable.

Hypothesis: **H<sub>0</sub>** : during = before

**H<sub>a</sub>** : during  $>$  before

The results of the calculation of the results of the paired difference test (paired to t-test) can be seen in the following table:

**Table 6**  
**Hypothesis Test Results**

Paired Sample Statistics					
		mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before the Pandemic	41.49	100	4.756	,476
	During the Pandemic	39,40	100	4,744	,474

The table above shows the statistical summary results from the two data samples, namely data before the pandemic and during the pandemic. It can be seen that before the pandemic had a mean value of 41.49 with N as many as 100 respondents. Financial behavior data during the pandemic has a mean value of 39.40 with N as many as 100 respondents. It shows that the financial behavior of Muhammadiyah people in Medan before the pandemic was better than during the pandemic. The standard deviations indicating the heterogeneity of the data before and during were 4.756 and 4.744, respectively. The standard error of the mean before and during the data is 0.476 and 0.474. The standard error of the mean describes the distribution of the sample mean to the overall average of the possible samples.

**Table 7**  
**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	Before the Pandemic & During the Pandemic	100	0.181	0.071

The table shows the correlation or relationship between the two data, namely financial behavior before and during the Covid-19 pandemic. The basis for decision making from the correlation test is if the significance value is  $<0.05$ , then there is a correlation or relationship between two data or samples. The significance value of the data is 0.071 where this value is greater than 0.05. It can be concluded that there is no correlation between before and during the pandemic.

**Table 8**  
**T test**

Paired Samples Test									
		Paired Differences					T	df	Sig. (2-tailed)
		mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Before the Pandemic - During the Pandemic	2.09	6,079	0.608	0.884	3,296	3,438	99	0.001

Test results of paired sample test in the table above shows the results of Sig (2-tailed) is equal to 0.001. Where the value is  $0.001 < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted. So it can be concluded that there are significant differences in the financial behavior of Muhammadiyah people in Medan before and during the Covid-19 pandemic.

### **Two-Sample Kolmogorov-Smirnov Test**

The test aims to examine the comparability of two independent samples on the financial behavior of Muhammadiyah people in Medan. To find out whether the two samples have differences or not, it is necessary to test the variance first with a significant level of  $= 5\%$ .

Hypothesis



Ho: there is no difference in financial behavior between before and during the pandemic

Ha: there are differences in financial behavior between before and during the pandemic

(Juliandi, 2014 p. 55)

Decision making basis: Significance probability  $< 0.05$  reject Ho

Significance probability  $> 0.05$ , accept Ho

The following are the results of the Kolmogorov Smirnov test for two samples:

**Table 9**  
**Frequencies**

Frequencies		
	Behavior	N
Pandemic Results	Before the Pandemic	100
	During the Pandemic	100
	Total	200

**Table 10**  
**Test Statistics**

Test Statistics		
		Pandemic Results
Most Extreme Differences	Absolute	,320
	Positive	,010
	negative	-,320
Kolmogorov-Smirnov Z		2,263
asympt. Sig. (2-Tailed)		,000
Grouping Variable: Behavior		

From the Test Statistics table, the following information is obtained: a) Value of Most Extreme Differences Absolute: 0.320; b) Asym value. Sig. (2-tailed): 0.000. Therefore, the asym value is obtained. Sig. (2-tailed) less than ( $0.000 < 0.05$ ). Ho is rejected and Ha is accepted. It means that there is a significant difference between the financial behavior of Muhammadiyah people in Medan before and during the Covid-19 pandemic.

## **Discussion**

### **Financial Behavior Level Analysis**

Based on the results of the study that the level of financial behavior before the pandemic, the majority of respondents stated agree regarding financial behavior based on the answers to the questionnaire, meaning that before the pandemic Muhammadiyah people in Medan managed their finances well and realized that it was very important to manage their finances personally, as an effort to control the future financial problems. Then during the pandemic, there was a decrease in the agree and strongly agree percentages, then the percentage increase in disagree answers when compared to financial behavior data before the Covid-19 pandemic.

### **Analysis of Differences in Financial Behavior of Muhammadiyah People in Medan Before and During the Pandemic**

Based on the results of the study, it was found that there was a significant difference between the financial behavior of Muhammadiyah people in Medan before and during the Covid-19 pandemic. It was obtained from the results of the paired sample t test with a significance value of Sig (2-tailed) of 0.001. Where the value is  $0.001 < 0.05$ . The number of people's financial behavior before the pandemic managed their finances well than during the pandemic with the average number of people from 41.49 dropping to 39.40.

It can be concluded that there is a significant difference between the financial behavior of Muhammadiyah people in Medan before and during the Covid-19 pandemic. It is because the pandemic has an impact on uncertain economic conditions which have resulted in people changing in managing their finances. The condition is in line with the research results (Fahlia, Irawan, & Tasmin, 2019) that there was a real change in behavior from a social perspective after the earthquake in MapinRea Village.

As for the research carried out, (Cholilawati & Suliyanthini, 2021) also stated that during the Covid-19 pandemic, the consumer community experienced changes in behavior, especially in seeking information related to goods/services, purchasing goods/services, and how they used goods/services. These activities are reduced or rarely carried out during the Covid-19 pandemic, but the activities of disposing of products that have been consumed are mostly carried out during the pandemic. Even before the pandemic, people did this.

Other research (Panjaitan, Lubis, & Kusuma, 2014), there is a significant difference between the price of oranges, the price of cabbage, the price of potatoes, the price of tomatoes, the price of carrots, the price of beans, the price of Chinese cabbage, the price of chayote, the price of cauliflower, the price of red chili before and after the eruption of Mount Sinabung.

It can be seen from the results of the percentage of education 73% or equivalent to 73 people with D3/S1/S2/S3 education stating that people coming from universities are the majority because they understand more and get more economic concepts and financial behavior during lectures.

Good financial behavior is obtained through financial decisions made appropriately in order to appreciate the value of money. Thus, it is important to have good financial literacy in order to organize a better future. This is continuous with financial education that has the ability to understand, assess and even act in the interests of financial behavior, because if financial learning in higher education is improved, students' financial behavior will be even better.

Financial education has a very important role for students to have the ability to understand, assess, and act in their financial interests. Learning in college provides students with lessons that are used as milestones in guiding the way to overcome the financial problems they face (Erawati & Susanti, 2016).

It can be concluded that universities are very influential on people's financial behavior which is in line with and supported by the results of research conducted (Nasihah & Listiadi, 2019) which states that "learning in higher education has a positive and significant influence on financial behavior".

Learning has a significant effect on the financial behavior variable. The higher the students' understanding of the learning provided by the lecturers at the university, the better the students financial behavior will be (Arisal, Agustang, & Syukur, 2020). From the results of the research and discussion conducted, it is necessary to strengthen the understanding of financial management for Muhammadiyah people, in order to minimize the economic condition of the household, which is currently experiencing income fluctuations.

## CONCLUSION

Based on the results of the study that the level of financial behavior before the pandemic, the majority of respondents agreed regarding financial behavior based on the answers to the questionnaire, meaning that before the pandemic, Muhammadiyah people in Medan managed their finances well and realized that it was very important to manage their finances personally, as an effort to control financial problems that arise will experience in the future. Then during the pandemic, there was a decrease in the agree and strongly agree percentages, then the percentage increase in disagree and disagree answers when compared to financial behavior data before the Covid-19 pandemic. It shows that people experience changes in financial behavior in managing finances during a pandemic due to declining income so that people adjust financial patterns according to circumstances. And based on the results of the study, it was found that there was a significant difference between the financial behavior of Muhammadiyah people in Medan before and during the Covid-19 pandemic.

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