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The Effect of Social Media Abstinence and Gender on Mindfulness.

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I, Jacob Green, declare that this submission is my own work. Where I have read, consulted, and used the work of others I have acknowledged this in the text.

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Abstract

Social media abstinence, gender, and their effect on mindfulness is an area of research that is rapidly developing, particularly in the aftermath of the covid-19 pandemic. The pool of research that currently exists in the area has produced a mixed set of results with some studies finding significant differences between social media abstinence and mindfulness and others reporting insignificant results. However, there has been little research conducted around these variables with the inclusion of gender as a third variable. The present study aimed to explore the gap that exists in the current literature surrounding social media abstinence and mindfulness employing gender as an additional variable. A quantitative experimental between groups 2-way anova was employed to test for group differences between those who abstained from social media and those who did not. Additionally the difference in mindfulness scores between males and females was tested. Mindfulness scores were measured using the mindfulness attention awareness scale (MAAS). The researcher recruited 69 participants and analysed the descriptive and inferential statistics. The data indicated no significant differences and all three hypotheses were rejected. These results, in comparison to the literature, are expected as there has been a mixed set of results in previous studies and the current study had various limitations such as a small sample size. A strength of this study is that it contributes research on mindfulness using a majority of irish citizens thus providing an irish context to the literature. Future research could look to increase the sample size of participants as well as employ additional variables such as life satisfaction in order to draw more accurate results.

Literature Review

1.1 Overview

The use of social networking sites in today's western society are now a normative part of life from adolescence (Coyne et al. 2020). In 2019, it was reported by Karim et al. (2020) that the number of social media users worldwide was 3.484 billion and that number is rising year on year. Recent research has suggested a negative relationship between social media usage and health related outcomes including mental health (Bekalu et al., 2019). In a study carried out by Barry et al. (2017) it was reported that moderate social media usage can be linked to fear of missing out, loneliness, and depression in adolescents and in young adults. Additionally, it was shown that age did not have an effect on mental health problems related to social media usage, but it found that gender did with females more likely to have mental health (Karim et al. 2020). Recently, more research surrounding the topic of social media abstinence and its benefits/drawbracks has been conducted. Brown & Kass (2020) reported that a 7-day social media abstinence period resulted in an increase in dispositional mindfulness and a significant decrease in fear of missing out. This current study will aim to examine the effects that social media abstinence and gender have on mindfulness.

1.2 Social Media Abstinence

Research conducted on social media abstinence and its effects on mindfulness have produced results that vary between studies. According to Hall et al., (2019), from a longitudinal study where duration of abstinence was manipulated and whether the benefits of social media abstinence are apparent in daily reports of well-being over the course of four weeks, there was no main difference in well-being based on social media abstinence. Participants in the study were randomly assigned to five groups which were i). Control, ii). 1 week abstinence, iii) 2 week abstinence, iv). 3 week abstinence, v). 4 week abstinence. Social media usage each day was recorded for each participant where applicable. Although previous research suggests there is a weak negative relationship between positive psychosocial outcomes and social media usage, the data from this study failed to identify a relationship. However in a study conducted by Valley and D'Souza (2019), it was reported that those who abstained from social media showed a decline in life satisfaction and an increase in loneliness when compared to a control group. The participants for this study were assigned to one of two groups. The first group were asked to continue their social media usage as normal and the second group were asked to abstain for 7 days.

Reliable and valid scales such as the Satisfaction with Life Scale (SWLS) and the Positive and Negative effect Schedule (PANAS) were used reporting Cronbach alpha levels of α=.84 and α=.88 respectively. The researchers also looked at the potential motivators to abstain from social media and listed things such as: potential for future addiction and impact on productivity levels. The researchers also reported that those who chose to quit or abstain from social media usage did so citing similar reasons such as concerns over their privacy or misuse of their data.

According to Orben & Przybylski, (2019), the current literature on the negative impact of social media use on wellbeing is problematic. The evidence base uses mostly large-scale secondary social data sets which have a large number of variables. There are a plethora of options for analysis, and with a large number of variables the chances of finding correlations are high. The effects that have been found are statistically significant, but effect sizes are very small and are of minimal practical importance. This can lead to high numbers of researcher degrees of freedom as the majority of the data sets are collected with multidisciplinary research councils. In order to address this limitation, the researchers implemented a specification curve analysis (SCA) across three large scale datasets in order to examine the effects of technology on adolescent well being and found a negative association between the two. Additionally, in a confirmatory cohort study carried out by Przybylski et al., (2020) that used an adapted version of the Strengths and Difficulties questionnaire (α=.84) , it was reported that a moderate amount of screen time engagement (1-2 hours) per day can lead to a slightly higher level of psychological functioning compared to lower or higher amounts of screen time engagement. According to Turel et al. (2018) it is typical for frequent social media users to be aware of their intense psychological dependency on these sites and in turn it can lead to higher levels of elevated stress. The researchers hypothesized that a short to medium period of social media abstinence would reduce levels of perceived stress after several days. The hypothesis was supported and it was found that the effects were particularly accentuated in excessive social media users.

1.3 Mindfulness and Well-Being

Mindfulness as a social construct has been theoretically and empirically related with psychological well being (Keng et al. 2011). Mindfulness is made up of a consortium of elements such as non-judgemental acceptance of the present moment and awareness. Well-being is one of the most core fundamental features related to mental health and is imperative to hedonic (pleasure) and eudaimonic (fulfilment) happiness as well as resilience in the form of emotion regulation and problem solving (Tang

et al., 2019). According to Kabat-Zinn, (2003), mindfulness and its relation to attention and awareness can be developed through meditation. Today's society has encouraged excessive use of social media and the consequences of this are less face-to-face interactions and an increase of compulsive behaviours online (Apaolaza et al., 2019).

Mindfulness and the awareness characteristic has been said to provide some protection to compulsive behaviours such as excessive social media usage and excessive alcohol use etc (Apaolaza et al., 2019). Mindlessness, according to (Shonin, 2014) is a condition whereby an individual goes through life without ever feeling present or aware in any particular moment, given that the only time life can be truly experienced is in the present. Recently, research has been conducted on how communication technology such as smartphones and social media platforms have been linked with well being. In a study conducted by (Johannes et al., 2020) where the researchers investigated how a mind set of online vigilance through technology usage related to well-being, it was shown that such technology use resulted in minimal and possible non-linear effects on well-being.

1.4 Mindfulness and Social Media

Recently there has been a rise in social media users with 73% of adults reportedly using a minimum of one social media site per day and 42% using multiple sites per day (Shonin, 2014). Research suggests that such usage can be beneficial towards enhancing communication skills, creativity, and social connectedness (online vigilance). However, in spite of these benefits, using social media excessively for a minority of individuals can result in psychological consequences. According to Du et al. (2021) in a study that examined how a lack of self control in social media usage can negatively effect well being, individuals may experience guilt, strain and time pressure as a result of excessive social media usage and in turn this can lead to a decrease in mindfulness and well being. Additionally, failure for an individual to manage time spent on social media can induce negative emotions as other goals and objectives are pushed back or ignored. According to Karim et al. (2020), in an intervention study designed to address the prevalent problem of excessive social media use in adolescents that used 3 axioms of mindfulness to expand awareness and regulation of social media use, the feeling of inadequacy is often associated with compulsive online use.

1.5 Gender and Mindfulness

In the last five years researchers have begun to look at the differences that gender has on mindfulness and for the most part minimal differences have been found. Alispahic & Hasanbegovic-Anic (2017), reported in a study conducted on age and gender differences in mindfulness that women scored higher than men on a subscale *Observing* while men scored higher on the subscale *Acting with awareness*.The results of the study showed a significant difference in gender for some aspects of mindfulness. However, research conducted around emotional intensity has shown that women experience both more negative and more positive emotions than men. Mindfulness meditation is one of the most common forms of meditation practices and involves focusing one's attention on the present moment. Previous literature has shown that men and women portray alternating trajectories of psychological symptomatology (Rojiani et al., 2017). This contrast appears early in teenage years and research has shown that between the ages of 13-14, women are two times more likely to suffer from depression and anxiety. Importantly, there are also differences between how men and women cope with psychological distress. Men have a tendency to "externalise" tension by projecting outward whereas women tend to "internalise" tension by directing inward and this continues throughout adulthood. Katz & Toner, (2012) conducted a study that examined how gender differences effected mindfulness based treatments (MBT's) for substance abuse. The results showed that women gravitate more toward MBT's as effective treatment or that women benefited more from MBT's. In a quantitative study carried out by Wang (2017) to examine the effect that gender has on mindfulness, where the mindfulness attention awareness scale (MAAS) was distributed to IS (information system) college students, it was shown that there was not much difference in average mindfulness scores based on the results from a pilot study. The results however did imply that female disposition mindfulness varies more than males as the standard deviation for females was 1.2 compared to 0.94 for males. Furthermore with the introduction of the mindfulness concept prior to the mindfulness scale, males increased their mindfulness disposition whilst females decreased in theirs.

1.6 Rationale for this Research:

This current study aims to examine the relationship between Social Media Abstinence and Mindfulness employing gender as a second independent variable. Research has shown that men and women differ in their psychological symptomatology and processing however results of previous studies are inconsistent in their findings in this regard in relation to abstinence of any kind. This study will attempt to address the gap in the literature that links social media abstinence and its effects on mindfulness to gender. The Mindful Awareness Attention Scale (MAAS), which is a 15-item scale, has been chosen by the researcher as it assesses the core characteristics of mindfulness (Brown & Ryan, 2003). The study will examine how a short term period of social media abstinence effects mindfulness in participants whose age will range from 18+ years old.

1.7 Research Question:

1. Does Social Media Abstinence and Gender Have an effect on Mindfulness ?

1.8 Hypotheses:

H1: There will be a significant difference in mindfulness scores for participants based on social media abstinence.

H2: There will be a significant difference in mindfulness scores for participants based on gender.

H3: There will be a difference in mindfulness scores for participants based on social media abstinence and gender

Method

2.1 Design

A quantitative, experimental, between groups study was employed to test for group differences between those who abstained from social media and those who did not, as well as gender. The dependent variable was Mindfulness scores with the independent variables being Social Media abstinence and Gender. The independent variables contained 2 levels each (Abstain/Non-Abstain and Male/Female) resulting in a 2x2 factorial between groups survey design.

2.2 Participants

Participants for this study were recruited online by using convenience sampling followed by snowball sampling methods. The study aimed to gather an even number of men and women from the age of 18+. Ninety participants took part in the online survey. However, 31 surveys were excluded due to incompletions. From the 69 completed surveys, 36 were Male and 33 were Female with the mean age being *(M = 25.73)*. The treatment of all participants was under the ethical standards of the Psychological Society of Ireland and the Department of Technology and Psychology Ethics Committee of IADT approved this study.

Table 1:

Minimum, maximum, mean age (M) and standard deviation (SD) of participant's ages

Age	N	Range	Minimum	Maximum	*M*	*SD*
Participants	69	42	18	60	25.73	9.031

2.3 Materials

Information sheet: (Appendix A)

An online survey was created using Microsoft Forms. Attached to the link for the online survey there was a brief description of what the current study entailed. The Information sheet was presented to the participant firstly with an overview of the current study and their requirements.

Consent Form: (Appendix B)

Following this was a consent form which participants were required to fill out before partaking in the study. On the consent form was a box which participants used to insert a unique id code (e.g their initials and the last 4 digits of their phone number) which was used to identify participants anonymously should they wish to withdraw from the study.

Demographic Information: (Appendix C)

The participants were also required to provide their age and gender in the demographic section for descriptive statistics purposes.

Scale: (Appendix E)

The Mindfulness Attention Awareness Scale (MAAS; Brown, K.W. & Ryan, R.M. 2003) was used for the current study. This is a 15-item scale that takes roughly 10 minutes to complete and is designed to measure participants' dispositional mindfulness. More specifically it aims to measure receptive awareness and attention to what is happening in the present moment. A 6-point Likert Scale ranging from almost always to never is used to measure the 15 statements of the survey. The researchers have credited this survey stating that it shows strong psychometric qualities. Each participant was required to fill out the survey. The cronbach alpha in the current study for this scale was α=.73, which, according to Pallant (2001), is considered a highly reliable and acceptable index.

Debrief sheet: (Appendix D)

Upon the completion of the survey, the participants were provided with a debrief sheet. This sheet consisted of a brief message thanking the participant and a brief synopsis of the study. Information about how the participants data was to be used was also included on this sheet including a number of support links to support the participants if required.

2.4 Pilot Study

A pilot study was conducted in order to test the scales and the functionality of the survey. This data was not included in the final research statistics. The pilot study assisted in addressing any concerns that arose throughout the participant data collection as well as to get an estimation of how long the survey would take to fill out. The information gathered from the completion of the pilot study was used to alter and correct certain elements such as grammar.

2.5 Procedure

Two surveys were created in order to divide the participants into two separate groups. The survey was posted to numerous social media platforms such as Facebook, Instagram, and Twitter. Participants were invited to partake in the study through the link provided. Each participant was randomly assigned to one of two groups. Group 1: who were not required to abstain from social media and group 2: who were required to abstain from social media for 1 hour per day for 3 days. Upon opening the link the participants were greeted with an information sheet that provided them with a brief overview of the study and how they could withdraw at any time. They were then required to fill out the consent form which asked them if they agreed to partake in the study. It was also stated that the way participants were identified was through their unique id code (Initials + last 4 digits of phone number). Participants were required to give their age and gender here. Following this, group 1 were asked to fill out the MAAS scale. Upon completion a debrief form was provided with information on how to contact the researcher as well as withdraw from the study. Group 2 were required to abstain from social media for 1 hour per day for 3 days. They were then emailed the MAAS survey and debriefed following their completion. They were then thanked for their participation and support links were provided.

Results

3.1 Overview

This study employed a two-way Between groups Anova (Analysis of Variance) to calculate the results. The target variable which was investigated was Mindfulness. The two independent variables used were Social Media Abstinence (2 groups) and Gender (2 groups). Thus, a quantitative 2x2 Factorial

design was employed. IBM SPSS Statistics version 27 was used to calculate and report the data to test for any significance within the variables. The alpha value was set to 0.05 for all analysis.

3.2 Descriptive Statistics:

The participants data for their age and for the standard deviation to the mean for all scores was calculated.. The data is displayed below for participants age and standard deviation to the mean age.The participants ranged in age from 18-60 years old with a mean age of (M age: 25.23, SD age: 9.03)

The descriptive data for the DV (Mindfulness) is summarised in the table below with the mean, standard deviation and the N scores for Mindfulness scores is displayed for the four groups.

Table 2 displays the Mean (M), Standard Deviation (SD), and N scores for the participants Mindfulness Scores.

Groups	Gender	Mean	Std. Deviation	N Scores
Non-Abstain	Males	3.27	.603	15
	Females	2.98	.623	26
	Total	3.09	.624	41
Abstain	Males	3.31	.522	19
	Females	3.31	.294	9
	Total	3.31	.455	28
Total	Males	3.29	.551	34
	Females	3.06	.571	35
	Total	3.18	.569	69

3.3 Assumptions of Two-Way Between groups anova

SPSS was used to measure the assumptions of a two-way between groups anova. There were three variables employed in this study, one DV (Mindfulness) and two IV's (Social Media Abstinence, Gender). The independent variables had two groups each, social media abstinence/non-abstinence and male/female. Levene's test for homogeneity of variances was used to test for equal variance across all groups. This was not violated as p= .241. A test for normal distribution was carried out for both of the independent variables. The test for normal distribution for gender was violated for males mindfulness scores as Shapiro-Wilk (34)=.633, p=.000 and female mindfulness scores Shapiro-Wilk (35)=.546, p=.000.

Shapiro-WIlk p value was = <0.05 for participants in the abstinence and non-abstinence group. For the abstinence group Shapiro-Wilk (28)=.591, p=.000 and for the non-abstinence group Shapiro-Wilk (41)=.611, p=.000. The two-way anova however, is still considered an appropriate and robust test to the violations of normality meaning that some of the violations can be tolerated and the results of the test can still be valid.

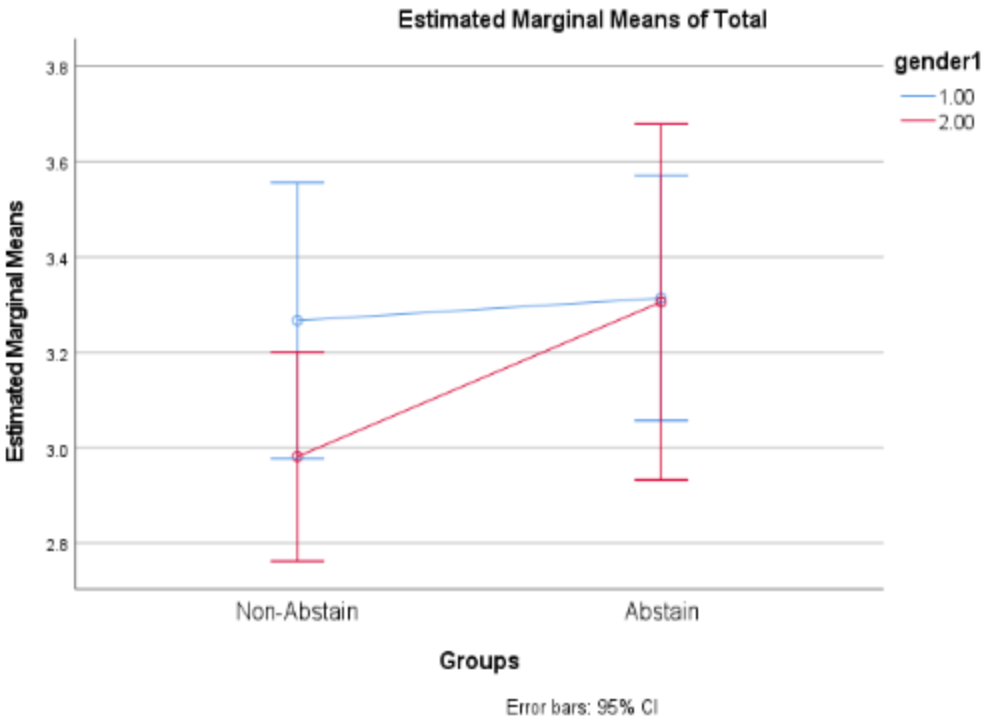
3.4 Inferential Statistics

A two-way between groups analysis of variance was conducted in order to test for any significance between the target variable (mindfulness) and both the independent variables (social media abstinence, gender) and the interaction between the two IVs on the target variable. A G*Power analysis was used to calculate the number of participants needed for a test powered at .80 and 120 participants were needed. This requirement was unable to be reached as there were only 69 participants who completed the survey. Thus this study does not satisfy the requirement for a statistically significant quantitative study.

Three hypotheses were proposed for this study.

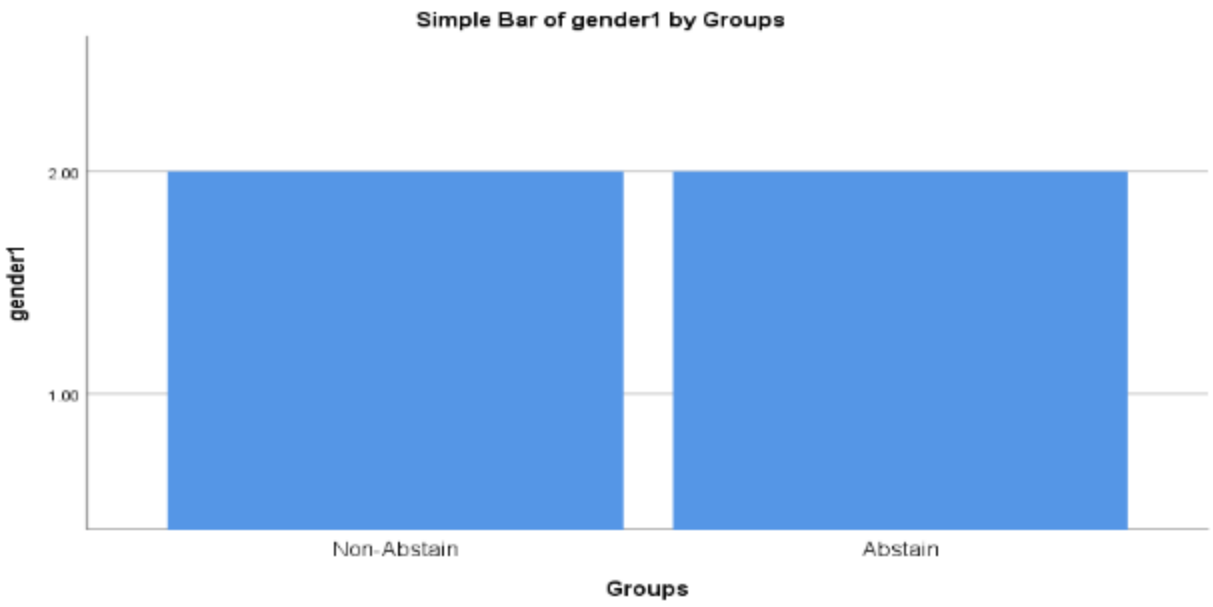
H1: There will be a significant difference in mindfulness scores for participants based on social media abstinence. There was no significant difference in mindfulness scores based on social media abstinence, F (1, 65) = 1.632 , p= .206, observed power = .242. In lieu of these results, the hypothesis was rejected and the null hypothesis was accepted.

Figure 1 displays the estimated marginal means of total for males (1) and females (2)



H2: There will be a significant difference in mindfulness scores for participants based on gender. There was no significant difference in mindfulness scores based on gender of the participant F (1, 65) = 1.019 , p= .316, observed power = .169.

Figure 2 displays a bar chart of non-abstain/abstain groups for males (1) and females (2)



H3: There will be a difference in mindfulness scores for participants based on social media abstinence and gender. This hypothesis aimed to test the interaction between the two independent variables however there was no significant statistical difference, F(1, 65) =.909 ,p = .344, partial eta squared = .014, observed power = .156

Upon completion of the hypothesis testing, the insignificant results indicate that all three hypotheses were rejected.

Discussion

4.1 Overview of Discussion

The relationship between social media abstinence, gender, and mindfulness is a relatively new field of research that has only begun to be explored in the past decade. This current study found no significant relationship between social media abstinence, gender, and mindfulness. When formulating the research questions, this study drew from recent literature that examined the relationship between social media abstinence and gender and their effects on mindfulness such as Valley & D'Souza's (2019) work on abstinence from social media use. The researchers focused on the effects that abstinence has on subjective well-being, stress and loneliness. Additionally, the researcher examined a study carried out by Przybylski et al., (2020) which reported that a moderate screen time engagement (1-2 hours per day) can increase psychological functioning compared to higher or lower screen engagements times.

4.2 Findings

Hypothesis 1 stated that there would be a significant difference in mindfulness scores for participants based on social media abstinence. This hypothesis was rejected. After calculating the data, there was no significant difference between mindfulness scores for those participants who abstained from social media and those who did not. These results, in comparison to the present literature in this field, were similar as some literature has found no significant difference, however there is some variation in previous findings with other studies reporting significant differences. In a study conducted by Hall et al. (2019) where participants were randomly assigned to abstinence/non-abstinence groups for periods of time ranging from 1-4 weeks, findings showed that there was no main difference in well-being and mindfulness levels based on social media abstinence. In comparison to this current study, a difference that can be found is that the participants abstained for a shorter period of time (1 hour per day for 3 days) however results for both studies showed no significant difference between the independent variables and target variable. However, Valley & D'Souza (2019), compared the difference in life satisfaction and loneliness between a control group and a group who abstained from social media for 7 days where social media abstinence showed increased levels of loneliness and a decrease in life satisfaction

Hypothesis 2 stated that there would be a significant difference in mindfulness scores for the participants based on gender. This hypothesis was rejected as there was no significant difference between the variables after the analysis. In contrast to the current literature on gender and mindfulness,

the insignificant results are similar to previous studies however previous literature has shown some significant differences in gender and mindfulness. In a study conducted by Alispahic & Hasanbegovic-Anic (2017), where participants were asked to complete a five factor mindfulness questionnaire, women scored higher than men on the subscale Observing while men scored higher on the subscale Acting with awareness. The results of the study showed a significant difference in gender for some aspects of mindfulness. Similarly, Rojiani et al. (2017), who recruited participants from the USA, reported that men and women experience and portray alternating trajectories of psychological symptomatology when focussing one's attention to a present moment or engaging in a mindfulness or awareness task. However, in the study conducted by Alispahic & Hasanbegovic-Anic (2017), the participants were solely from the region of Bosnia and Herzegovina, thus there may be cultural differences effecting the results of the study compared to the current study. Additionally, the mindfulness scale used in the current study focused on mindfulness in a broad sense rather than examining subscales which could have been another reason for insignificant results.

Hypothesis 3 stated that there will be a significant difference in participants' mindfulness scores based on their social media abstinence and their gender. This hypothesis aimed to test the interaction between the two independent variables on the DV (mindfulness). This hypothesis was rejected as there was no significant interaction found. Previous literature shows alternating results regarding the interaction. According to Brown & Kass (2020) there was no significant difference in MWB (mental well-being) or mindfulness in males and females after a 7-day social media abstinence period.

4.3 Strengths and Limitations of Study

Firstly this study contributes to the field of social media abstinence, gender, and their effects on mindfulness in psychology and has added research to the gap that currently exists in this area. Literature surrounding this concept is still bare and there is a lot of room for further developments. There have been similar studies conducted employing the same variables, Alispahic & Hasanbegovic-Anic (2017), however the current study employed primarily Irish participants which looks at the topic from an Irish perspective which has not been done before. This study was conducted in the midst of a pandemic during uncertain times which have differed from previous years. The pandemic has had an effect on emotion regulation and mindfulness. As people are not experiencing normal levels of wellbeing and mindfulness, Guintella et al., (2021), a pandemic could be a confounding variable in this research.

According to Conversano et al. (2020), high dispositional mindfulness enhances well-being which contributes to dealing with stress during the covid-19 pandemic.

Secondly, the study used a reliable and valid scale with the employment of the Mindfulness Attention Awareness Scale (MAAS), Brown & Ryan (2003). Reliability and validity are fundamental indexes in measuring and obtaining true results (Mohammadbeigi et al., 2015). Cronbach's alpha (α=.73) was reported in the method section ensuring the reliability and validity of the scale.

A limitation of the study was the exclusion of 30 participants due to incomplete surveys. Participants in the abstinence group were required to fill out an information sheet before being asked to abstain from social media for one hour per day for three days. Thirty surveys were not followed up despite the researcher emailing a reminder to each participant. This in turn led to a smaller sample size which stopped the study from reaching its G*Power calculated sample size and limited the results. The study also employed convenience sampling in the hope that snowball sampling would follow. The number of participants yielded by the snowball sampling was extremely limited which restricted the results.

4.4 Theoretical and Practical Implications

The present study has contributed to the scarce field of social media abstinence, gender, and mindfulness studies that have provided a mixed set of results thus far. Although this study did not yield any significant results, the existing literature does show some levels of significance between gender and social media abstinence on mindfulness as well as some insignificance. This study employed a mindfulness scale (MAAS) that examined mindfulness as an entity rather than breaking it down into sub scales which could be a reason for insignificant results. It is important to consider studies such as Rojiani et al. (2017), who examined how men and women differ in psychological symptomatology portraying alternating trajectories. Examining the difference between psychological functioning in men and women when researching mindfulness will help increase the accuracy of the results produced from group difference studies such as the present study. It is possible that the societal fears surrounding excessive social media usage are not substantially based on research findings.

4.5 Future Research

The relationship between gender and social media abstinence on mindfulness is one that has not been researched extensively. Research conducted by Alispahic and Hasanbegovic-Anic, (2017) has reported that men and women differ on the subscales observing and acting with awareness on a mindfulness questionnaire and in contrast Brown and Kass (2020) reported that there is no significant difference in mindfulness scores for men and women after a 7-day abstinence period. These results are conflicting and the body of research as a whole shows no significant pattern. More research in this area is worth examining for further significant results. As previous literature shows discrepancies between the psychological functioning of men and women, future research could employ a more large-scale investigation for a more accurate result.

As this research was conducted during a pandemic with the majority of participants being mainly online for work and college, future research could examine the effects of transitioning back into the office or workspace. This study has reported that the covid-19 pandemic has caused an increase in stress levels with higher dispositional mindfulness being more effective in the processing of stress (Conversano et al. 2020). Future research could examine the relationships between social media abstinence, gender and mindfulness outside a pandemic and compare the results with those gathered during one.

A suggestion for future research would be to employ additional variables such as job type and job satisfaction. These variables could have an effect on dispositional mindfulness prior to the investigation. Future research could include these variables as covariables to test if there is a significant difference between groups and between genders and to further understand the relationship between mindfulness and social media abstinence.

4.6 Conclusion

In conclusion, the present study aimed to examine the effects of social media abstinence and gender on mindfulness. The results of the study showed insignificant results between social media abstinence and mindfulness. Additionally the study showed no significant results between gender and mindfulness. Previous literature in this area is not yet substantial and there is a pattern of alternating results from one study to the next. Different styles of method and various sample sizes resulting in different results may be an explanation for this. This study has provided more depth into the field of mindfulness studies and its findings have theoretical implications however, the limitations of the study must be considered. Future research can learn from the limitations of this study by increasing the sample size in order to produce enough power for the statistics and by employing additional variables.

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Appendices

6.1 Appendix A: Information Sheet

Title of project: *Social Media Abstinence and its effect on Mindfulness Levels*

You are being invited to take part in the research that aims to investigate the effects that social media has on mindfulness. This project is being undertaken by Jacob Green for our major research project as part of the BSc in Applied Psychology, IADT.

Before you decide whether you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with someone you trust. If there is anything that is unclear or if you would like more information please ask, our contact details are at the end of this information sheet. Thank you for reading this.

What is the purpose of the project?

As the world gets more technologically advanced, people are using more social media for entertainment, connection with others, procrastination and many other reasons. This research aims to examine if a short period of social media abstinence will have an effect on Mindfulness.

Who is/Why are you being invited to take part?

This study is intended for people within the age bracket of 18-50 who are regular social media users.

What is involved?

Should you choose to participate you will be asked to fill out a short survey pertaining to your social media usage. You will be allocated to one of two groups. Group one will be required to fill out the survey which will take roughly 10 minutes to complete. It will contain statements about mindfulness, receptive awareness, and attention and you will be asked to select how you feel on a 6 point scale ranging from strongly agree to strongly disagree. Group two will be asked to abstain from social media for a period of one hour before they go to sleep for 3 days. They will then be required to take the survey. An email will be sent to remind them to take the survey.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part, you will be asked to sign a consent form that lets us know you have read this information sheet and understand what is involved in the research. You are free to withdraw from this study at any time and without giving reasons.

What are the disadvantages and risks (if any) of taking part?

The study should not cause any harm or discomfort to participants.

What are the possible benefits of taking part?

Although we cannot promise that the study will benefit you, the information that we gather can help to increase the understanding of the psychology behind social media usage, its abstinence, and its effects on Mindfulness.

How will my information be used?

Your responses to the questionnaire will be combined with all other participants' data and statistically analysed. No individual's data will be identifiable in the final report. Participants will be identified by

their unique id code. The results of this analysis will be reported in the thesis for the BSc in Applied Psychology in the Dun Laoghaire Institute of Art, Design & Technology. This can be requested through the library at IADT, or by emailing the researcher or supervisor at N00181575@student.iadt.ie and nicola.fox-hamilton@iadt.ie. This study may also be published in an academic journal article and may be written about for blog posts or media articles and these can be requested from the researcher.

How will my data be protected?

Under the EU General Data Protection Regulation (GDPR) the legal basis for collecting data for scholarly research is that of public interest. The regulations regarding the protection of your data will be followed. Only data which is needed for analysis will be collected. By giving your consent to take part in the study you are consenting to the use of your data as detailed in this information sheet.

The data will be retained by the researcher for at least one year, and may be retained for up to 7 years if the results of the study are published in certain capacities (e.g. in a journal article). There is also a possibility that the fully anonymised dataset may be submitted to a journal and made available to other researchers and academics worldwide for verification purposes, but if this occurs it will be ensured that you are not identifiable from the data.

As the supervisor on this project, I, Dr Nicola Fox Hamilton, am responsible for ensuring that all datasets will be stored in accordance with GDPR regulations and those which are not submitted to a journal will be fully deleted on or before 12/01/2029

You will find contact information for IADT's Data Protection Officer, Mr Bernard Mullarkey, and more information on your rights concerning your data at https://iadt.ie/about/your-rights-entitlements/gdpr/

Who has reviewed the study?

This study has been approved by the Department of Technology and Psychology Ethics Committee (DTPEC).

What if you have any questions or there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do their best to answer your questions. You should contact Jacob Green (N00181575@student.iadt.ie) or their supervisor Dr Nicola Fox Hamilton (nicola.fox-hamilton@iadt.ie)

Thank you

Date 24/01/22

6.2 Appendix B: Consent Form

Consent Form

Title of Project: Social Media Abstinence and its affects on Mindfulness

1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. *

   yes

2. I understand that my participation is voluntary and that I am free to withdraw at any time. *

   yes

3. I understand that data collected about me during this study will not be identifiable when the research is published. *

   yes

4. I am over 18 *

   yes

5. I agree to take part in this study. *

   yes

6.3 Appendix C: Demographic Information

Demographic Questions

6. Please state your gender

- ○ Woman
- ○ Man
- ○ Non-binary
- ○ Prefer not to say
- ○ Prefer to self-describe

7. If you prefer to self-describe, please feel free to do so here

Enter your answer

8. What is your age ? (in years)

Enter your answer

9. What is your email address ?

Enter your answer

10. Please create a unique identity code. (ie. your initials + last 3 digits of your phone number) e.g JG846 *

Enter your answer

6.4 Appendix D: Debrief

Title of Project: Social Media Abstinence and its effects on Mindfulness

Name of Researcher: Jacob Green

Thank you very much for taking part in this research study.

As the world gets more technologically advanced, people are using more social media for entertainment, connection with others, procrastination and many other reasons. It is becoming more important to examine the effects of social media on its users. Your participation in this research will help to examine if a short period of social media abstinence will have an effect on Mindfulness.

Withdrawal information

If you have any questions about this study, or if you would like to withdraw your data from the study, please contact the researcher or supervisor at N00181575@student.iadt.ie and nicola.fox-hamilton@iadt.ie . In your email let them know your unique ID code Eg: initials and last 4 digits of phone number. If you submit a request for data removal, all data collected from you will be securely deleted. You will be able to remove your data from the study until 16/02/22 when the data will be combined and analyzed. Data removal will not be possible after that date. Please keep a copy of this information in case you wish to remove your data after leaving this screen.

Data protection

Your data will be treated according to GDPR regulations. You will find contact information for IADT's Data Protection Officer, Mr Bernard Mullarkey, and more information on your rights concerning your data at https://iadt.ie/about/your-rights-entitlements/gdpr/

Support Resources

If you have been effected by the content of this study in any way, the organizations below may be of assistance.

HSE Mental Health Services - https://www.hse.ie/eng/services/list/4/mental-health-services/

Thank you again for taking the time to participate in this research.

If you have any questions about this study, please contact the researcher or supervisor at N00181575@student.iadt.ie and nicola.fox-hamilton@iadt.ie

6.5 Appendix E: Mindfulness Attention Awareness Scale (MAAS)

Day-to-Day Experiences

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what *really reflects* your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I could be experiencing some emotion and not be conscious of it until some time later.	1	2	3	4	5	6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1	2	3	4	5	6
I find it difficult to stay focused on what's happening in the present.	1	2	3	4	5	6
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.	1	2	3	4	5	6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1	2	3	4	5	6
I forget a person's name almost as soon as I've been told it for the first time.	1	2	3	4	5	6
It seems I am "running on automatic," without much awareness of what I'm doing.	1	2	3	4	5	6
I rush through activities without being really attentive to them.	1	2	3	4	5	6
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.	1	2	3	4	5	6
I do jobs or tasks automatically, without being aware of what I'm doing.	1	2	3	4	5	6
I find myself listening to someone with one ear, doing something else at the same time.	1	2	3	4	5	6

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I drive places on 'automatic pilot' and then wonder why I went there.	1	2	3	4	5	6
I find myself preoccupied with the future or the past.	1	2	3	4	5	6
I find myself doing things without paying attention.	1	2	3	4	5	6
I snack without being aware that I'm eating.	1	2	3	4	5	6

MAAS Scoring

To score the scale, simply compute a mean of the 15 items. Higher scores reflect higher levels of dispositional mindfulness.

6.6: Appendix F: Reliability and Validity of Scale

Case Processing Summary

		N	%
Cases	Valid	69	98.6
	Excluded[a]	1	1.4
	Total	70	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.725	.739	15

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted

I could be experiencing some emotion and not be conscious of it until some time later.	44.58	67.218	.272	.138	.716
I break or spill things because of carelessness, not paying attention, or thinking of something else.	43.93	65.774	.229	.434	.722
I find it difficult to stay focused on what's happening in the present.	44.57	64.043	.369	.274	.707
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.	45.28	65.761	.194	.403	.727
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	44.38	69.621	.067	.119	.736
I forget a person's name almost as soon as I've been told it for the first time.	44.87	65.321	.204	.277	.727
It seems I am "running on automatic," without much awareness of what I'm doing.	44.87	61.762	.542	.507	.690
I rush through activities without being really attentive to them.	44.51	59.548	.546	.440	.685
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.	44.51	62.783	.386	.300	.704
I do jobs or tasks automatically, without being aware of what I'm doing.	44.71	62.415	.492	.506	.695
I find myself listening to someone with one ear, doing something else at the same time.	44.93	64.156	.310	.269	.713
I drive places on 'automatic pilot' and then wonder why I went there.	43.96	63.366	.318	.258	.712
I find myself preoccupied with the future or the past.	45.45	66.280	.255	.357	.718
I find myself doing things without paying attention.	44.94	61.055	.657	.680	.682

6.7: Appendix G: Ethical Application and approval

Section 0: For Completion by the Supervisor

I confirm that this application to the DTPEC by _____Jacob Green_____ (student name) accurately reflects all of the ethical implications in the project.

Application type (tick all that apply for mixed methods): Green Route _____

Amber Route __x__

Red Route _____

Signed _  _____ **Date: _23-22-21_____**

Section 1: Project Information

Student Name: Jacob Green_____

Student Email Address: ___N00181575@student.iadt.ie_____

Supervisor Name: Dr. Nicola Fox-Hamilton_____

Working Project Title: Examining the effects of Social media abstinence and gender on Mindfulness

Main Variables Being Investigated: Social Media Abstinence, Gender, Mindfulness

Section 2: External Agencies

Does your project involve recruitment from any external agency (e.g. a school, sports club, medical centre, voluntary organisation, or any other organisation outside of the IADT)?	Yes*	No X
* You must include a letter from a senior manager of each organisation stating that you have approval to collect data within that organisation. Include copies each of these letters in the Appendices to your application. If the organisation has its own ethical review board (which is very common in some settings, such as hospitals), then you are also required to get ethical approval from that board prior to starting data collection, and to submit notice of this approval to your supervisor so that it can be forwarded on to the ethics committee. Some online forums also require permission to post requests for participants – make sure to check the relevant forum/organisation's code of conduct or terms and conditions. You do not need to include approval letters if you are conducting recruitment using mainstream social media routes (e.g., Twitter, Instagram, Facebook, Snapchat, TikTok) to your own followers, and/or snowball sampling/word of mouth recruitment.		

Section 3: Project Methodology – Please tick which type of project you are seeking approval from the DTPEC for. If your project involves mixed methods, then tick all which apply.

Route Type	Methodology	Tick here
Green Route (no direct contact with participants required, and no data is collected/recorded which could identify participants)	Theoretical paper / systematic literature review	
	Novel analysis of an existing dataset gathered by another researcher or group which you are certain has abided by appropriate ethical procedures for the relevant discipline	
	Observation of participants in a public place in which they could reasonably be expected to be observed by strangers or in an online space which does not require users to log in to access.	
	Content analysis of material which is publicly available and does not require users to log in to access content.	
	Other method without direct contact with participants **	
Amber Route (direct contact with participants, but no additional ethical considerations beyond the minimum requirements)	Requirements gathering for and/or user testing of a prototype which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group	
	An experiment which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group	X
	A survey/questionnaire design which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group	
	An observational study which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group	
	Content analysis research which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group	
	Interviews and/or focus groups which are highly unlikely to cause any harm or distress to participants and which do not aim to collect data from a potentially vulnerable group	
	Other method which is highly unlikely to cause any harm or distress to participants and which does not aim to collect data from a potentially vulnerable group **	
Red Route (direct contact with participants, including one or more project aspects which require special ethical consideration)	Requirements gathering for and/or user testing of a prototype which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group	
	An experiment which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group	
	A survey/questionnaire design which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group	
	An observational study which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group	
	Content analysis research which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group	

	Interviews and/or focus groups which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group	
	Other method which may cause harm or distress to participants and/or which involves collecting data from any potentially vulnerable group **	
** If you are using a methodology not listed above then provide a short description (fewer than 100 words) here:		

Section 4: Checklist of Attached Appendices and Other Completed Sections

Applicable Project Ethics Route Colour Guide		Section / Item	I have attached this item/completed this section	I have checked with my supervisor and we have agreed that this item/section is not relevant to my project
	1	Section 1	X	
	2	Section 2		
	3	Section 3	X	
	4	Section 4	X	
	5	Letters of permission from any external agencies to be used for data collection		X
	6	Statement of approval from ethical review boards in external agencies		X
	7	Section 5 (Green Route Projects only)		X
	8	Section 6 (Amber and Red Route Projects only)	X	
	9	Section 7 (Amber Route Projects only)	X	
	10	Section 8 (Red Route Projects only)		X
	11	Section 9 (Red Route Projects only)		X
	12	Evidence of why you need to complete a Red Route Project (see note in Section 8)		X
	13	Project Information Sheet (Red Route Projects only)		x
	14	Project Consent Form (Red Route Projects only)		X
	15	Project Demographic Questionnaire (Red Route Projects only)		X
	16	All Other Questionnaires and Data Collection Materials (Red Route Projects only)		X

Section 7: Declaration of an Amber Route project

I hereby declare that my project involves no risk of physical, emotional, social or cognitive harm to participants; that I will obtain full informed consent from all participants and provide a full debrief afterwards that I will provide full anonymity and/or confidentiality to participants; and that my participants are not a potentially vulnerable population. In addition, I will ensure that all data which I gather is held in a manner which is compliant with GDPR, and will be deleted once it is no longer required (and definitely within 6 years of collection). At all times my study will be conducted in adherence to the ethical policies of the Psychological Society of Ireland and the British Psychological Society.

Student Signature: Jacob Green Date: 23/11/21 bv

DL825 Year 4 MRP Green and Amber Ethics Applications December 2021

The following Ethics applications have been approved:

Alessia Merkes	Jake Richardson
Alison Deegan	Jason Chatham
Amy Benton Byrne	Jordan McDonnell
Ana Neres Borges	Kate Lifely Stafford
Andrea Farrelly	Katie Jenkinson
Angela Hegarty	Killian Schonfeld
Anita Hovarth	Lukas Dillon
Armandas Bendaravicius	Lynda Brady
Chloe O'Connor	Mark Byrne
Ciara Little	Matthew Delaney
Ciaran Nally	Megan Doherty
Cliona Gaffney Moran	Molly Kavanagh
Clodagh McCarthy	Niamh Dennehy
Danny Corbin	Nicholas Rooney
David O'Hagan	Nora Noone
Dora Krstulovic	Owen Cooney
Eamonn Cooke	Peter Conlon
Eden Bryan	Samual Edomwonyi
Emilja Gostautaite	**Sarah Flavin**
Gemma Clabby	Stuart Kavanagh
Jack Condron	Yvonne McNulty
Jacob Green	Sabrina Bacinschi

6.8: Appendix H: Spss Analysis Output

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	gender1	Statistic	df	Sig.	Statistic	df	Sig.
Total	1.00	.098	34	.200*	.952	34	.141
	2.00	.091	35	.200*	.975	35	.579

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
Total	Based on Mean	1.506	3	65	.221
	Based on Median	1.435	3	65	.241
	Based on Median and with adjusted df	1.435	3	60.446	.241
	Based on trimmed mean	1.476	3	65	.229

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.[a,b]

a. Dependent variable: Total

b. Design: Intercept + gender + Groups + gender * Groups

Tests of Between-Subjects Effects

Dependent Variable: Total Mindfulness Scores

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1.618[a]	3	.539	1.718	.172	.073
Intercept	615.802	1	615.802	1962.369	.000	.968
Gender	.320	1	.320	1.019	.316	.015
Groups	.512	1	.512	1.632	.206	.024
Gender * Groups	.285	1	.285	.909	.344	.014
Error	20.397	65	.314			
Total	718.563	69				
Corrected Total	22.015	68				

Tests of Between-Subjects Effects

Dependent Variable: Total

Source	Noncent. Parameter	Observed Power[b]
Corrected Model	5.155	.429
Intercept	1962.369	1.000
gender1	1.019	.169
Groups	1.632	.242
gender1 * Groups	.909	.156
Error		
Total		
Corrected Total		

a. R Squared = .073 (Adjusted R Squared = .031)

b. Computed using alpha = .05

Estimates

Dependent Variable: Total

Groups	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Non-Abstain	3.124	.091	2.943	3.305
Abstain	3.310	.113	3.083	3.536

Pairwise Comparisons

Dependent Variable: Total

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Non-Abstain	Abstain	-.186	.145	.206	-.476	.105
Abstain	Non-Abstain	.186	.145	.206	-.105	.476

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Dependent Variable: Total

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Contrast	.512	1	.512	1.632	.206	.024	1.632	.242
Error	20.397	65	.314					

The F tests the effect of Groups. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05