Online Loan Victims: Analysis Of Depression, Stress, and Anxiety Levels Based On Dass (Depression Anxiety Stress Scale) 42 in North Sulawesi

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Abstract

Someone who's trapped in online loan debt usually tends to experience some psychological pressure that attacks their mental health such as depression, stress, and anxiety. These pressures come from many different factors in online loans, like the coercion by the debt collector and even the fear of not being able to pay off the debt. According to the Indonesian Financial Services Authority (OJK), the usage of online loan services in North Sulawesi in 2023 growing up to 61,81% with the growth amounting to IDR 435,52 billion. Growing from 2016-2022 the total distribution reached IDR 2,17 trillion, with a total of 484.555 borrowers and 5.014 accounts as lenders. The amount of online loan services is inseparable from the presence of illegal online loans that harm society. The purpose of this research is to find out the level of depression, stress, and anxiety of the online loan victim. We started this research from July until November 2023. We gathered the data from 44 respondents, aged between 17 to 35 years old in North Sulawesi. Using DASS-42 as the psychological measuring tool, all questions were answered directly by the respondents with the accompaniment of the researcher and followed by statistical analysis. The result of this research has found that online loan customers experience depression, anxiety, and stress regardless of what services they use whether it's legal or illegal. Based on this research, we discover that most of the online loan customers are experiencing normal depression (75%), normal stress (65,9%), and normal anxiety (36,4%).

Keywords: Anxiety, DASS-42, Depression, Online Loans, Stress.

Introduction

Indonesia is a country where internet use is widespread. Based on survey results from the Indonesian Internet Service Providers Association (APJII), internet users in Indonesia reached 215.63 million people in the 2022-2023 period (APJII, 2023). One of the impacts of high internet penetration in Indonesia is the emergence of Financial Technology (Fintech), one of whose products is online loans (PINJOL), this is a loan with terms and conditions that are of course easier and more flexible, compared to conventional financial institutions such as banks. (Pardosi et al., 2020). In the North Sulawesi region, total online loan distribution (PINJOL) experienced a significant increase reaching IDR 2.17 trillion, from 2016 to early March 2022, an increase of 98.76% (Tigauw and Lengkey, 2022).

Based on data from the OJK (Financial Services Authority), there were only 103 online loan

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companies registered and licensed with the OJK in January 2022. OJK data also shows that from 2018 to February 2022, there were 3,784 illegal online loan fintech companies (Wikanto, 2022). Especially in North Sulawesi, according to findings from the North Sulawesi POLDA, many online loans are unofficial or illegal, in this case, these companies commit crimes in the form of theft of personal data, terror, and even psychological pressure on borrowers (Lontaan, 2022). For borrowers who are trapped by illegal or legal online loans, it can hurt the victim's psychology, that was by causing depression, stress, and anxiety (Lestari, 2021).

When the body feels stressed, the body will react and cause anxiety, this is a common reaction. Explicitly, stress occurs because something is happening and is stressful, while anxiety can arise without something happening. Economic stress factors such as economic difficulties, financial threats, and financial well-being have been proven to be positively related to the emergence of depression, anxiety, and stress disorders (Kusumadewi et al., 2020). The impact of someone being entangled with an online loan and experiencing this terror usually results in pressure and fear. This shows that a person who is terrorized will feel uneasy and anxious, causing depression and stress (Indriyani, 2021).

There has been no research in Indonesia, especially North Sulawesi, which describes the emotional condition of online loan victims, where measuring this condition can use a measuring instrument, that was the Depression Anxiety Stress Scales (DASS). DASS is a self-assessment scale that is used to measure a person's negative emotional condition, that was depression, anxiety, and stress. The main purpose of measurement with DASS is to assess the severity level (severe level) of core symptoms, depression, anxiety, and stress (Kusumadewi et al., 2020). Thus, this research

aims to measure the level of depression, stress, and anxiety experienced by online loan victims in North Sulawesi.

Research Method

This research used a design with a quantitative approach through a cross-sectional survey design study, that was a data collection study at one time with the independent variable online loan victims according to the inclusion criteria and the dependent variable, that was depression, anxiety, and stress scale (DASS) 42. The time for doing research was done during 5 months from July to November 2023 in North Sulawesi province.

The research stage consists of processing permits at the National Unity and Regional Political Agency of North Sulawesi Province on 18 July – 20 July 2023 with the production of a research notification letter number: 070/20/Kesbangpolda/VII/2023. After obtaining permission, the next stage of the research was that we made a data confidentiality statement, respondent identity questionnaire, informant consent, and the DASS 42 questionnaire.

The instrument used in this research was the Depression Anxiety Stress Scale (DASS 42) which was developed in 1995 and published by Healthfocus Clinical Psychology Services. DASS 42 is a measurement questionnaire consisting of 42 statements related to an individual's level of stress, anxiety, and depression.

This questionnaire uses an ordinal scale, where each statement is assessed with a score, this measurement has a range of values that include 0 (Does not reflect on yourself at all or never), 1 (Reflects on yourself to some extent, or sometimes), 2 (Reflects on yourself to some extent, or sometimes), 2 (Reflects on yourself to some extent, or sometimes), 2 (Reflects on

yourself to the greatest extent, or quite often), or 3 (Reflects on yourself very well, or very often).

After obtaining the measurement results, that was the total value for each variable, the stress, anxiety, and depression variables will be grouped into several categories, such as normal, mild, medium, severe, and very severe. Information on measurement results is depicted in Table 1.

Table 1. DASS 42 Score Categories

DASS Score (42)	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely Severe	28-42	20-42	34-42

It is important to note that the measuring instrument used in this research is a standard measuring instrument that has established standards, so repeated validity and reliability tests are not necessary. Previous research has tested validity by obtaining a positive Pearson correlation value, that was more than 0.532 for all items related to stress, anxiety, and depression (Marsidi, 2021). Apart from that, reliability testing of measuring instruments using Cronbach's alpha has also been done and produced high results, that was stress = 0.951, anxiety = 0.943, and depression = 0.952 (Marsidi, 2021).

The research continued with an offline search for respondents in the cities of Manado, Bitung, and Minahasa Regency to meet the minimum total sample of 40 respondents as primary data sources until August 15, 2023. The minimum sample calculation used the Slovin formula as follows:

Figure 1. Slovin's formula for calculating the minimum sample

19	6	13.6
20	14	31.8
22	4	9.1
23	2	4.5
24	1	2.3
25	1	2.3
27	1	2.3
30	1	2.3
31	1	2.3
34	1	2.3
Gender		
Man	11	25.0
Woman	33	75.0
Legal/Illegal		
Illegal	6	13.6
Legal	38	86.4
Status		
Bachelor	38	86.4
Marry	6	13.6
Last education		
Diploma IV/Strata I-III	4	9.1
High School/Equivalent	40	90.9
Work		
Other	4	9.1
Private employees	3	6.8
Student/Students	31	70.5
Doesn't work	4	9.1
Self-employed	2	4.5

$$n = \frac{4 \; p \; q}{d^2}$$

Information :

n → minimum number of samples required

= → degree of trust

p → the proportion of cases studied in the population, if the p value is unknown then use

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the largest p, namely p= 0.5. If you want to be careful, the d value is around 2.5% (0.025) or even smaller.

q → 1-p

d → limit of error or absolute precision, if set = 0.05

Based on the calculation results, we then used a sampling method, that was purposive sampling, by setting inclusion criteria, that was men/women aged 17 – 35 years, victims of illegal online loans, legal online fund borrowers but unable to return the funds or late in paying the loan, while the exclusion criteria were subjects who did not borrow funds online, from these criteria we found 44 respondents spread across cities in North Sulawesi. After obtaining samples for primary data, we continued by looking for secondary data originating from the results of literature studies done offline during research to support field data results via Google Scholar, Science Direct, JSTOR, Research Gate, Springer Link, and so on. In the next stage, we done data analysis and management using the SPSS (Statistical Product and Service Solution) program. The data processing stage is done so that the research analysis produces correct information. There are four stages in data processing. First, editing is the stage of checking the correctness of the data that has been collected. Second, coding is the stage of changing data in the form of letters into numbers to make data analysis easier. Third, the processing is entering questionnaire data that has been filled in and coded into a computer program. Fourth, cleaning is the results that have been entered into the computer program and checked again for errors or not. After that, in univariate analysis, this analysis aims to describe each variable studied as well as to understand the distribution of the samples studied.

Then we continued with correlation analysis using non-parametric statistical tests, that was Spearman correlation because the data

produced was ordinal by proposing 9 hypotheses, with testing done at a significance level (α value) of 0.05. The basis for making decisions regarding the existence of a relationship is the Sig value. (2- tailed) < 0.05, then H0 is rejected and H1 is accepted, whereas there is no relationship if the Sig. (2- tailed) > 0.05, then H0 is accepted and H1 is rejected. In correlation testing, you will get coefficient values and can determine the direction of positive or negative correlation coefficients based on the relationship between variables, along with variable coefficient values according to the following table:

Table 2. Correlation Coefficient Values

Correlation coefficient	Decision
0.00-0.20	Very low
0.20-0.40	Low
0.40-0.70	Moderate
0.70-0.90	High
0.90-1	Very High

After analysis, we present the data results using tables or columns based on statistical tests.

Results

The univariate analysis results are as follows

Variable	Frequency	Percentage (%)
Age (Years)		
17	1	2.3
18	4	9.1

Variable	Frequency	Percentage
> 12 Months	3	6.8
1-3 Months	28	63.6
10-12 Months	4	9.1
4-6 Months	7	15.9
7-9 Months	2	4.5
Late Payment		
1-6 Months	40	90.9
13-18 Months	2	4.5
19-24 Months	1	2.3
7-12 Months	1	2.3
Depression Scale		
Normal	33	75.0
Mild	7	15.9
Moderate	2	4.5
Severe	2	4.5
Anxiety Scale		
Normal	16	36.4
Mild	4	9.1
Moderate	14	31.8
Severe	6	13.6
Extremely Severe	4	9.1
Stress Scale		
Normal	29	65.9
Mild	6	13.6
Moderate	5	11.4
Severe	4	9.1
Income/Month		
< IDR 500,000	21	47.7
> IDR 5,000,000	1	2.3
IDR 1,000,000 - IDR 2,000,000	5	11.4
IDR 2,000,000 - IDR 5,000,000	5	11.4
IDR 500,000 - IDR 1,000,000	12	27.3

Based on table 3, shows that the highest percentage of respondents' age is 20 years old, that was 14 people (31.8%), the highest gender percentage is female, that was 33 people (75%), the highest percentage of legal/illegal is the category Legal, that was 38 people (86.4%), the highest percentage of respondents' status is in a Single category, that was cents = a lot (86.4%), the highest percentage of respondents' last education is in the Student category, that was 31 people (70.5%), the percentage The highest usage time is the 1-3 month category, that was 28 people (63.7%), the highest percentage of late payments is the 1-6 month category, that was 40 people (90.9%), the highest percentage on the depression scale is the normal category. that was as many as 33 people (75%), the highest percentage of the anxiety scale is the normal category, that was 16 people (36.4%), the highest percentage of the stress scale is the normal category, that was 29 people (65.9%), and the percentage of income/month the most common was the <Rp 500,000 category, that was 21 people (47.7%).

Table 4. DASS 42 Borrower Score Data

Variable	Frequency	Percentage (%)
Depression		
Illegal-Normal depression	2	4.5
Illegal-Mild Depression	1	2.3
Illegal-Moderate Depression	1	2.3
Illegal-Severe Depression	2	4.5
Legal-Depression is normal	31	70.5
Legal-Mild depression	6	13.6
Legal-Moderate depression	1	2.3
Worry		
Illegal-Severe Emergency	2	4.5
Illegal- Severe Emergency	3	6.8

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Legal- Normal emergency	16	36.4
Legal- Mild emergency	4	9.1
Legal- Medium emergency	13	29.5
Legal- Severe Emergency	5	11.4
Legal- Emergency is very heavy	1	2.3
Stress		
Illegal-Normal stress	1	2.3
Illegal- Medium Stress	3	6.8
Illegal- Severe Stress	2	4.5
Legal- Normal stress	28	63.6
Legal- Mild stress	6	13.6
Legal- Moderate stress	2	4.5
Legal- Severe stress	2	4.5

Based on Table 4, it is shown that the highest percentage of depression is in the legal category with normal depression, that was 31 people (70.5%), while from the illegal category, 2 people are experiencing severe depression. The highest percentage of anxiety is in the Legal category who experience normal anxiety, that was 16 people (36.4%), 13 people in the legal category experience moderate anxiety (29.5%), while in the illegal category, 3 people experience very severe anxiety, 2 people experience severe anxiety and the percentage The most stress in the Legal category experienced normal stress, that was 28 people (63.6%), while for the illegal category 2 people experienced severe stress, 3 people experienced moderate stress.

Spearman correlation test on 9 hypotheses including:
1. The relationship between Length of Use and the Stress Scale obtained a significance value of 0.025, this value is <0.05, so H_0 is rejected and H_1 is accepted, which means there is a relationship between Length of Use and the Stress Scale.

The correlation coefficient figure is 0.338, meaning that the level of close relationship (correlation) between the Length of Use variable and the Stress Scale is 0.338 or falls into the low criteria. The correlation coefficient value is 0.338, where the value is positive, which means the relationship between the two variables is in the same direction. Thus, it can be concluded that the higher the duration of use, the higher the stress scale will be. Meanwhile, if the Length of Use is low, the Stress Scale will also be lower.

2. The relationship between Length of Use and the Depression Scale obtained a significance value of 0.942, this value is > 0.05, so H_0 is accepted and H_1 is rejected, which means there is no relationship between Length of Use and the Depression Scale. The correlation coefficient figure is 0.011, meaning that the level of close relationship (correlation) between the Length of Use variable and the Depression Scale is 0.011 or falls into the very low criteria. The correlation coefficient value is 0.011, where the value is positive, which means the relationship between the two variables is in the same direction. Thus, it can be concluded that the higher the duration of use, the higher the depression scale will be. Meanwhile, if the duration of use is low, the depression scale will also be lower.

3. The relationship between Length of Use and the Anxiety Scale obtained a significance value of 0.811, this value is > 0.05, so H_0 is accepted and H_1 is rejected, which means there is no relationship between Length of Use and the Anxiety Scale. The correlation coefficient figure is 0.037, meaning that the level of close relationship (correlation) between the Length of Use variable and the Anxiety Scale is 0.037 or falls into the very low criteria. The correlation coefficient value is 0.037, where the value is positive,

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which means the relationship between the two variables is in the same direction. Thus, it can be concluded that the higher the duration of use, the higher the anxiety scale will be. Meanwhile, if the Length of Use is low, the Anxiety Scale will also be lower.

4. The relationship between Late Paying and the Depression Scale obtained a significance value of 0.859, this value is > 0.05, so H_0 is accepted and H_1 is rejected, which means there is no relationship between Late Paying and the Depression Scale. The correlation coefficient figure is -0.028, meaning that the level of closeness of the relationship (correlation) between the late-paying variable and the Depression Scale is -0.028 or falls into the very low criteria. The correlation coefficient value is -0.028, where the value is negative, which means the relationship between the two variables is opposite. Thus, it can be concluded that the higher the Late Payment, the lower the Depression Scale will be. Meanwhile, if Late Payment is low, the Depression Scale will be higher.

5. The relationship between Late Paying and the Anxiety Scale obtained a significance value of 0.248, the value is > 0.05, so H_0 is accepted and H_1 is rejected, which means there is no relationship between Late Paying and the Anxiety Scale. The correlation coefficient figure is 0.178, meaning that the level of closeness of the relationship (correlation) between the Late Payment variable and the Anxiety Scale is 0.178 or falls into the very low criteria. The correlation coefficient value is 0.178, where the value is positive, which means the relationship between the two variables is in the same direction. Thus, it can be concluded that the higher the Late Payment, the higher the Anxiety Scale will be. Meanwhile, if Late Payment is low, the Anxiety Scale will be lower.

6. The relationship between Late Paying and the Stress Scale obtained a significance value of 0.778, the value is > 0.05, so H_0 is accepted and H_1 is rejected, which means there is no relationship between Late Paying and the Stress Scale. The correlation coefficient figure is 0.044, meaning that the level of closeness of the relationship (correlation) between the Late Paying variable and the Stress Scale is 0.044 or falls into the very low criteria. The correlation coefficient value is 0.044, where the value is positive, which means the relationship between the two variables is in the same direction. Thus, it can be concluded that the higher the Late Payment, the higher the Stress Scale will be. Meanwhile, if Late Payment is low, the Stress Scale will be lower.

7. Online Lending obtained a significance value of 0.139, this value is > 0.05, so H_0 is accepted and H_1 is rejected, which means there is no relationship between Age and Frequency of Length of Online Lending. The correlation coefficient figure is 0.227, meaning that the level of close relationship (correlation) between the Age variable and the Frequency of Length of Online Borrowing is 0.227 or falls into the low criteria. The correlation coefficient value is 0.227, where the value is positive, which means the relationship between the two variables is in the same direction. Thus, it can be concluded that the higher the age, the higher the frequency of online borrowing. Meanwhile, if age is low, the frequency of online borrowing will be lower.

8. Online Borrowing obtained a significance value of 0.745, this value is > 0.05, so H_0 is accepted and H_1 is rejected, which means there is no relationship between Gender and the Frequency of Duration of Online Borrowing. The correlation coefficient figure is 0.051, meaning that the level of close relationship (correlation) between the

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Gender variable and the Frequency of Length of Online Borrowing is 0.051 or falls into the very low criteria. The correlation coefficient value is 0.051, where the value is positive, which means the relationship between the two variables is in the same direction. Thus, it can be concluded that the higher the gender, the higher the frequency of online borrowing. Meanwhile, if Gender is low, the Frequency of Online Lending will be lower.

9. The relationship between Income/month and Frequency of Length of Online Lending obtained a significance value of 0.395, this value is > 0.05, so H_0 is accepted and H_1 is rejected, which means there is no relationship between Income/month and Frequency of Length of Online Lending. The correlation coefficient figure is 0.132, meaning that the level of close relationship (correlation) between the Income/month variable and the Frequency of Length of Online Lending is 0.132 or falls into the very low criteria. The correlation coefficient value is 0.132, where the value is positive, which means the relationship between the two variables is in the same direction. Thus, it can be concluded that the higher the income/month, the higher the frequency of online borrowing. Meanwhile, if the income/month is low, the frequency of online borrowing will be lower

Discussion
1. Sociodemographics of Online Borrowers

One of the aims of this research is to describe the frequency of data regarding online borrowers in North Sulawesi. Univariate test results revealed that most of the respondents were 20 years old, with a total of 14 people or around 31.8%. Apart from that, the majority of respondents were single, reaching 86.4%, and most had an educational background as students, with a

total of 31 people or around 70.5%. This finding is by data from the financial services authority which indicates that the millennial generation, especially those aged between 19 and 34 years, became the main users of online loans in December 2021, reaching 63% of total users, with most transactions occurring on the island of Java, especially in DKI Jakarta region (OJK, 2022). Apart from that, the latest survey by the Indonesian Internet Service Providers Association (APJII) in 2023 also recorded an increase in internet users in Indonesia, with the majority of them being the millennial generation, including school and university students (APJII, 2023).

The percentage of female respondents in this research reached 75%, by previous findings which revealed that women are more likely to use online loans because they have greater needs than men. This can result in consumptive behavior, and in turn, increase the risk of vulnerability to victimization, such as using borrowed money to fulfill consumer needs (Nuraini and Zaky, 2023).

Most respondents chose to use legal online loan services, with a percentage of around 86.4%. This is by previous research involving the millennial generation, where the majority of respondents chose to borrow through legitimate applications (Novika et al., 2022).

The use of loans with a term of 1-3 months is the most dominant, with around 63.7% of respondents choosing this option. These findings are consistent with the millennial generation's high interest in using online loans, with most choosing the " pay later " option, where they use current loan funds to meet their needs and pay them back in the following month. Apart from that, some respondents chose to repay via installments and cash loans (Novika et al., 2022).

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Based on the data obtained, the majority of respondents experienced late payments in the 1-6 month category, reaching 90.9%. In addition, the majority of respondents have a monthly income of less than IDR 500,000, which is around 47.7%. However, this finding is not in line with previous research which showed the dominance of respondents with income between IDR 1,000,000 to IDR 5,000,000 (Novika et al., 2022). The main factor that might explain this is that the majority of respondents in this research were students, who generally do not have a fixed income.

2. Stress, Depression and Anxiety Levels of Online Borrowers in North Sulawesi

This research is also useful for knowing the results of the analysis of stress, depression and anxiety levels of online loan customers in North Sulawesi.. The results of the analysis based on data processing show that the majority of our respondents (29 people) experienced stress in the normal category when using online loan services. The results of this stress analysis are in line with previous research conducted by Marsidi on 61 sample subjects, which stated that the average stress level of respondents was at a normal level (Marsidi, 2021). Also in research by (Pertiwi et al., 2023) on 647 sample respondents, 424 of them experienced stress at normal levels.

The results showed that the majority of respondents experienced stress at normal levels (65.9%). Normal stress shows that respondents can adapt to their environment, both in the family environment and in social interactions in society, because the social environment also has an impact on a person's psychology (Khairunnisa et al., 2016). This is also the theory that stress is a part of human life that requires him to adapt.

Although the results of data processing showed that the majority of respondents experienced normal stress, it was also found that respondents experienced moderate stress (5 people) and severe stress (4 people). Even though the figure is not as high as normal stress, this still shows that using online loans can cause psychological pressure in the form of stress, which can certainly hurt the life of the user. Meanwhile, 33 respondents experienced depression, which is normal depression. Where the percentage is 75%. Based on previous research by Marsidi, there were 34 out of 61 respondents, which show that the level of depression is normal (Marsidi, 2021). Normal depression also known as natural depressive reaction, is a state of sadness, anxiety, or tension that arises in response to challenging events or situations. The respondents who experienced anxiety fell into normal anxiety, that was 16 people (36.4%). Normal anxiety is a natural response to the events we face, this anxiety does not need to be eliminated because it is a driving force towards change (Hayat, 2014).

3. Relationship between Length of Use and Stress Scale

This research also seeks to find out the relationship between the duration of online loans and the stress scale. The significance value obtained is 0.025, this value is <0.05, so H0 is rejected and H1 is accepted, which means there is a relationship between the duration of use and the stress scale. This relationship is also positive, which means that the higher the duration of use, the higher the stress scale. Meanwhile, if the Length of Use is low, the Stress Scale will also be lower.

This is consistent with previous studies showing that among students, increases in student loans have a significant impact on financial stress. A comparison of students who had no debt with those who did revealed that those who reported having

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debt in the range of 12,000 to 30,000 USD also reported increased stress levels of 0.74 (Britt et al., 2015). Similar findings were found in other research on stress and debt, where high levels of stress were significantly associated with debt burden for caregivers (Sharma and Pradhan, 2018).

4. **Relationship Between Duration of Use and Depression Scale**

There are differences in results between these findings and research conducted by (Berger et al., 2015). This research shows that the significance value of the relationship between length of use and the depression scale is 0.942, which is greater than 0.05. Therefore, the null hypothesis (H0) is accepted and the alternative hypothesis (H1) is rejected. These results imply that there is no significant relationship between length of use and the depression scale. However, previous research conducted by (Berger et al., 2015) showed a relationship between short-term debt and levels of depression, especially among adults in the United States, with the impact most concentrated in the 51-64-year-old age group. This conclusion suggests the possibility that the sample used in the current study was adolescent to young adult, possibly influencing different results. The results of the research we conducted show that there is a positive relationship, that was that the higher the duration of use, the higher the depression scale tends to be. Conversely, if the length of use is low, the depression scale also tends to be lower.

5. **Relationship Between Duration of Use and Anxiety Scale**

The results obtained in this research are different from the results of previous research conducted by (Richardson et al., 2016). In this research, the significance value regarding the relationship between duration of use and anxiety level was 0.811, exceeding 0.05. This means that the null hypothesis (H0) is accepted while the alternative hypothesis (H1) is rejected. This means that there is no significant correlation between length of use and anxiety levels in this research.

However, previous research results show that students in the UK who have difficulty paying bills tend to experience higher levels of anxiety, related to financial stress (Richardson et al., 2016). This context indicates the possibility of other factors influencing differences in results, such as variations in social, cultural, or economic background between the samples in this research and previous researches. One potential possibility is that differences in race or other demographic aspects may influence the relationship between duration of use and anxiety levels. This finding is also in line with a systematic review which concluded that the number of studies considering social and cultural aspects related to debt in Asia is still relatively low (Amit et al., 2020)

6. **Relationship Between Late Payments and Depression Scale**

In our research, the significance value obtained was 0.859, exceeding 0.05. Therefore, the null hypothesis (H0) is accepted while the alternative hypothesis (H1) is rejected. This means there is no significant relationship between late payments and depression levels. The correlation coefficient value in this research is -0.028, indicating an inverse relationship between the two variables. In other words, the higher the level of late payments, the lower the level of depression tends to be. Conversely, if the level of late payments is low, then the level of depression tends to be higher.

The results of our research are not in line with previous research which states that high levels of debt have a positive relationship with levels of depression. More

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specifically, previous research shows that excessive debt duration can predict the emergence of depressive symptoms (Hojman et al., 2016). These findings are in line with other research showing that in several European countries, individuals living in households with debt in the past 12 months had a significant increase in the odds of reporting poor health by 22.6% compared with those without debt. In addition, there are indications that the burden of debt collection strengthens the relationship between debt and health, although evidence regarding the impact of social stigma is still relatively weak (Angel, 2016).

7. Relationship of Late Payments With The Anxiety Scale

Based on the test results, a significance value of 0.248 was obtained which was higher than 0.05. This indicates that the null hypothesis (H0) is accepted and the alternative hypothesis (H1) is rejected. This means that there is no significant relationship between late payments and anxiety levels.

The correlation coefficient of 0.178 indicates a positive relationship between the two variables. This implies that the higher the level of late payments, the higher the level of anxiety. Conversely, if the level of late payments is low, then the level of anxiety tends to be lower.

However, these results are not in line with the findings of other studies of anxiety. Previous studies, such as those conducted by, (Dackehag et al., 2019). reported a significant relationship between debt levels and anxiety levels.

8. Relationship of Late Payments to Stress Scale

In this research, we also looked for a relationship between late payments and stress levels. The test results show a significance value of 0.778 which is higher than 0.05. Therefore, the null hypothesis (H0) is accepted and the alternative hypothesis (H1) is rejected. This means there is no significant relationship between late payments and stress levels.

However, if we review other research, there are interesting findings in several European countries. Those living in households with debt in the past 12 months had a significant increase in the odds of reporting poor health by 22.6% compared with those living without debt. These findings show that debt and health have a significant relationship, including the burden of debt collection costs (Angel, 2016).

However, in our research, a correlation coefficient value of 0.044 was found, which illustrates a positive relationship between late payments and stress levels. This means the higher the level of late payments, the higher the stress level. Conversely, if the level of late payments is low, then the level of stress tends to be lower. This interpretation is based on the results of the correlation coefficient found in this research.

9. Relationship Between Age, Gender, and Income/Month With Frequency of Length of Online Loans

The team's test results show that of the three existing variables, that was age, gender, and monthly income, there is a positive relationship with the frequency of online loan duration. The correlation coefficient value is 0.227 for age, 0.051 for gender, and 0.132 for monthly income. These positive values indicate that the relationship between these three variables is in the same direction as the duration of the online loan.

However, from the correlation test done on these three variables, it was found that the null hypothesis (H0) was accepted and the alternative hypothesis (H1) was

rejected. This means that there is no significant relationship between these three variables and the frequency of online loan duration. Even though there is a positive relationship in terms of correlation coefficient, statistically, this relationship is not considered significant.

The narrative considers findings from other research highlighting differences in responses to debt based on gender, income class, and age. Research by (Callegari et al., 2019) shows that men and women have different responses to debt, including in terms of financial stress, subjective evaluation of their financial situation, and feelings towards their partners and themselves.

Furthermore, research addressing income class shows that debt experience is also influenced by income level. Middle-income Americans reported experiencing high levels of depression and anxiety due to consumer balance, especially after the Great Recession. On the other hand, low-income consumers do not feel this impact until after the recession, which can be attributed to lower access to and use of credit (Hodson et al., 2014). Additionally, research discussing age highlights that age can also influence online transaction behavior. Age that is still unstable can present risks in online transactions (Nuraini and Zaky, 2023).

Finally, a new journal emphasizes the need for more research to understand the role of culture in the relationship between debt and mental health. This review suggests that cultural background, such as sociocultural factors, may influence the psychological impact of debt, especially among Asians (Amit et al., 2020).

By knowing the results of this measurement, the data obtained can be used as a preventive alternative and treatment recommendation to related parties. The aim is for online borrowers to have better abilities in dealing with the mental health impacts of online borrowing. Analysis of the results of this research can provide valuable insights for developing interventions or educational programs to increase awareness of the mental health risks associated with online loans.

For further research, it is recommended to expand the diversity of data on individual characteristics of respondents, including sociodemographic and cultural factors. This is important to ensure a more comprehensive relationship between the outcome variables, that was stress, anxiety, and depression, with other variables. More in-depth research into social and cultural factors will help to identify the deeper impacts on the mental health of online lending, as well as guide the development of more effective preventive strategies.

Conclusion

Online loan respondents in North Sulawesi showed that the highest level of stress felt was normal level stress, the highest level of anxiety felt was normal level anxiety, and the highest level of depression felt was normal level depression. As well as the results of further analysis of the 9 hypotheses proposed, only the relationship between Length of Use and the Stress Scale was found to be a relationship with a significance value of 0.025, this value was <0.05.

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