Effects of Gender and Age in Virtual Reality Art Interventions for University Students' Total Intentions

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Abstract
Introduction This study investigated how demographic factors, specifically gender and age, influenced university students' Total Intention (TI) to engage in Virtual Reality Art Interventions (VRAI) aimed at promoting mental health. Previous studies largely focused on Use Intention (UI), while limited research examined demographic impacts on overall TI toward VRAI participation. Methods A quantitative research design was employed. Data were collected from 82 Chinese university students undergoing psychological counselling using a validated questionnaire. Gender differences were assessed through both parametric (two-tailed independent samples t-test) and non-parametric (two-tailed Mann-Whitney U test) methods. A one-way ANOVA was conducted to evaluate the association between age and TI. Result The analysis revealed no statistically significant difference in TI between male and female participants ($\alpha = 0.05$). Additionally, no significant relationship was found between age and TI. These results indicated that neither gender- nor age-specific modifications were necessary for VRAI program design. Conclusions The findings demonstrated the broad applicability of VRAI across gender and age groups and suggested the robustness of TI regardless of demographic differences. This study clarified the influence of demographic factors on digital mental health interventions and offered practical insights for designing inclusive VRAI initiatives in higher education contexts.
Keywords: Gender, Age, Total Intention (UI), Virtual Reality Art Intervention (VRAI), University Student, Mental Health

Introduction
Virtual Reality Art Intervention (VRAI) has emerged as a promising form of digital mental health intervention, particularly suited for university students facing increasingly severe psychological challenges. This innovative technology combines the immersive experience of virtual reality with the therapeutic qualities of artistic expression, creating new possibilities

for mental health support within higher education environments. Although VRAI demonstrates considerable potential, understanding how demographic factors influence students' Use Intention (UI) to participate in such interventions remains limited, representing a critical gap in the current of knowledge.

Research Background
In recent years, the widespread application of virtual reality (VR) technology has positioned it as an important tool for mental health interventions. Virtual Reality Art Intervention (VRAI), with its unique immersive, interactive, and therapeutic artistic qualities, has demonstrated significant potential in improving university students' mental health, including enhancing positive mental health(Li Pira et al., 2023), alleviating anxiety (Tan et al., 2023), and regulating emotions (Son, 2021).

University students represent a particularly suitable group for such interventions, as they are more vulnerable to mental health challenges and generally hold positive attitudes toward technological innovations.

However, the effectiveness of VRAI depends not only on its technological capabilities but also on students' willingness to adopt and consistently use these interventions—an aspect that may be influenced by demographic variables such as gender and age. Although research on technology acceptance has made significant progress in understanding general Use Intention (UI), the specific demographic determinants of university students' acceptance of VRAI require more targeted investigation.

Theoretical Framework
This study was grounded in the Technology Acceptance Model (TAM) framework(Davis, 1989) (Davis, 1989), which has been extensively validated in information systems research. TAM posits that perceived usefulness and perceived ease of use are key factors influencing Use Intention (UI), ultimately determining actual usage behavior. The model has evolved through the development of the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003)and its subsequent extensions(Venkatesh et al., 2012), providing a solid theoretical foundation for examining technology acceptance in specialized contexts such as VRAI.

Building on these established frameworks, this study introduced and operationalized the concept of Total Intention (TI) as a more comprehensive measure of technology acceptance. Total Intention (TI) integrates both initial Use Intention (pre-test) and sustained Use Intention (post-test), enabling a more holistic evaluation of users' willingness to adopt and engage with VRAI over time.This approach addressed a significant limitation of existing research, which often focused exclusively on either initial adoption or continued use, rather than considering both dimensions simultaneously.

Gender as a Variable in VRAI Acceptance
There is ongoing debate in the literature regarding the impact of gender on technology acceptance. Some studies have indicated significant gender differences in virtual reality experiences, with males exhibiting stronger spatial presence and greater technological adaptability(Grassini & Laumann, 2020), while females' acceptance may be hindered by

device-related discomfort or stereotypical constraints (Kristian Gäckle, 2018) (Robinson et al., 2016).

Other studies have reported that perceived usefulness affects Use Intention differently across gendersTavera-Mesías et al., (2023), and that males tend to demonstrate more sustained engagement with technological devices(Kalinić et al., 2019).

In contrast, some researchers have found no significant direct effect of gender on technology use intention (Zogheib et al., 2015 ; Teo & Milutinovic, 2015) .Zhang & Juvrud (2024) argued that the immersive nature of VR might even help users transcend traditional gender stereotypes, potentially reducing gender-based differences in acceptance. These contradictory findings highlight the complexity of gender as a variable in VRAI research and underscore the need for empirical studies focusing on university student populations.

Age as a Variable in VRAI Acceptance
Similarly, existing research on age-related differences in technology acceptance has produced inconsistent conclusions. Some studies have emphasized age as a key predictor of technology use, suggesting that younger users are generally more receptive to new technologies (Volkom et al., 2014).

Recent studies by Küntzer et al., (2024)and Martinez et al., (2023) indicated that virtual reality technologies typically cater more to younger users, while acceptance rates among older adults are relatively lower. These researchers highlighted that age bias in technology design could be an important factor contributing to such differences.

In contrast, other studies have reported a weak direct relationship between age and technology acceptance. López-Belmonte et al., (2022) found no significant correlation between age and the sense of presence in virtual reality technologies. Similarly, Teo and Milutinovic (2015) and Stephen and Asiimwe (2013) observed only minimal effects of age on technology Use Intention, suggesting that the type of technology and its intended use may mediate age-related impacts.

Murciano Hueso and Martín García (2020) highlighted the digital technology use intentions of older adults, categorized by age and gender. Their findings emphasized that the "sense of presence" was minimally affected by age, and no interaction effects were observed between age and gender.

Most prior studies have focused either on very young populations or on older adults, with limited attention to university students aged 18 to 25. Although this age range is relatively narrow, exploring subtle age differences within this group may provide valuable insights for developing personalized mental health interventions in higher education settings.

Research Gaps and Objectives
Despite the growing body of research on the application of virtual reality (VR) technologies in mental health, several critical gaps remain.
First, studies examining demographic variables in VRAI acceptance have primarily focused on general populations rather than specifically targeting university students. Second, most

existing research has considered only initial adoption or sustained use separately, rather than integrating these two dimensions into a comprehensive measure of Total Intention (TI). Third, findings on the influence of gender and age on technology acceptance remain inconsistent and appear highly context dependent.

To address these gaps, this study aimed to systematically explore whether gender and age affect university students' Total Intention (TI) to use VRAI for mental health support. Rigorous statistical analyses were employed, including two-tailed independent samples t-tests, Mann-Whitney U tests, and one-way analysis of variance (ANOVA), to provide empirical evidence regarding demographic factors influencing VRAI acceptance. The findings are expected to contribute to the design of more inclusive and effective VRAI programs in higher education settings, potentially enhancing mental health support for diverse student populations.

Research Question: Do gender and age affect university students' Total Intention (TI) to use Virtual Reality Art Interventions (VRAI)?
Research Objective: To examine whether age and gender influences university students' total intention to use VRAI.

By addressing this question, the study aims to advance theoretical understanding of technology acceptance in specialized mental health contexts and offer practical insights for developing and implementing VRAI initiatives in university environments.

Methodology
This study, grounded in the Technology Acceptance Model (TAM)(Davis, 1989), addresses gaps in the existing literature by systematically examining the influence of age and gender on university students' total intention to use Virtual Reality Art Intervention (VRAI) for mental health support. A quantitative approach was adopted, including one-way ANOVA and two-tailed independent samples t-tests/Mann-Whitney U tests, to analyze survey data from 82 student counseling volunteers(Elka Cahn, 2023).

Research Design
This study adopts a group comparison design, focusing on the potential relationship between emotional changes and age across different use intention groups (low intention group vs. high intention group). By conducting a quantitative analysis of emotional changes before and after the Virtual Reality Art Intervention (VRAI), the study explores the effects of key variables such as age and use intention groups. The advantages of this design include Clear group comparisons: Directly comparing emotional changes between different intention groups to highlight the impact of VR interventions. Refined variable relationships: Stratified analysis by intention groups to avoid overly generalized conclusions about age.

Sample Selection
Sample Source
University student volunteers (n = 82) were recruited using purposive sampling. Informed consent and participant privacy protection were ensured.

Selection Criteria
Inclusion criteria: Current university students who completed the intervention task and submitted a fully completed questionnaire.
Exclusion criteria: Individuals with diagnosed mental health conditions or those unable to participate in virtual reality experiences. A total of 83 participants were recruited, with 1 invalid questionnaire excluded.

Data Collection
Measurement Tools
1.Demographic Variable: Age
Participants' age was recorded as a key demographic variable.
2.Positive and Negative Affect Scales (PANAS):
The PANAS scale was used to measure participants' positive affect (PA) and negative affect (NA) before and after the intervention.
3.Technology Acceptance Model (TAM)-Based Scale:
A TAM-based questionnaire was used to assess participants' use intention, including perceived enjoyment, perceived effectiveness, and perceived ease of use. Total scores of intentions were used for grouping participants.
The original reliability of the scale demonstrated a Cronbach's alpha of 0.894, with a KMO (convergent validity) value of 0.83.

Data Analysis
Descriptive Statistics
Descriptive statistics were conducted for changes in positive and negative affect (calculated as post-intervention minus pre-intervention scores). Mean, standard deviation, standard error, skewness, and kurtosis were calculated to ensure the normality of data distribution.

Main Effect Analysis
One-Way Analysis of Variance (ANOVA):
One-way ANOVA was used to compare the mean emotional changes across different age groups, testing whether age has a significant impact on emotional changes.

Hypothesis Testing and Model Assumptions
1.Normality Assumption:
Q-Q plots were used to verify whether the residuals followed a normal distribution.
2.Homogeneity of Variance:
Residuals were plotted against predicted values to examine if the homoscedasticity assumption was met.
3.Outlier Detection:
Studentized residuals were calculated to identify and exclude individuals whose extreme values significantly influenced

Results and Discussion
Descriptive Statistics
This study examined the effects of Virtual Reality Art Intervention (VRAI) on the emotional states of university students.

The results indicated that participants in both the high-intention and low-intention groups exhibited emotional changes before and after the intervention. Notably, the low-intention group showed a greater increase in positive affect (PA), rising from 3.59 to 4.06, and a decrease in negative affect (NA), dropping from 2.90 to 2.71.In contrast, the changes observed in the high-intention group were relatively weaker. These findings provide foundational data for future investigations into how gender and age may influence students' total intention to participate in VRAI.

Gender

This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation, as well as the experimental conclusions that can be drawn.

This study analyzes experimental data on the impact of virtual reality art on mental health, with a particular focus on differences in positive and negative emotional experiences (measured using the PANAS scale) between groups with low use intention (N = 47) and high use intention (N = 35). The dataset consists of participants categorized by gender, with 61.9% female and 38.1% male（Figure 1）, indicating a higher representation of female participants in the study.

A visual representation (pie chart) highlights this difference, showing that the female group (pink) constitutes the majority, while the male group (blue) accounts for a smaller proportion. The primary objective of this study is to explore the relationship between gender differences and total intention in virtual reality art interventions, providing evidence of generalizability to support the wider application of VR-based mental health interventions.
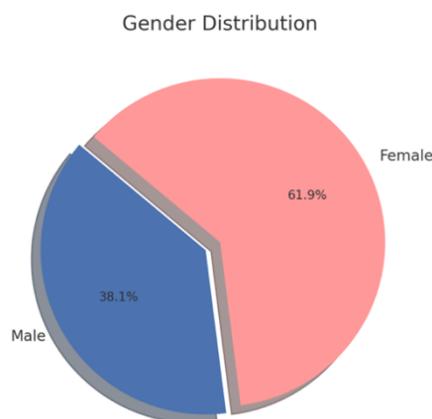

Figure 1 61. Demographic Gender Distribution in the VRAI Study

Two-Tailed Independent Samples t-Test
Introduction
A two-tailed independent samples t-test was conducted to examine whether the mean of total intention was significantly different between the 1 and 2 categories of gender.

Assumptions
Normality. Shapiro-Wilk tests were conducted to determine whether total intention could have been produced by a normal distribution for each category of gender (Razali & Wah, 2011). The result of the Shapiro-Wilk test for total intention in the 1 category was significant

based on an alpha value of .05, W = 0.91, p = .010. This result suggests that total intention in the 1 category is unlikely to have been produced by a normal distribution. The result of the Shapiro-Wilk test for total intention in the 2 category was significant based on an alpha value of .05, W = 0.94, p = .023. This result suggests that total intention in the 2 category is unlikely to have been produced by a normal distribution. The Shapiro-Wilk test was significant for both the 1 and 2 categories of gender, indicating the normality assumption is violated.

Homogeneity of Variance. Levene's test was conducted to assess whether the variance of total intention was equal between the categories of gender. The result of Levene's test for total intention was significant based on an alpha value of .05, $F(1, 79) = 7.04$, p = .010. This result suggests it is unlikely that the variance of total intention is equal for each category of gender, indicating the assumption of homogeneity of variance was violated.

Results

Welch's t-test was used, which has higher statistical power than Student's t-test when the two samples have unequal variances and unequal sample sizes (Ruxton, 2006). The result of the two-tailed independent samples t-test was not significant based on an alpha value of .05, t (53.10) = 1.68, p = .099, indicating the null hypothesis cannot be rejected. This finding suggests the mean of total intention was not significantly different between the 1 and 2 categories of gender. The results are presented in Table 1. A bar plot of the means is presented in Figure 2.

Table 1

Two-Tailed Independent Samples t-Test for total intention by gender									
	1			2					
Variable	M	SD	n	M	SD	n	t	p	d
total intention	3.85	0.69	34	3.62	0.46	47	1.68	.099	0.39

Note. N = 81. Degrees of Freedom for the t-statistic = 53.10. d represents Cohen's d.
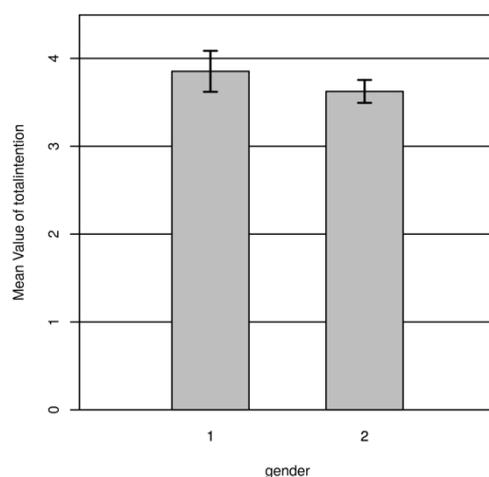

Figure 2 The mean of total intention by levels of gender with 95.00% CI Error Bars

Two-Tailed Mann-Whitney U Test
Introduction
A two-tailed Mann-Whitney two-sample rank-sum test was conducted to examine whether there were significant differences in total intention between the levels of gender. The two-

tailed Mann-Whitney two-sample rank-sum test is an alternative to the independent samples t-test but does not share the same assumptions (Conover & Iman, 1981). There were 34 observations in group 1 and 47 observations in group 2.

Results

The result of the two-tailed Mann-Whitney U test was not significant based on an alpha value of .05, U = 912, z = -1.09, p = .278. The mean rank for group 1 was 44.32 and the mean rank for group 2 was 38.60. This suggests that the distribution of total intention for group 1 (Mdn = 3.67) was not significantly different from the distribution of total intention for the 2 (Mdn = 3.67) categories. Table 2 presents the result of the two-tailed Mann-Whitney U test. Figure 3 presents a boxplot of the ranks of total intention by gender.

Table 2

Two-Tailed Mann-Whitney Test for total intention by gender

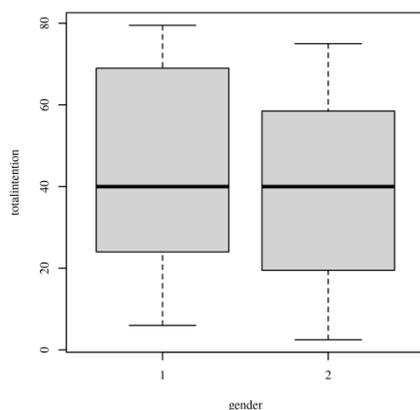|	1		2				
Variable	Mean Rank	n	Mean Rank	n	U	z	p
total intention	44.32	34	38.60	47	912.00	-1.09	.278

Figure 3 Ranks of total intention by gender

There were no significant effects in the model. As a result, posthoc comparisons were not conducted.

Age

ANOVA

Introduction

An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in total intention by age.

Assumptions

Normality. The assumption of normality was assessed by plotting the quantiles of the model residuals against the quantiles of a Chi-square distribution, also called a Q-Q scatterplot (DeCarlo, 1997). For the assumption of normality to be met, the quantiles of the residuals must not strongly deviate from the theoretical quantiles. Strong deviations could indicate that

the parameter estimates are unreliable. **Figure3** presents a Q-Q scatterplot of model residuals.
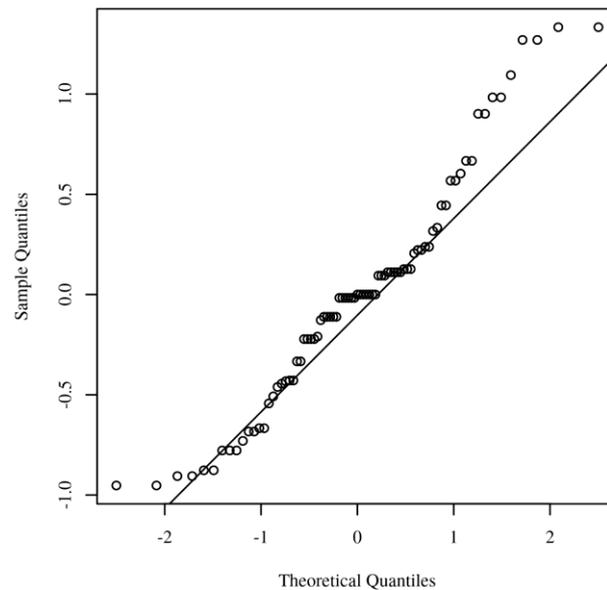

Figure 3.Q-Q scatterplot for normality of the residuals for the regression model.

Homoscedasticity. Homoscedasticity was evaluated by plotting the residuals against the predicted values (Bates et al., 2014; Field, 2017; Osborne & Walters, 2002). The assumption of homoscedasticity is met if the points appear randomly distributed with a mean of zero and no apparent curvature. **Figure 4** presents a scatterplot of predicted values and model residuals.
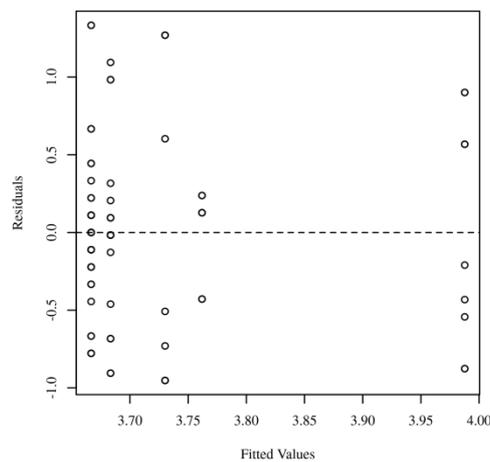

Figure 4. Residuals scatterplot testing homoscedasticity

Outliers. To identify influential points, Studentized residuals were calculated, and the absolute values were plotted against the observation numbers (Field, 2017; Pituch & Stevens, 2015). Studentized residuals are calculated by dividing the model residuals by the estimated residual standard deviation. An observation with a Studentized residual greater than 3.20 in absolute value, the 0.999 quantile of a t distribution with 80 degrees of freedom, was considered to have significant influence on the results of the model. Figure 5 presents the

Studentized residuals plot of the observations. Observation numbers are specified next to each point with a Studentized residual greater than 3.20.
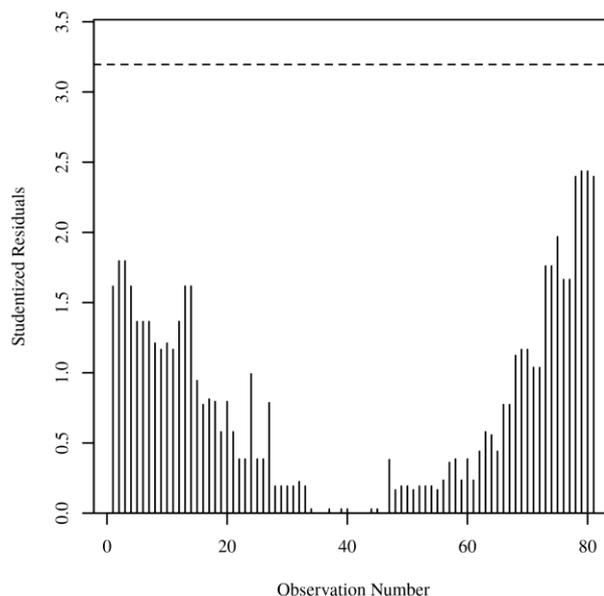

Figure5.Studentized residuals plot for outlier detection

Results

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were not significant, $F(4, 76) = 0.59$, $p = .673$, indicating the differences in total intention among the levels of age were all similar **(Table 1).** The main effect, age was not significant, $F(4, 76) = 0.59$, $p = .673$, indicating there were no significant differences of total intention by age levels. The means and standard deviations are presented in **Table 2** and **Figure 6**. The total intention means to use for each age group is between 3.67 and 3.99, with small differences between groups.

Table 1
Analysis of Variance Table for total intention by age

Term	SS	df	F	p	η_p^2
age	0.79	4	0.59	.673	0.03
Residuals	25.65	76			

Table 2
Mean, Standard Deviation, and Sample Size for total intention by age

Combination	M	SD	n
1（18）	3.76	0.30	7
2（19）	3.68	0.57	20
3（20）	3.67	0.48	38
4（21）	3.99	0.74	9
5（22）	3.73	1.02	7

Note. A '-' indicates the sample size was too small for the statistic to be calculated.
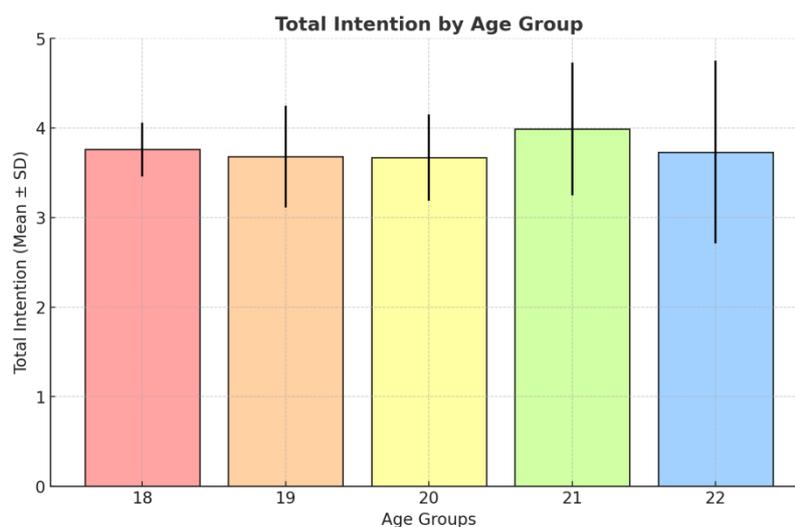
Figure 6. Visualize image of Mean, Standard Deviation, and Sample Size for total intention by age

Post-hoc
There were no significant effects in the model. As a result, post-hoc comparisons were not conducted.

Discussion
This study explored the influence of gender and age on university students' Total Intention (TI) to use Virtual Reality Art Interventions (VRAI) for mental health support. The findings indicated no statistically significant differences in TI across either gender or age groups. These results challenge some mainstream assumptions while aligning with certain branches of existing research. This section discusses the broader implications of these findings within the context of technology acceptance studies and mental health interventions in higher education environments.

Gender and Total Intention in VRAI
In terms of overall Use Intention for VRAI, no significant gender differences were observed, a finding that warrants careful consideration.Our results are consistent with those of Zogheib et al., (2015) and Teo and Milutinovic (2015), who found no significant direct effect of gender on technology Use Intention.Similarly, Zhang & Juvrud (2024) suggested that the immersive nature of virtual reality may allow users to transcend traditional gender norms, potentially reducing gender-based differences in technology acceptance. The present findings offer empirical support for this perspective within the specific context of university students using VRAI for mental health purposes.

These results contradict studies that have suggested significant gender differences in virtual reality experiences. Grassini & Laumann(2020) reported that males exhibit stronger spatial presence and greater technological adaptability in virtual environments, whereas our study found comparable levels of willingness between male and female university students to engage with VRAI.

This discrepancy may be attributed to several factors. First, the specific application context—using artistic expression to support mental health—may transcend traditionally gendered domains of technology use. Second, compared to the broader age ranges examined in earlier studies, university students as a group may exhibit more homogeneous patterns of technology acceptance. Third, the concept of Total Intention (TI), which integrates both initial and sustained Use Intention, may offer a more comprehensive reflection of acceptance than measures focusing on a single dimension.

The finding of no gender difference challenges the assertion by Tavera-Mesías et al., (2023) that perceived usefulness affects Use Intention differently across genders, as well as the claim by Kalinić et al. (2019) that males are more inclined to sustain technology use.

These differences may be explained by the evolving gender roles in technology engagement, particularly among younger generations raised in increasingly digital environments. Within the university student population, traditional gender-based barriers to technology acceptance may be diminishing, suggesting that digital mental health interventions are moving toward greater equity.

Additionally, our results contradict concerns raised by Kristian Gäckle, (2018)and (Robinson et al., 2016)., who suggested that women might experience discomfort with VR devices or face stereotype-based barriers to acceptance.In the context of VRAI for mental health support, such barriers appear to be less pronounced than in other VR applications.

This finding suggests that when technology is presented within therapeutic and artistic frameworks, gender-related acceptance obstacles may diminish, which has important implications for the design and development of digital mental health interventions.

Age and Total Intention in VRAI
Although the participants in this study were university students aged 18 to 25 with different years of study, no significant age differences in Total Intention were observed, which is also an important finding.

This result challenges the perspectives of (Volkom et al., 2014), Küntzer et al., (2024), and Martinez et al., (2023), who emphasized age as a key predictor of technology use and suggested that younger users are generally more receptive to new technologies.

In contrast, our findings align with those of López-Belmonte et al., (2022), who found no significant correlation between age and the sense of presence in virtual reality technologies, as well as with Teo and Milutinovic (2015) and Stephen and Asiimwe (2013), who observed minimal effects of age on technology Use Intention.

In our university student sample, consistency in Total Intention across different age groups may be attributable to several factors. First, the relatively narrow age range (18–25 years) may have limited the detection of age-related differences that might be more pronounced across broader life stages. However, even within this range, differences between first year and fourth-year students might have been expected due to varying life experiences and levels of technological exposure. The absence of such differences suggests that, among groups with

similar educational backgrounds and developmental stages, the impact of age may be minimal.

Second, the specific nature of VRAI as a mental health intervention may appeal equally to students across different age groups, as they all experience academic stress, social challenges, and emotional development issues. The therapeutic benefits of such interventions may transcend subtle age differences, leading to similar acceptance levels across the university student population. This interpretation is consonant with the view that the purpose of technology and perceived benefits may mediate the influence of demographic variables on acceptance (Stephen and Asiimwe,2013). Third, university students generally possess higher levels of technological literacy compared to the general population. This shared characteristic may overshadow minor age differences within the group, resulting in more homogeneous patterns of technology acceptance.
The findings suggest that VRAI interventions designed for university students may not require significant age-specific adaptations, potentially simplifying the implementation of mental health services in higher education environments.

Conclusion
This study advances the Technology Acceptance Model (TAM) in three ways. First, it successfully applies the TAM framework to a specialized context in which university students engage with Virtual Reality Art Interventions (VRAI) for mental health support, thereby demonstrating the model's utility beyond demographic predictors in healthcare technologies. Second, it introduces and validates the construct of "total intention" as a composite indicator, providing a more comprehensive means of evaluating long-term user acceptance. Third, the study helps resolve theoretical inconsistencies in existing literature by emphasizing that contextual and goal-oriented factors may play a more critical role in shaping technology acceptance than demographic variables—particularly in relatively homogeneous populations such as university students.

Despite these contributions, the study has several limitations. The sample size of 82 students, while adequate for statistical analysis, may restrict the generalizability of the findings. Moreover, the demographic homogeneity of the student participants may have narrowed the variability in age and other personal characteristics, potentially concealing effects that could emerge in more diverse populations. Additionally, the study primarily focused on the outcome variable of total intention without exploring possible mediators such as perceived usefulness, ease of use, or users' specific mental health needs.

These limitations open promising avenues for future research. Broadening the age range of participants could help assess whether the absence of age-related effects remains consistent across different stages of life. Including variables such as prior exposure to technology, mental health history, and cultural background may offer deeper insights into the factors influencing VRAI acceptance. Experimental designs that compare different VRAI features across diverse user groups could also yield practical recommendations for enhancing intervention effectiveness. Furthermore, longitudinal studies that track actual usage behavior could verify whether total intention accurately predicts sustained engagement with the technology.

Finally, future research might examine interactions between demographic variables and specific content or therapeutic elements within VRAI. Even if overall acceptance levels remain consistent, particular artistic or treatment styles may resonate differently across populations. Investigating these nuances could support the development of more personalized and accessible mental health interventions. In sum, this study identifies three core limitations: the small and homogeneous sample, the narrow demographic scope, and the lack of focus on mediating variables. Addressing these gaps in future work will be essential for advancing the applicability and personalization of VRAI in broader educational and clinical contexts.

This study examined whether gender and age influence university students' total intention to use Virtual Reality Art Interventions (VRAI) for mental health support. The Findings indicated no statistically significant differences based on these variables. These assumptions about demographic barriers in technology acceptance and align with perspectives that emphasize contextual over demographic determinants.

The findings have practical implications for VRAI application. Mental health professionals and developers can focus on enhancing core therapeutic and artistic elements rather than tailoring interventions by demographic categories. Although limited by sample size and population homogeneity, this study provides a foundation for further exploration. As digital mental health interventions evolve, VRAI shows potential as an inclusive support approach in higher education settings—offering benefits across genders and age groups.

Institutional Review Board Statement
The studies involving humans were approved by Universiti Sains Malaysia's Human Ethics Committee approved this study (JEPeM Code: USM/JEPeM/22,120,811). Written informed consent was obtained from the [individual(s)] for the publication of any potentially identifiable images or data included in this article. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Data Availability:
The datasets generated and analyzed during the current study are available from Li Huang and can be requested from the corresponding author.

Conflicts of Interest:
No, I declare that the authors have no competing interests as defined by AG, or other interests that might be perceived to influence the results and discussion reported in this paper.

Abbreviations
The following abbreviations are used in this manuscript:
VRAI   Virtual Reality Art Intervention
UI   Use Intention
TI   Total Intention

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