**Conference Paper**

# The Effect of Friendship on Loneliness in Post-Pandemic Overseas Students

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**Abstract.**

Loneliness is a common problem among overseas students. Loneliness can occur due to the low level of the intimacy of friendship. Thus, this study aimed to determine the effect of friendship on the loneliness of respondents. The research used comparative causal type quantitative methods. The study involved 385 respondents who were overseas students at Malang State University class of 2020 and 2021 who started friendships online and continued offline. They were selected using a purposive sampling technique. The study used the University of California, Los Angeles Loneliness Scale Version 3 (UCLA LS) scale, which was adapted into Indonesian by Putri (2019) and modified by researchers, had 14 items with a reliability of 0.884, and the Intimacy of Friendship Scale by Rizal's (2020) and modified by researchers, had 41 items with a reliability of 0.942. Data analysis in this study used simple regression analysis. The results showed that intimacy of friendship contributed 32.7% to loneliness with a negative influence ($\rho = 0.000$).

**Keywords:** Intimacy of friendship; Loneliness; Overseas students; Post-pandemic

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## 1. INTRODUCTION

The application of online learning at the tertiary level provides new experiences for students, especially in the 2020 and 2021 batches. 2020 and 2021 batch students undergoing a period as new students online and studying offline (offline) after the pandemic subsided. Class of 2020 students have attended online lectures for almost two years, and nearly one year of students of class 2021 have studied online. After undergoing an online lecture period in 2022 during the post-pandemic period, students are encouraged to take lectures offline so that students in the 2020 and 2021 batches can be called students undergoing post-pandemic offline courses. This change in the learning model is also being felt by students from class 2020 and 2021 migrating.

Overseas students are undergoing their lecture period by leaving their home areas and occupying new spaces (1). Overseas students have their challenges in life, such as changes in social interaction, lifestyle, and responsibilities and demand to adapt

to a new environment. One is marked by establishing relationships with people in a new place, such as having college friends and mingling with people around the area where you live overseas, such as roommates or dormitory friends. This is an example of intimacy, which is one of the needs in early adulthood, according to (2).

Early adulthood is a time for establishing intimacy with others, where there is a process of self-discovery, self-merging, and sharing warm relationships with others (3). In this case, students are individuals in early adulthood, so developing social relations is essential. When someone feels, dissatisfaction with will relationships or social relations can trigger feelings of loneliness. According to (4), loneliness is a feeling of being unenthusiastic, sad, empty, and worthless when dealing socially with other people around him due to a mismatch of expected social relations.

Based on research conducted by researchers from George Mason University, it was stated that 1 out of 3 individuals with early adulthood experience loneliness (5). Another survey conducted in research by (6) found that individuals with early adulthood often experience loneliness. Loneliness occurs because there is a mismatch between expectations between reality and what a person expects in interpersonal life, giving rise to dissatisfaction, unhappiness, and self-blame behaviour due to dissatisfaction with their interpersonal relationships (7).

One of the factors causing feelings of loneliness, according to (8), is the low quality of social relations. Students in class 2020 and 2021 who have been studying online for a long time have interacted with friends online; however, when lectures are conducted offline, they find a discrepancy in friendship intimacy than expected, causing a feeling of loneliness. Especially for students who migrate, there is a change in residence that started with living with parents and then ends up living alone and far from friends in the city where they were originally from, which causes overseas students to be prone to experiencing loneliness (9).

This is also supported by the interviews conducted by researchers on four overseas student subjects of the 2020 and 2021 batches of the State University of Malang. The four subjects explained that they felt empty, empty, lonely, uncared for, and had no place to complain when they were overseas students. The feelings experienced by the four subjects are a form of feelings of loneliness (4). Based on his explanation, this is due to the long duration of online social interaction, so when interacting offline, there is a distance between them, especially during the time of being a new student, which should be used for the beginning of making friends is not optimally fulfilled due to a pandemic which requires interacting online.

Furthermore, when you become an overseas student, being far from your family is one of the reasons for feelings of loneliness, so the role of close friends is needed for overseas students. Therefore, based on the results of interviews conducted by researchers, introductions and friendships carried out online for quite a long time turned out to impact post-pandemic overseas students. One of the impacts experienced is a decrease in the quality of social relations. One type of social relationship is a close relationship with friends around him. This sticky relationship is called the intimacy of friendship (10, 11).

According to (10, 11), the intimacy of friendship is a feeling of empathy, sharing feelings with friends, mutual trust and giving attention, committing to one another, and expressing to each other about the things that are in each other. There are eight aspects of the intimacy of friendship belonging (10, 11): honesty and spontaneity, sensitivity and understanding, attachment to friends, exclusivity in relationships, giving and sharing with friends, acceptance and sacrifice, equal activity, and trust and loyalty. This aspect of the same activity is not received by students from batch 2020 and 2021 who are studying online and do not meet in person.

Activities that should improve the quality of friendships were not obtained by post-pandemic batch students, such as group assignments given by lecturers, which were often carried out individually. Other activities, such as gathering outside lectures with friends, can only be carried out for a short time by these students. That is not achieved, which causes the low quality of intimate relationships (need for intimacy) with friends around him, thus triggering feelings of loneliness.

Several previous studies on the intimacy of friendship and loneliness have been carried out. Like research conducted by (12) entitled "Relationship between Intimate Friendship and Self-Disclosure in Students Using WhatsApp", research conducted by (13) entitled "Relationship of Self-Compassion with Loneliness in Students", and research conducted by (14) entitled "Formation of Late Youth Online Friendships from Social Media that Continues to Offline". Based on previous research, the novelty lies in the research subjects used, namely overseas students in the 2020 and 2021 batches who experience a state of loneliness and intimacy of friendship after the pandemic or post-pandemic period.

The introductory periods that started a long time made the friendship conditions for the 2020 and 2021 generations essential to discuss and differ from previous generations, which started face-to-face lectures before the COVID-19 pandemic. The choice of overseas students at the State University of Malang as respondents is because the State University of Malang requires an online system from 2020 to 2021, followed by an

offline method in 2022, so students from outside Malang are Average studying far from their hometown. Based on these problems, this study aims to determine the depiction of loneliness and intimacy of friendship of post-pandemic overseas students and test the influence of intimacy of friendship towards loneliness on post-pandemic overseas students at the State University of Malang.

## 2. LITERATURE REVIEW

According to (4), loneliness is a feeling of being unenthusiastic, sad, and worthless when dealing socially with other people around him due to a mismatch of expected social relations. In more detail, as explained by (13), loneliness is a negative emotion felt by someone, which is the influence or effect of an inconsistency in quantity and quality between the desired social relations and the state of social relations that occur in reality, giving rise to feelings of anxiety, depression and perceptions individuals related to perceived lack of social connection. Based on several meanings, It can be concluded that loneliness is a negative feeling or emotion caused by a gap between desired social relations and actual social relations.

Aspects of loneliness according to (4), namely:

1. Personality is the individual personality of the psychophysical systems that determine the characteristics of behaviour and thinking;

2. Social desirability that is there is a desire for social life that is liked by individuals in life in their environment

3. Depressed, namely the existence of pressure within oneself that causes depression

Several factors cause loneliness, namely:

1. Loneliness can occur due to an environment that is not conducive (15)

2. Loneliness can arise due to low self-esteem in a person (7)

3. Age can cause individuals to experience loneliness (13).

4. Low quality of social relations. When a person has a low rate of social relations, the closeness or intimacy of one's relationship with others is lower, which becomes an emotional problem for the individual. This is what triggers feelings of loneliness (8).

According to (10, 11), the intimacy of friendship is a feeling of empathy, sharing feelings with friends, mutual trust and giving attention, committing to one another, and expressing to each other about the things that are in each other. In line with (12), namely a relationship that is conceptualized as a level of openness, closeness and creates intimacy and comfort between the two parties. Furthermore, according to (16), the intimacy of friendship is a relationship based on secure attachment with peers based on trust and confidence that friends can understand their wants and needs. When the individual conveys his feelings, the friend can respond as he wishes. Thus, the conclusion from the notion of intimacy of friendship by some experts is that close and close relationships with friends are based on feelings of trust, often spending time together, a sense of security, trust in each other, and similarities with friends.

Eight aspects of the intimacy of friendship formulated by (10, 11) are:

1. Honesty and spontaneity

   In this case is to express honesty regarding anything, both positive and negative things related to each individual.

2. Sensitivity and understanding (sensitivity and knowing)

   The closeness between friends is marked by sensitivity to one another and understanding one another, which does not come from self-disclosure alone.

3. Attachment to a friend (devotion to the friend)

   The existence of a sense of mutual need and connection with one another can create a sense of attachment among friends.

4. Exclusivity in the relationship (exclusiveness in the relationship)

   Relationships that are mutually bound to each other are characterized by exclusivity, which means that close friendships are at a higher level than their relationships with other people.

5. Giving and sharing with friends (giving and sharing with the friend)

   Refers to the provision of both material and social support between friends. Like giving time to listen to the complaints of his closest friends.

6. Acceptance and sacrifice (imposition)

   This is interpreted as prioritizing friends' interests above self-interest and always helping friends no matter what.

7. Equal activity (common activities)

Close friendships can be marked by taking time to do the same activities together. This can be fun and can strengthen relationships between friends.

8. Trust and loyalty

This refers to close friendships that can keep each other's secrets, are mutually supportive, and don't betray each other.

According to (17) cause of intimacy of friendship:

Spend a lot of time together. When someone often spends time together, it can mean that these individuals are comfortable with each other when together and comfortable being themselves. Spending time with friends can lead to closer relationships because activities carried out together and continuously together can make each other feel comfortable.

## 3. RESEARCH METHODS

This research was conducted using a quantitative method with a type of comparative causal method (18). This study wants to examine the influence of the independent variable (X), namely intimacy of friendship, and the dependent variable (Y), namely loneliness. The operational definition of the intimacy of friendship variable is the establishment of a close relationship between friends which is characterized by honesty, sensitivity and understanding, attachment to friends, exclusivity in relationships, giving and sharing with friends, acceptance and sacrifice, the same activities, and trust and loyalty towards friends. Meanwhile, the operational definition of the loneliness variable is a feeling that arises from a lack of quality social relations that are meaningful as a result of a discrepancy between social relations that are expected and reality, giving rise to negative feelings such as anxiety, being left out,

The population criteria in this study are: active undergraduate students (S1) of the 2020 and 2021 batches of the State University of Malang who come from outside Malang City, live independently in Malang City/ Regency, have undergone online lectures, are currently undergoing offline lectures, aged 18 - 23 years. The number of overseas students at the State University of Malang is 25, 115 people (19). However, in this study, the criteria for overseas students used were those who came from outside Malang City or Malang Regency and lived independently without a family, so the exact number was unknown. The reason for taking these criteria is to find out the picture of loneliness in overseas students without a family as an intimate figure. Besides that, the criteria for attending online lectures and Average undergoing offline lectures aim to determine the

quality of friendships after online lectures. The age criterion is 18-23 years old because 18 is the starting age for new students, and 23 years is the age limit for class 2020 students when viewed from the gap year age limit for entering state universities (20).

The sampling technique used was purposive sampling based on the criteria and characteristics of the population. According to (21), the sampling technique that can be used is the Chocran formula based on the uncertain population size. Therefore, based on calculations on the Chocran formula, the number of respondents used as a sample in this study was 385 respondents. Data collection was carried out by distributing questionnaires with the help of the Google Form (online) service. Data collection instruments in this study consisted of two, namely:

1. The University of California, Los Angeles Loneliness Scale Version 3 (UCLA LS), owned by (4), was adapted into Indonesian by (13) and modified by researchers to measure loneliness with four answer choices, namely: 1 always (four scores); 2 sometimes (three scores); 3 rarely (two scores); 4 never (one score), for favourable items and vice versa for unfavourable items. This research aspect is based on (4) loneliness aspect. The modification of the scale that was carried out was to change the words on several items so that respondents could understand them. Besides, there were two additional items on the personality aspect to anticipate the items falling after being tested. This scale contains 17 items, consisting of 10 favourable items and 7 unfavourable items. The 17 items were tested on a trial sample, and from the trial results it was found that 3 items failed and 14 were valid and reliable.

2. (12) modification of the intimacy of friendship scale was compiled based on (10, 11) to measure the intimacy of friendship in students with five answer choices, namely: 1 Strongly Agree (five scores); 2 Agree (four scores); 3 Neutral (three scores); 4 Disagree (two scores); 5 Strongly Disagree (one score), for favourable items and vice versa for unfavourable items. This research is based on the intimacy of friendship aspect (10, 11). The scale modification that was made was to change the word "friend" on Rizal's scale (2020) to "friends overseas" so that it was by the research objectives, besides that there was the addition of two items on the aspects of acceptance and sacrifice to anticipate the item fall after being tested. On the scale, there are 44 items used, including 38 favourable items and 6 unfavourable items. The 44 items were tested on a trial sample, and it was found that there were 3 failed items, and 41 items were valid and reliable.

Modifying the scale in this study also used item content validation by expert judgment, namely the supervisor. Expert judgment will assess and provide advice on items based

on aspects and indicators that will be used in research. After that, a readability test was carried out on five respondents according to the criteria of research respondents to find out whether the respondents well understood the whole item. The readability test results are used as suggestions and evaluations in the preparation of items. Furthermore, instrument trials were carried out on 60 respondents from Brawijaya University with the same criteria as the subjects used for the study. The research trial was conducted on 7-10 February 2023. After that, the selection of valid and reliable items in this study was carried out using the item discrimination test. The item discrimination test aims to determine whether each item can measure according to the attribute you want to measure, by correlating each item's score with the total score (23).

The criteria for selecting valid and reliable items in this study are when the total item correlation coefficient is at least $0.25(r_{ix} \geq 0.25)$. This is explained by (18) that if the items passed are not sufficient in the desired number, then the criterion limit can be reduced to 0.25 to be used in research. If there are items with item correlation coefficient values below 0.25, these items cannot be used in this study. On the scale of The University of California, Los Angeles Loneliness Scale Version 3 (UCLA LS), there are 3 failed items and 14 valid and reliable items. The 14 items have a total item correlation coefficient value range of 0.282 to 0.744, and the Cronbach alpha reliability test value is$\alpha = 0.884$. Whereas on the intimacy of friendship scale, there are 3 items dropped and 41 items valid and reliable, 41 items have the range of total item correlation coefficient values is 0.290-0.718 and the Cronbach alpha reliability test value is $\alpha = 0.942$.

The data analysis technique used is descriptive analysis to summarize the data in tabular or graphical form, then performed the classic assumption test is the normality test using the one-sample Kolmogorov-Smirnov technique, linearity test by going through the test of linearity and the heteroscedasticity test through the test Glejser. After that, a hypothesis test was carried out using a simple linear regression test to find out the functional or causal relationship of one independent variable with one dependent variable, to know the direction of the relationship between the independent variable and the dependent variable, and how far the independent variables affect the dependent variable.

## 4. RESULTS

### Description of Research Respondents

Based on the origin category, most respondents came from East Java Province, 52%, followed by students from West Java Province 16.1%, and a minority of respondents

TABLE 1: Demographic data of research respondents.

| Description | Amount (N) | Percentage (%) |
|---|---|---|
| Origin East Java West Java DKI Jakarta Central Java Banten East Kalimantan DIYYogyakarta East Nusa Tenggara West Sumatra Lampung West Nusa Tenggara Bali South Sulawesi North Sumatra South Sumatra North Sulawesi Riau islands Central Kalimantan Papuan Jambi Bangka Belitung | 200 62 26 23 13 11 8 7 6 4 4 3 3 3 2 2 2 2 2 1 1 | 52 16,1 6,7 5,9 3,4 2,9 2,1 1,8 1,6 1 1 0.8 0.8 0.8 0.5 0.5 0.5 0.5 0.5 0.3 0.3 |
| Age 18 years 19 years 20 years 21 years 22 years 23 years | 23 68 122 99 44 29 | 6 18 32 26 11 7 |
| **Faculty of Origin** faculty of Psychology Faculty of Business Economics Faculty of Engineering Faculty of Mathematics and Science faculty of Literature faculty of Sport Science Faculty of Education Faculty of Social Science | 69 65 58 50 46 46 31 20 | 18 17 15 13 12 12 8 5 |
| Lecture Force 2020 2021 | 220 165 | 57 43 |

from Jambi and Bangka Belitung Provinces, 0.3%. Most respondents are 20 years old, as much as 32%, and a minority of respondents aged 18, as many as 6%. Based on the category of origin of the faculty, the majority of respondents came from the Faculty of Psychology; namely, as much as 18%, and a minority of respondents came from the Faculty of Social Sciences, as much as 5%. Then based on the lecture class category, 57% of respondents from the class of 2020 and 2021 were 43%.

## 4.1. Categorization of Research Respondents.

TABLE 2: Hypothetical and empirical value of research data.

| Variable | Hypothetical | | | | Empirical | | | |
|---|---|---|---|---|---|---|---|---|
| | Max | Min | Means | SD | Max | Min | Means | SD |
| *Intimacy of friendship* | 205 | 41 | 123 | 27.3 | 204 | 52 | 117.2 | 36.8 |
| *Loneliness* | 56 | 14 | 35 | 7 | 50 | 17 | 37.2 | 6.1 |

TABLE 3: Score categorization of loneliness.

| Classification | Norm | Amount | Percentage |
|---|---|---|---|
| High | 43 <X | 65 | 17% |
| Average | 31 <X < 43 | 266 | 69% |
| Low | X < 31 | 54 | 14% |

TABLE 4: Score categorization of intimacy of friendship.

| Classification | Norm | Amount | Percentage |
|---|---|---|---|
| High | 154 <X | 67 | 17% |
| Average | 80 < X < 154 | 233 | 61% |
| Low | X < 80 | 85 | 22% |

Based on the results of the descriptive analysis in table 2, it was found that the empirical mean value for intimacy of friendship was smaller than the hypothetical mean value for intimacy of friendship. The existence of an empirical score smaller than the hypothetical score means that the level of intimacy of friendship owned by respondents tends to be low. In the loneliness variable, it is found that the empirical mean value is greater than the hypothetical mean value, so it means that the respondent's level of loneliness tends to be high. Meanwhile, based on the results of the categorization table, it is known that loneliness for most respondents is in the moderate category with a percentage of 69%, and intimacy of friendship for the majority of respondents is in the medium category with a percentage of 61%.

TABLE 5: Categorization of loneliness based on class generation.

| Force | Categorization | Amount | Percentage |
|---|---|---|---|
| 2020 | High Average Low | 38 147 35 | 17% 67% 16% |
| 2021 | High Average Low | 26 120 19 | 16% 73% 11% |

TABLE 6: Categorization of intimacy of friendship based on class level.

| Force | Categorization | Amount | Percentage |
|---|---|---|---|
| 2020 | High Average Low | 44 134 42 | 20% 61% 19% |
| 2021 | High Average Low | 23 99 43 | 14% 60% 26% |

The table above explains that the percentage of loneliness in the high category in the class of 2020 is 1% greater than the class of 2021 and the percentage of intimacy of friendship in the high category in the class of 2020 is 6% greater than the class of 2021

TABLE 7: Categorization of loneliness based on aspects.

| Aspect of loneliness | Category | | |
|---|---|---|---|
| | Low | Average | High |
| Personality | 15 subjects | 292 subjects | 78 subjects |
| Social desirability | 43 subjects | 263 subjects | 79 subjects |
| depression | 64 subjects | 227 subjects | 94 subjects |

**Classic assumption test**

TABLE 8: Categorization of intimacy of friendship based on aspects.

| Aspects of the intimacy of friendship | Category | | |
|---|---|---|---|
| | Low | Average | High |
| Honesty and spontaneity | 41 subjects | 250 subjects | 94 subjects |
| Sensitivity and understanding | 73 subjects | 254 subjects | 58 subjects |
| Attachment to friends | 75 subjects | 225 subjects | 85 subjects |
| Exclusivity in relationships | 84 subjects | 218 subjects | 83 subjects |
| Giving and sharing with friends | 67 subjects | 244 subjects | 74 subjects |
| Acceptance and sacrifice | 15 subjects | 311 subjects | 59 subjects |
| Equal activity | 65 subjects | 252 subjects | 68 subjects |
| Trust and loyalty | 89 subjects | 196 subjects | 100 subjects |

TABLE 9: Normality test.

| | asymp. Sig. (2-tailed) | Information |
|---|---|---|
| *Unstandardized Residuals* | 0.089 | Normal |

Based on the results of the normality test, the significance value *One-Sample Kolmogorov-Smirnov* namely 0.089 and fulfills the condition $\rho > 0.05$, therefore the distribution of data is normally distributed.

TABLE 10: Linearity Test.

| Variable | Sig. Deviation from Linearity | Information |
|---|---|---|
| Intimacy of Friendship and Loneliness | 0.197 | Linear |

Test the linearity of the relationship between the intimacy of friendship and loneliness of post-pandemic overseas students produces a significant value *deviation from linearity* of 0.197 and meets the requirements $\rho > 0.05$, so with these results, there is a linear relationship between the independent and dependent variables.

TABLE 11: Heteroscedasticity test.

| Variable | Sig. | Information |
|---|---|---|
| *Intimacy of Friendship* | 0.483 | Not occur heteroscedasticity |

Heteroscedasticity test results using the Glejser test it can be seen that the significant value between the intimacy of friendship (X) variable and the absolute residual is 0.483 and fulfills the requirements of $\rho > 0.05$. With these results, it can be concluded that there are no symptoms of heteroscedasticity.

## 4.2. Hypothesis testing

This study uses a simple linear regression test to test the hypothesis. The results of the hypothesis test can be seen in the following table.

TABLE 12: Coefficients.

| Model | | Unstandardized Coefficients | | Standardized Coefficients | Q | Sig. |
|---|---|---|---|---|---|---|
| | | B | std. Error | Betas | | |
| 1 | (Constant) | 48,317 | 0.856 | | 56,455 | 0.000 |
| | X | -0.095 | 0.007 | -0.572 | -13,637 | 0.000 |

It is known that the regression equation in this study is Y = 48.317 - 0.095X and a Sig value of 0.000. Based on the regression equation, the following conclusions can be drawn:

1. A constant value of 48.317 means that if the intimacy of friendship variable has a value of 0 or remains constant (no increase), then loneliness is worth 48.317.

2. The intimacy of friendship coefficient value is -0.095 with a negative value indicating that for every increase of 1 score on the intimacy of friendship then loneliness will decrease by 0.095

3. Sig is obtained (0.000) <0.05 then H1 is accepted. The minus sign on the value of the regression coefficient can be interpreted that the direction of the influence of variable X on variable Y, which is negative, so that the higher the intimacy of friendship of post-pandemic overseas students, the lower the loneliness and vice versa.

TABLE 13: Summary models.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.572a | 0.327 | 0.325 | 5.018 |

Based on the table above, the results show that the contribution made by intimacy of friendship to loneliness is equal to 0.327 or there is 32.7% of the contribution made by intimacy of friendship to the loneliness of post-pandemic students and 67.3% is influenced by other factors other than intimacy of friendship.

# 5. DISCUSSION

This research aims to know the depiction of loneliness and intimacy of friendship among post-pandemic overseas students and test the influence of intimacy of friendship towards loneliness on post-pandemic overseas students at the State University of Malang. Based on the research results, most respondents experienced loneliness in the moderate category, with a percentage of 69%, and some were in the high category, with a percentage of 17%. According to(24), if the majority of loneliness is in the moderate category, the individual feels lonely when he is not around trusted people. When the closest people are absent, overseas students at the State University of Malang batch 2020 and 2021 feel dissatisfied with existing social relationships and feel alone even though they are physical with other people.

If described based on the results of the frequency distribution on the loneliness aspect of(4), the depression aspect has the highest number of 94 subjects in the high category, followed by the social desirability aspect of 79 subjects in the high category and personality aspects of 78 subjects in the high category. In this case, the depression aspect has a higher frequency than the other two aspects. Loneliness is related to feelings of sadness, depression, lack of enthusiasm, and feeling worthless and pressure on individuals, which results in depression (4). Overseas students can experience these feelings as a result of a change of place of residence (25). A life lived independently without attention or support.

Aspects of social desirability can occur when a person gets the social life he wants from life in his environment (4). The high loneliness when viewed from this aspect is because post-pandemic overseas students have the desire that if they study face-to-face, they will get familiarity and social support from their lecture friends, but what happens is there is an unfamiliar social relationship due to limited interaction when studying online. The existence of relationship expectations that are not by reality triggers the emergence of loneliness with a high category. Apart from that, related to personality aspects, the way of thinking and behaviour of post-pandemic overseas students related to social relations in their overseas cities can also trigger feelings of loneliness. Feelings of loneliness greatly influence the perceived support from social relationships and the individual's personality.

In the results of this study, the high category of subject loneliness is in second place. The low quality of social relations can cause high loneliness. This is supported by the research results of(26) that unfavourable social relations are a factor that triggers

feelings of loneliness. One type of social relationship in question is friendship. Subject friendships that started online and when traveling to study offline found that the expected quality of companies is not what is desired. Failure to form close friendships will trigger feelings of loneliness.

Regarding the quality of close friendship or intimacy of friendship, most respondents in this study were in the medium category with a percentage of 61% and followed by the low category with a percentage of 22% in second place. The social restrictions imposed during the pandemic resulted in a lack of opportunities to spend time together, this situation could be a factor in the low intimacy of friendship among the respondents of this study. The level of intimacy of friendship is influenced by one's communication (27). For students in batches of 2020 and 2021, communication that has taken place online is quite long, so familiarity between friends is even less, and there is a distance between them. It is supported by (14) that friendships made online are only limited to ordinary friendships, not close friendships or friendships because the interactions that are carried out are also online interactions.

Online interactions have limitations compared to offline interactions. As a result of the limited interaction online, the friendships that are formed are less intimate. According to (28), several limitations cause friendships to be less intimate as a result of online interactions, namely: 1 limited nonverbal communication, namely body language, eye contact, and facial expressions, which are essential parts of understanding friends' feelings; 2 there is internet connection disturbance which reduces the quality of interacting with friends; 3 there is limited time when online which tends to be limited and scheduled so there is a lack of time to interact deeply with friends; 4 lack of physical activity together which reduces opportunities to build intimate friendships.

Based on the frequency in the low category of intimacy of friendship in this study, the highest influencing aspects are trust and loyalty. Lack of close friendship creates a lack of trust in the friend. Online communication for post-pandemic students creates a feeling of hesitation to tell about problems related to individuals themselves to their friends (12). The second order is on the aspect of exclusivity in relationships. Friends who are made online for quite a long time make friendships that are made just ordinary friendships, not friendships, so friendships have no exclusivity. Furthermore, on the aspect of attachment to friends,

The following sequence is on the aspect of sensitivity and understanding. Low awareness among friends in post-pandemic students can be caused by the distance between students who do not meet face to face, so sensitivity is low. This statement is supported by the results of (29). In post-pandemic students who do not yet have

trust between friends, this results in low intensity in giving and sharing with friends. The closeness of friendship can also be caused by frequently doing the same activities (12). However, in this study, post-pandemic students needed to gain the same aspects of activity due to the COVID-19 pandemic, which required them not to meet face to face. The lack of openness between friends also causes the low intimacy of friendship in this research subject. Regarding honesty and spontaneity, subjects in the low category tend not to be honest about what is happening to them (30). The lowest frequency of the intimacy of friendship variable in this study is in acceptance and sacrifice. This lack of close friendship can result in a person not being willing to sacrifice himself for the sake of a friend (31). This was also felt by the subjects in this study, who were unfamiliar due to the long-term conditions of the COVID-19 pandemic. This lack of close friendship can result in a person not being willing to sacrifice himself for the sake of a friend (31). This was also felt by the subjects in this study, who were unfamiliar due to the long-term conditions of the COVID-19 pandemic. This lack of close friendship can result in a person not being willing to sacrifice himself for the sake of a friend (31). This was also felt by the subjects in this study, who were unfamiliar due to the long-term conditions of the COVID-19 pandemic.

In this study, the results also showed a negative and significant influence on the intimacy of friendship and loneliness among post-pandemic overseas students at the State University of Malang. The negative direction shows that the higher the intimacy of friendship, the lower the loneliness, and vice versa. These results show that the research hypothesis is accepted, namely that there is an influence between the intimacy of friendship and loneliness in post-pandemic overseas students. This is in line with the trigger factor for loneliness, namely the low quality of social relations experienced by a person, where one type of social relationship is friendship (8). Therefore, students who live independently in their overseas cities need the role of close friends to reduce their level of loneliness. In his research,(32) explained that one of the first sources of loneliness is the quality of friendship. Individuals want close friendships marked by validation, understanding, self-disclosure, and empathy to reduce loneliness. Quality friendships allow for regular social interaction. Through this interaction, individuals can feel the presence of other people, share experiences, and feel included in a social group, reducing feelings of loneliness.

This study also found that the percentage of the high category in the intimacy of friendship of class 2020 students is 6% greater than that of students of class 2021. Furthermore, the loneliness of students of the class of 2020 has a percentage that is 1% greater in the high category compared to the class of 2021. The duration of

the introduction is longer (33), which can result in a higher percentage of intimacy of friendship among students in class 2020 compared to class 2021. Meanwhile, a higher percentage level of loneliness in class 2020 compared to 2021 can be caused by other factors not analyzed in this study, such as those related to relationships and other social activities outside of friendship, namely the relationship between overseas students and their parents (26). This is also supported by the results of interviews in the preliminary study that when you become an overseas student, an empty, lonely state can occur due to being far from your parents, so you don't have someone you can interact with.

## 6. CONCLUSION

Based on the results of the research that has been done, it can be concluded that post-pandemic overseas students at the State University of Malang have a low level of intimacy of friendship and a high level of loneliness. In addition, there is an influence with an opposing direction between the intimacy of friendship on loneliness in post-pandemic overseas students at the State University of Malang. This effect shows that the lower the intimacy of friendship in students, the higher the loneliness felt and vice versa. The intimacy of friendship contributed 32.7% in influencing the loneliness of post-pandemic overseas students, and the other 67.3% was influenced by other factors besides intimacy of friendship.

Advice that can be given to post-pandemic overseas students is to improve the quality of friendships during offline lectures, which are lacking during online lessons, to prevent or reduce feelings of loneliness. In addition, future researchers can use other types of social relationships besides friendship, such as relationships with family or partners, to get a deeper picture of loneliness.

## References

[1] Hardiyana E, Margi IK, Wirawan IG. Hubungan Sosial Mahasiswa Perantau dalam Paguyuban Jong Java sebagai Sumber Belajar Sosiologi di Sma (Studi Kasus Paguyuban Jong Java Di Undiksha). Jurnal Pendidikan Sosiologi Undiksha. 2020;2(1):44–55.

[2] Santrock JW. Life Span Development : Perkembangan Masa Hidup Jilid II. (B. Widyasinta, Penerj.) Jakarta: Penerbit Erlangg; 2012.

[3] Erwinda L. Urgensi Intimacy dalam Kehidupan Berkeluarga Pasangan Dewasa Awal. Jurnal EDUCATIO: Jurnal Pendidikan Indonesia. 2016;2(2):53–60.

[4] Russell DW. UCLA Loneliness Scale (Version 3): reliability, validity, and factor structure. J Pers Assess. 1996 Feb;66(1):20–40.

[5] Indonesia CN. Studi : 1 dari 3 Orang Dewasa Muda Alami Kesepian. Diakses pada 18 September 2022, dari https://www.cnnindonesia.com/gaya-hidup/20191216162634-255-457435/studi-1-dari-3-orang-dewasa-muda-alami-kesepian.

[6] Octaviany C. Dinamika Kesepian pada Wanita Dewasa Awal. Calyptra. 2019;8(1):1722–41.

[7] Misyaroh D. Hubungan antara Loneliness dengan Mobile Phone Addict pada Mahasiswa Universitas Negeri di Kota Malang (Doctoral dissertation, Universitas Islam Negeri Maulana Malik Ibrahim). 2016

[8] Silvi CR. Hubungan antara Intimasi Pertemanan dan Kesepian pada Remaja Panti Asuhan di Kota Padang (Doctoral dissertation, Universitas Andalas). 2019

[9] Muttaqin VA, Hidayati IA. Pengalaman Kesepian pada Mahasiswa Rantau Selama Pandemi Covid-19. Psikostudia: Jurnal Psikologi. 2022;11(4):587–602.

[10] Sharabany R. Intimate Friendship Scale: Conceptual Underpinnings, Psychometric Properties and Construct Validity. J Soc Pers Relat. 1994;11(3):449–69.

[11] Sharabany R, Eshel Y, Hakim C. Boyfriend, Girlfriend in A Traditional Society: Parenting Styles and Development of Intimate Friendships Among Arabs in School. Int J Behav Dev. 2008;32(1):66–75.

[12] Rizal MN. Hubungan antara Intimate Friendship dengan Self Disclosure pada Mahasiswa Pengguna WhatsApp (Doctoral dissertation, Universitas Negeri Padang). 2020.

[13] Putri QA. Hubungan Self-Compassion dan Loneliness (Studi pada Mahasiswa Universitas Islam Negeri Sultan Syarif Kasim Riau) (Doctoral dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau). 2019.

[14] Ramadhani CM, Kusumaningtyas R. Pembentukan Pertemanan Online Remaja Akhir dari Media Sosial yang Berlanjut ke Offline (Doctoral dissertation, Universitas Muhammadiyah Surakarta). 2021.

[15] Yunanto TA, Fitria AZ, Mahirah AH, Putri A, Kencanasuci BQ, Nurulfuadiyah B, et al. Peer Support Group: Upaya Peningkatan Resiliensi Bagi Pengusaha Kecil di Masa Pandemi. J-Dinamika: Jurnal Pengabdian Masyarakat. 2022;7(3):496–501.

[16] Stern JA, Cassidy J. Empathy From Infancy To Adolescence: An Attachment Perspective On The Development Of Individual Differences. Dev Rev. 2017;47:1–22.

[17] Branscombe NR, Baron RA. Social Psychology 13$^{th}$ Ed. England: Pearson; 2017

[18] Azwar S. Reliabilitas dan Validitas. Yogyakarta: Pustaka Pelajar; 2020.

[19] Statistik UM. (2023). Mahasiswa Asal Sekolah Pddikti. Diakses pada 12 Mei 2023, dari https://statistik.um.ac.id/mahasiswa/asalsekolah/pddikti

[20] SNPMB. (2023). Apakah Alumni Gap Year Bisa Mengikuti SNBT. Diakses pada 12 Mei 2023, dari https://halo-snpmb.bppp.kemdikbud.go.id/helpdesk/id/blog/apakah-alumnigap-year-bisa-mengikuti-snbt

[21] Sugiyono D. Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D. Yogyakarta: Alfabeta; 2019.

[22] Putri DA. Status Psikososial Lansia di Pstw Abiyoso Pakem Sleman Yogyakarta Tahun 2019 (Doctoral dissertation, Poltekkes Kemenkes Yogyakarta). 2019

[23] Miftahuddin M, Fithriana AR. Digunakan dalam Menilai Hasil Belajar Siswa dengan Hasil Kegiatan MGMP Matematika di Kabupaten Pidie. Jurnal Matematika, Statistika dan Komputasi. 2008;4(2):76-89.

[24] Marisa D, Afriyeni N. Kesepian dan Self Compassion Mahasiswa Perantau. Psibernetika. 2019;12(1):1–11.

[25] Herdi H, Ristianingsih F. Perbedaan Resiliensi Mahasiswa Rantau Ditinjau Berdasarkan Gegar Budaya. INSIGHT: Jurnal Bimbingan Konseling. 2021;10(1):30–40.

[26] Halim CF, Dariyo A. Hubungan Psychological Well-Being dengan Loneliness pada Mahasiswa yang Merantau. Jurnal Psikogenesis. 2016;4(2):170–81.

[27] Pramasella F. Hubungan Antara Lima Besar Tipe Sifat Kepribadian dengan Kesepian pada Mahasiswa Rantau. Psikoborneo. 2019;3(7):648–61.

[28] Kurniawan IP. Interaksi Persahabatan Virtual Bagi Siswa-Siswi Smak Santo Albertus Malang (Tinjauan Filsafat Relasionalitas Armada Riyanto). Jurnal Ilmiah Dinamika Sosial. 2022;6(1):116–27.

[29] 29. Rinaldi MR. Kesepian pada Mahasiswa Selama Pandemi COVID- Jurnal Psikologi Teori dan Terapan. 2021;11(3):267-277.

[30] Tangkudung JP. Proses Adaptasi Menurut Jenis Kelamin dalam Menunjang Studi Mahasiswa Fisip Universitas Sam Ratulangi. Acta Diurna Komunikasi. 2014;3(4):1–11.

[31] Miranda E. Hubungan Intimasi Pertemanan dengan Keterbukaan Diri (Self-Disclosure) pada Mahasiswa Universitas Islam Negeri Ar-Raniry (Doctoral dissertation, UIN Ar-raniry). 2021

[32] Qualter P, Vanhalst J, Harris R, Van Roekel E, Lodder G, Bangee M, et al. Loneliness across the life span. Perspect Psychol Sci. 2015 Mar;10(2):250–64.

[33] Hall JA. How Many Hours Does It Take to Make a Friend? J Soc Pers Relat. 2019;36(4):1278–96.