YOU ARE WHO YOU EAT WITH: HOW DINING CHOICES CHANGE IN SOCIAL SCENARIOS

by

Alexandra Nicoletti

A Senior Honors Project Presented to the

Honors College

East Carolina University

In Partial Fulfillment of the

Requirements for

Graduation with Honors

by

Alexandra Nicoletti

Greenville, NC

May, 2021

Approved by:

Dr. Michael Baker

Department of Psychology, East Carolina University

Abstract

Social interactions play a key role in meal choice. Decisions on meal choice are made on factors such as personal preference, nutrition knowledge, convenience, hunger levels, economic factors, and psychological factors. When dining with a stranger, individuals may choose a meal they believe will leave an impression on their dining partner. The purpose of the current study is to understand the role of social factors on meal choice, specifically the role of perceived attractiveness of an individual. After arriving at the laboratory, two participants who were previously unacquainted spent time getting to know each other. Next, participants were provided with a menu to a fast-casual restaurant and asked to consider what they would order if they were in a restaurant ordering a meal for themselves. Participants who were randomly assigned to a private order condition were asked to not discuss their order with their partner, while those who were randomly assigned to a public order condition were asked to discuss and take their partner's order. Finally, participants completed questionnaires measuring their relationship status, social motives, social interaction anxiety, self-presentation, and their opinions about the other participant who they met during the experiment. The primary hypothesis is that among heterosexual individuals who are not currently in a romantic relationship and who tell their partner their order, individuals will choose meals with fewer calories when they perceive their opposite-sex partner as attractive.

Word count: 5002

Keywords: Meal choice, social scenarios, attractiveness

You Are Who You Eat With: How Dining Choices Change in Social Scenarios

Take a minute to think about what you want for dinner tonight. If you are alone, you may order take-out from your favorite restaurant, or maybe cook your favorite meal. If you are eating in the presence of another person such as a friend or significant other, you may choose your meal differently. Your choice will probably depend on factors such as personal preference, nutrition knowledge and beliefs, convenience, hunger levels, economic factors, and psychological factors (Birkenhead & Slater, 2015). How about if you are dining with an attractive individual who you do not know well? Your meal choice may be influenced by a desire to make a good impression on the individual.

The character of a stranger is often judged based on the appearance of that person (Willis & Todorov, 2006). Further character judgments are made based on the decisions an individual makes, such as the food they eat (Steim & Nemeroff, 1995). If an individual orders a meal that is perceived by another as healthier, they may be seen as having more concern about their health or body-image. If a person orders a high calorie meal, another individual may judge them as less conscientious about their health. Not only are "good food-eaters" perceived as caring about their health, they are also viewed as having better morals and seen as more feminine, likeable, and attractive (Steim & Nemeroff, 1995). A person's concern about how they are perceived by others may be reflected in their meal decision. If a person wants to be perceived as likeable and attractive, they may order meals with fewer calories.

Sex differences in judgements of food consumption are apparent in social situations. Judgements on both the type and amount of food consumed are made while in presence of others for both males and females (Vartarian et al., 2007). The well-known phrase "you are what you eat" explains many of the typical judgements made about individuals when consuming food.

Many food-preference traits, such as low-fat foods, are judged as more feminine than masculine in both men and women (Vartarian et al., 2007). Low-fat foods are also seen as intelligent and moral, but boring. Individuals who order healthy food are viewed as smaller than individuals who do not order healthy food. Although healthier females may be viewed as more attractive, it is more likely that smaller females are viewed as more attractive. Femininity is linked to thinness for women, which could contribute to the amount of food eaten by different sexes (Vartarian et al., 2007). Females who order a smaller meal size are more concerned with their appearance and viewed as more attractive as meal size decreased (Bock & Kanarek, 1995). Food preference and consumption is complicated and varies from person to person, but the influence of sex and societal norms could outweigh personal preferences often.

There may be further differences in meal preference based on sex. Since the beginning of animal food consumption, men hunted animals while women gathered food to supplement the meat (Love & Sulikowski, 2018). Hunting may have been used as a social signal (Hawkes & Bliege Bird, 2002). As a result, meat is often associated with power and masculinity and may be associated with social cues in dining scenarios (Love & Sulikowski, 2018; Hawkes & Bleige Bird, 2002). In the current study, men may choose meals higher in meat-protein while women may choose meals with lower caloric amounts when wanting to make a positive impression on their partner.

Prior Research

What a person orders from a restaurant depends on who they are, their beliefs, and who they are with. Although there is significant evidence that social interactions influence dining scenarios, there is a gap in literature exploring how physical attractiveness influences meal decision-making (Baker et al., 2019). In Baker's previous study, he began to close the gap in

literature with an online study presenting a hypothetical dining scenario. Participants were randomly assigned to one of seven hypothetical dining scenarios. Participants were either partnered with one of three men or women of varied attractiveness levels, or presented with a "dining alone" scenario. This study found that decisions on meal choice depend on the social environment, as well as personal preference. Heterosexual individuals who were not in a romantic relationship and who were assigned a hypothetical dining partner in the online experiment indicated that they would order fewer calories if they perceived the opposite-sex individual as attractive (Baker et al., 2019).

The current study is an expansion of the previous online study. The goal of the current study is to continue to close the gap in literature exploring the social influences of meal-decision making in a real-life scenario, rather than a hypothetical scenario. This study aims to gain a deeper understanding of the role that attractiveness of another individual plays in nutritional decision-making. We predict that relationship status, sexual orientation, and participant sex play a key role in meal decision-making when considering the role of a potentially attractive opposite-sex individual. The attractiveness of an individual is based on their partner's rating of attractiveness. Other factors under investigation that may have an influence on dining choices are privacy condition (public or private), and fundamental social motives such as mate retention, affiliation, and disease-avoidance. Fear of negative evaluation and social anxiety may also play a role in meal choice.

The Influence of Face Masks

Partway through collecting data for this experiment, the COVID-19 pandemic altered many of the social gatherings in our country. The social impacts of wearing face masks have only recently became a major factor due to the pandemic, and it appears that the concerns will

not be going away any time soon. Face masks are the "new-normal" with fashionable, colorful designs and accessories (Goh, et. al., 2020). After initial postponement of this study, data collection for this experiment was only slightly altered. Students were required to wear face masks, maintain a six-foot distance, and desks, keyboards, and mouses were wiped down before the experiment began. However, mask-wearing could have implications on social interactions between individuals. A person's character is immediately evaluated based on their appearance, especially the appearance of a person's face (Willis & Todorov, 2006). With the lack of facial information in mask-wearing, the judgements of a person's character may differ. Previous research claims that with less facial information present, there is an increase in perceived attractiveness (Sadr & Krowicki, 2019).

Choosing a mate who is associated with health, immunocompetence, and genetic fitness is beneficial in an evolutionary context (Ainsworth & Maner, 2019). Pathogen avoidance does have an effect on mate-preference (Ainsworth & Maner, 2019). In the context of Coronavirus, wearing a mask, even when required to, may increase the perceived pathogen-avoidance characteristics of an individual, contributing to their partner's impression. The increase in perceived pathogen-avoidance in addition to the lack of facial information of another individual could alter the judgements made by individuals. Aside from the main hypotheses, we predict that heterosexual individuals who are not in a romantic relationship and who were wearing face masks will, in general, rate their opposite-sex partners as more attractive than heterosexual individuals prior to the Covid-19 outbreak, who were not wearing face-masks.

The main hypothesis for the current study is among heterosexual individuals who are not currently in a romantic relationship and who tell their partner their order, individuals will choose meals with fewer calories when they perceive their opposite-sex partner as attractive. We predict

that this effect will be more prominent in females than males. We also predict that individuals who are rated as more attractive will order fewer calories than those who are rated as unattractive. In other words, a person's perception of attractiveness could be based on what they order, rather than an individual's order based on the person's perception of attractiveness. Third, we predict that among individuals who score high on social interaction anxiety, fear of negative evaluation, or exclusion concern, individuals will order fewer calories when telling their partner their order, regardless of who their partner is. Last, we predict that when sharing meal choice with an attractive opposite-sex partner, heterosexual men who are not currently in a romantic relationship will be more likely to order red meat-based protein than females.

Methods

Participants

Two hundred eight undergraduate students at a southeastern United States university participated in this experiment. Participants received credit toward a class requirement for Introductory Psychology. An alternative assignment was provided for students who did not wish to participate in the study. Students who did not wish to participate in the study were provided with an article and required to answer questions about the article. Of the 208 students who did participate, 104 (50%) were male and 104 (50%) were female. The mean age of participants was 19.15 and participant's ages ranged from 18 to 36. 128 participants participated prior to the COVID-19 outbreak (before March 2019), and 46 participants participated after the initial COVID-19 outbreak (after September 2020). The 46 participants who participated after the initial COVID-19 outbreak were required to wear face masks and maintain social distancing.

Materials and Procedures

Participants signed up for an available time-slot on the university's Experimentrak website. Each time-slot was available for two people. Participants came to the lab at their scheduled time and each sat at a separate computer. After the COVID-19 outbreak, the computers, keyboards, and mouses were sanitized prior to the participants' entry. At this time, participants were also required to wear face masks and their chairs were to maintain a six-foot distance.

Participants silenced their cell phones and placed them in their bags. Participants then completed a consent document. During the first task, they spent five minutes talking and getting to know each other. Ice-breaker questions were provided, but they were encouraged to talk about whatever they would like. Next, the participants were provided with a menu to a fast-casual restaurant. At this point in the experiment, participants were randomly assigned to two different conditions: a "public" condition and a "private" condition. In the public condition, participants spent time discussing what they would like to order with their partner. This group input their partner's order into their own computer, ensuring they discussed their orders with each other. In the private condition, participants were told *not* to discuss their meal choice with their partner. These participants were asked to input their own order into their computer. The experimenter left the room during each section of the study so that participants were not influenced by another person.

The menu for the fast-casual restaurant had a variety of meals including sandwiches, salads, soups, burgers, Mexican bowls, chicken, flatbread pizza, and non-alcoholic beverages. Nutritional information was included on the menu such as calories, fat content, and carbohydrates. Price was not included to exclude financial concern as a deciding factor in meal choice.

After participants entered their menu orders, participants answered a few questionnaires. Participants were first asked if they were in a romantic relationship and if they had any children. Next, participants filled out the Fundamental Social Motives Inventory (FSMI), which is a 7-point scale ranging from 1 (disagree strongly) to 7 (agree strongly) (Neel et al., 2016). This inventory has 66 questions and analyses the fundamental social motives of self-protection, disease avoidance, affiliation, status, mate seeking, mate retention, and kin-care. The FSMI consists of statements such as "I think about how to stay safe from dangerous people" and "getting along with people around me is a high priority" (Neel et al., 2016).

Next, the Brief Fear of Negative Evaluation Scale was completed (Leary, 1983). This is a 5-point scale ranging from 1 (not at all characteristic of me) to 5 (extremely characteristic of me). This evaluation scale measures levels of social anxiety. This scale measures statements such as "I am afraid others will not approve of me" and "Other people's opinions of me do not bother me" (Leary, 1983).

Next, the Self-Monitoring Scale was completed. This uses a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree) with 12 questions (O'Cass, 2000). The Self-monitoring Scale measures one's ability to modify self-presentation and the sensitivity to expressive behaviors of other people. Examples of statements on this scale are "in social situations, I have the ability to alter my behavior if I feel that something else is called for" and "I am often able to read people's true emotions correctly (through their eyes)" (O'Cass, 2000).

Next, the Social Interaction Anxiety Scale was completed. This uses a 5-point scale ranging from 0 (not characteristic or true of me) to 4 (extremely characteristic or true of me) (Mattick & Clark, 1998). This scale has 20 questions and measures anxiety in social situations.

This scale measures statements such as “I get nervous if I have to speak to someone in authority (teacher, boss, etc.)” and “I find it easy to make friends my own age” (Mattick & Clark, 1998).

Next, each person rated how friendly, nervous, fearful, caring, attractive, dominant, and rude they thought their partner was on a range from 1-7, with 1 being “not at all” and 7 being “extremely.” Participants answered whether they knew their partner before the experiment.

Toward the end of the questionnaires, participants answered questions on their ethnicity, race, relationship status, age, sex, gender, and sexual orientation. If the participant indicated they were in a romantic relationship, they were asked to estimate how long they have been dating their romantic partner. Last, participants were asked to explain their best guess on the topic of the experiment. After completion of the experiment, participants were given a debriefing statement which gave them more information on the purpose of the study.

Results

Of the 208 participants, 174 were included in the results (83.65%). 19 participants indicated that they preferred romantic/sexual relationships with members of the same sex or had no preference (sexual orientation) and were not included because several hypotheses incorporate an assumption that participants have heterosexual preferences. Participants were excluded if they ordered meals over 2,590 calories, as data points in this range were considered to be outliers since they exceeded three absolute deviations from the median (Leys, et al., 2013). 15 participants fell into this category and were excluded for ordering meals above 2,590 calories. Of the 174 participants included in the results, 87 were male (50%) and 87 were female (50%). 85 participants were in the “public” condition (48.9%) and 89 were in the “private” condition (51.1%). 95 participants had a same-sex partner (54.6%) and 79 had an opposite-sex partner (45.4%). There were 46 participants included in the results who participated after the COVID-19

outbreak and were required to wear face-masks and maintain social distancing requirements for the duration of the experiment. The ages of participants who were included ranged from 18-36 with the mean age 19.07, median age 19, and standard deviation 2.01.

In the first hypothesis, we predicted that among heterosexual individuals who are not currently in a romantic relationship and who tell their partner their order, individuals will choose meals with fewer calories when they perceive their opposite-sex partner as attractive. We also predicted that this effect will be more prominent in females than males. A 2x2x2x2 Between-Subjects ANOVA with one continuous predictor was conducted to determine the effect of private or public condition, participant sex (female or male), relationship status (involved or not involved), same or opposite sex partner, and partner attractiveness ratings on total calories ordered. The analysis revealed two significant interactions. The first significant interaction was a 3-way interaction between sex, relationship status, and partner attractiveness on total calories at the p<.05 level where [$F(1,142) = 4.16$, $p = .043$, $\eta_p^2 = .028$]. The second significant interaction was between sex, same or opposite sex partner, and partner attractiveness on total calories at the p<.05 level where [$F(1,142) = 8.40$, $p = .004$, $\eta_p^2 = .056$]. To further understand these results, the file was split by the three dichotomous variables (participant sex, relationship status, and same or opposite sex partner). The correlation between attractiveness level and total calories was analyzed for the dichotomous variables. This analysis found that total calories was positively correlated with higher partner attractiveness ratings in men with same-sex partners, $r(46) = .312$, $p = .035$ (see Appendix Figure 1). In contrast, men who had more attractive opposite-sex partners ordered marginally fewer calories, $r(4) = -.298$, $p = .059$ (see Appendix Figure 2). Regardless of relationship status or privacy condition, men with more attractive same-sex partners tended to order meals with significantly more calories. Men with more attractive opposite-sex partners

ordered fewer calories, but the result was not significant. There was also a significant negative correlation between attractiveness and total calories in women who are in a relationship, $r(46) = -.380$, $p = .009$. This analysis reveals that women who are in a relationship order fewer calories the more attractive their partner is, regardless of sex. This result was not the same for men, regardless of relationship status, or for single women.

The second hypothesis tested will be individuals who are rated as more attractive will order fewer calories than those who are rated as unattractive. A Pearson's *r* analysis was conducted to determine if perceived partner attractiveness had any relation to total calorie count. There was no significant correlation between perceived partner attractiveness and total calorie count, $r(174) = -.093$, $p = .223$.

In the next hypothesis, we predicted that among people who score higher on social interaction anxiety, fear of negative evaluation, or exclusion concern, those individuals will order fewer calories when telling their partner their order, regardless of who their partner is. An exploratory analysis was conducted to see if there were any correlations between total calories, exclusion concern, social interaction anxiety, and fear of negative evaluation. The only significant result found was between exclusion concern and total calories. There was a positive correlation between exclusion concern and total calories in single women, $r(17) = .518$, $p = .033$. This analysis expresses that single women who scored higher on exclusion concern ordered significantly more calories.

Next, an exploratory analysis was conducted to understand the relationship between calories and partner condition, regardless of partner sex or relationship status. An independent samples *t*-test was conducted to compare calorie count in the private condition and the public condition. There was a significant difference in score for the public (M=1228.20, SD=560.76)

and private (M=1034.47, SD=663.48) conditions; $t(172)$=-2.08, p=0.039 (see Appendix Figure 3). These results suggest that sharing an order with a partner does have an effect on total calories ordered. Specifically, when an individual shares their order with their partner, the number of calories ordered increases.

In the fourth hypothesis, we predicted that when sharing meal choice with an attractive opposite-sex partner, heterosexual men who are not currently in a romantic relationship will be more likely to order red-meat based protein than females. A 2x2x2 Between Subjects ANOVA with one continuous predictor was conducted to compare the effects of attractiveness levels, participant sex, same or opposite sex partner, and privacy condition on red-meat based protein. There was a significant effect in single women in the public condition on red-meat based protein [$F(1,142)$= 4.80, p=.030, η_p^2=.033] at the p<0.05 level. Single women ordered somewhat more red-meat based protein when in the presence of an attractive partner and while telling their partner their order, $r(17)$=.434, p=.081. There was no effect on red-meat based protein for men, as the hypothesis originally predicted.

Last, our fifth hypothesis predicted that heterosexual individuals who are not in a romantic relationship and who were wearing face-masks will, in general, rate their opposite-sex partners as more attractive than heterosexual individuals prior to the Covid-19 outbreak, who were not wearing face-masks. There were not enough participants in the post-COVID-19 era to test the original hypothesis that heterosexual individuals who are not in a romantic relationship and who were wearing face-masks will rate their partners as more attractive than individuals prior to the COVID-19 outbreak who were not wearing face-masks. However, an interesting finding from the post-COVID-19 era revealed there were significantly fewer calories ordered in participants who participated after the COVID-19 outbreak than participants who participated

before the COVID-19 outbreak. Significantly more calories were ordered before the COVID-19 outbreak (M = 1301.75, SD = 494.70) than after the COVID-19 outbreak (M = 707.64, SD = 707.55), $t(76.16)=5.73$, $p<.001$ (see Appendix Figure 4). A Levene's test revealed unequal variances ($F= 32.22$, $p <.001$), so degrees of freedom was adjusted from 190 to 76.16.

Discussion

Decisions on meal choice depend on many factors. Social implications in meal decision-making include who a person is, who they are dining with, and whether they are telling another person their meal choice. The sample size in this study was lower than originally expected due to set-backs during the COVID-19 pandemic (N=174). Because of the smaller than anticipated sample size and the lower calorie count after the onset of the COVID-19 pandemic, analyses that produced findings that were trending toward significance may change with the collection of additional data.

Men who were assigned same-sex dining partners ordered more calories when they perceived their partner as more attractive, regardless of whether they presented their order to their partner. This was in contrast to findings from previous research showing that among heterosexual individuals who are not currently in a romantic relationship and who tell their partner their order, individuals will choose meals with fewer calories when they perceive a hypothetical opposite-sex dining partner as attractive (Baker et al., 2019). However in the current study, when men were partnered with an opposite-sex dining partner, they ordered nominally fewer calories the more attractive they perceived their partner to be. This finding fell short of statistical significance.

Another important finding was that women who are in a relationship ordered fewer calories the more attractive their partner was, regardless of sex of their partner. This is somewhat

inconsistent with the original hypothesis, which predicted that this would only be the case for individuals who are not currently involved in a committed relationship. More research needs to be done in order to better understand this discrepancy between the findings of the current work and previous research.

Originally, we predicted that individuals who are rated as more attractive will order fewer calories than those who are rated as unattractive. When the analysis was done, this hypothesis was not supported. It is possible that there is no relationship between attractiveness ratings and calorie count. However, it is also possible that limitations surrounding the attractiveness ratings restricted the analyses of these two variables. The attractiveness rating may not have been the most reliable measure because it was a single-item measure. In the future, it may be useful to have a more reliable method for measuring attractiveness.

Another important finding was in the relationship between total calories, exclusion concern, social interaction anxiety, and fear of negative evaluation. The original prediction was that individuals who score higher on affiliation concern, social interaction anxiety, and fear of negative evaluation will order fewer calories when telling their partner their order, regardless of who their partner is. However, the analysis suggested that nominally more calories were ordered in single women who scored higher on exclusion concern, but similar trends were not observed among the other conditions. Although this finding did not reach significance, it was trending towards significance. It is unknown why this trend is only true for single women. More data needs to be collected to determine the reason behind this relationship, as well as determine if the result will change with a larger sample size.

In the fourth hypothesis, we predicted that heterosexual men will order more red-meat based protein than females if they are not currently in a romantic relationship and if they share

their meal order with their partner. Although this hypothesis was not supported, the analysis found that single women ordered more red-meat based protein when sharing their meal order with their partner if they perceived their partner as more attractive. This effect was not significant, but it was trending toward significance.

Last, we originally predicted that the use of face-masks would result in higher ratings of attractiveness for individuals in the post-COVID-19 era, specifically in heterosexual individuals who are not in a romantic relationship and who have an opposite-sex dining partner. This finding was not supported whatsoever. The limited number of participants who participated after the onset of COVID-19 did not provide enough data to conduct a strong analysis on this hypothesis. However, there was an important difference in calorie count from pre-COVID-19 participants compared to post-COVID-19 participants. Individuals ordered significantly more calories before the COVID-19 than after the COVID-19 pandemic. Interestingly, many individuals who participated after the COVID-19 pandemic chose to order just a drink, just water, or no meal at all, which contributed to the difference in total calories ordered in the two groups. To evaluate the reasoning behind this, an exploratory analysis was conducted in an attempt to determine whether "disease avoidance" motives changed, as measured with the disease avoidance subscale of the FSMI (Neel et al., 2016). Interestingly, there was no difference in disease avoidance motives between the participants who completed the study before versus during the first year of the COVID-19 pandemic. It is uncertain why calorie count was much less after the onset of COVID-19. As more data is collected, it will be important to understand if this trend will continue as more time passes from the onset of COVID-19.

One last important finding was in the relationship between partner condition and calorie count. When individuals told their meal order to their partner, the number of calories ordered

increased. This was not specific to participant sex, partner sex, or relationship status. This finding may have important implications for the real-world. When an individual is dining in the presence of another person, they are likely to order meals with more calories. In a real-world scenario, individuals who are trying to be cognizant of their calorie intake may not want to eat in the presence of another person in an effort to minimize their calorie intake.

Limitations and Future Directions

One limitation to this study was the small sample size. It was difficult to find participants after the onset of the COVID-19 pandemic because there were fewer students willing and able to participate in an in-person study. The small sample size may have led the current study to be underpowered, leading some results to fall short of statistical significance. As more data is collected in the continuation of this study, it is possible that the results will change.

Another limitation to the study was the introduction of mandated face-masks for participants and experimenters partway through data collection. Although face-masks did not impact the ratings of perceived attractiveness, it is reasonable to suspect that they impacted the social interactions of participants in some way. It is unclear whether the use of face-masks or the desire to avoid exposure to unfamiliar people during the pandemic affected the decrease in total calorie count. It is possible that both of these factors affected the foods selected by participants. Hopefully the reasoning behind this difference will be understood as more research is collected.

The participants in the current study were mainly between the ages of 19-22, with similar education levels, similar income levels and from a similar region of the country. This is an obvious limitation to the study. This study was more realistic than the previous online study as participants were assigned to a live partner rather than a hypothetical partner (Baker et al., 2019). However, there were still limitations in the procedure. Hunger levels could be an important

factor in meal choice. Participants signed up for time slots ranging from 8:00 a.m. to 5:00 p.m. on weekdays. If participants were signed up during a time period where they were not hungry, total calorie count may decrease. The menu had a variety of lunch and dinner options, so participants who were signed up for a morning time-slot may not have found the meal choices as appealing as participants signed up during later time-slots. The lack of real-food and the laboratory setting also may have impacted calorie count.

In the future, this research could become even more realistic with an in-person dining scenario in a real restaurant. The research assistant could be the waitress or waiter, and the participants could order a real meal from a sit-down restaurant. Although this may add some complications and outside variables, the atmosphere of a restaurant, sitting for a prolonged amount of time with another individual, and eating real food would make the experiment extremely realistic.

Future research should aim to answer questions on why certain results occurred. Although the current work represented an attempt to better understand why men order more calories in the presence of an attractive same-sex dining partner and fewer calories in the presence of an attractive opposite-sex partner, additional research may need to be conducted in order to shed more light on this phenomenon. Additional research with a larger sample size may also need to be conducted in order to understand if there is a change in findings that did not prove significance. Last, as more data is collected, it will be important to understand if calorie-counts will return to normal after the world returns to “normal” following the COVID-19 pandemic. Factors that influence the post-COVID-19 calorie drop need to be considered in future research.

The current study aimed to close the gap in the literature on the effects of dining in the presence of another individual, specifically an attractive individual. Although more research and a larger sample size is needed to fully understand the implications of this research, the current study is a step forward. When considering the reasons why a person chooses the a meal, it is important to consider their dining partner in addition to factors such as personal preference, nutrition knowledge, and economic factors. Meal orders may change drastically while in the presence of others. This research provides a more comprehensive understanding of meal choice by examining the role of social factors.

References

Ainsworth, S. E., & Maner, J. K. (2019). Pathogen avoidance mechanisms affect women's preference for symmetrical male faces. *Evolutionary Behavioral Sciences, 13(3),* 265-271. https://doi.org/10.1037/ebs0000139

Baker, M., Strickland, A., & Fox., N. D. (2019). Choosing a meal to increase your appeal: How relationship status, sexual orientation, dining partner sex, and attractiveness impact nutritional choices in social dining scenarios. *Appetite, 133,* 262-269. https://doi.org/10.1016/j.appet.2018.11.023

Birkenhead, K. L., & Slater, G. (2015). A review of factors influencing athletes' food choices. *Sports Medicine, 45,* 1511-1522. https://doi.org/10.1007/s40279-015-0372-1

Book, B. C. & Kanerek, R. B. (1995). Women and men are what they eat: The effects of gender and reported meal size on perceived characteristics. *Sex Roles: A Journal of Research, 33(1-2),* 109-119. https://doi.org/10.1007/BF01547938

Goh, Y., Tan, B. Y. Q., Bhartendu, C., Ong, J. J. Y., & Sharma, V. K. (2020). The face mask: How a real protection becomes a psychological symbol during Covid-19? *Brain, Behavior, and Immunity, 88,* 1-5. https://doi.org/10.1016/j.bbi.2020.05.060

Hawkes, K., and Bliege Bird, R. (2002). Showing off, handicap signaling, and the evolution of men's work. *Evol. Anthropol. 11*, 58-67. https://doi.org/10.1002/evan.20005

Leary, M. R. (1983). A Brief Version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin*, *9*(3), 371–375. https://doi.org/10.1177/0146167283093007

Leys, C., Ley, C., Klein, O., Bernard, P., & Licata, L. (2013). Detecting outliers: Do not use standard deviation around the mean, use absolute deviation around the median. *Journal of*

Experimental Social Psychology, 49(4), 764-766. https://doi.org/10.1016/j.jesp.2013.03.013

Love, J. H., & Sulikowski, D. (20180. Of meat and men: Sex differences in implicit and explicit attitudes toward meat. *Front Psychol.* 9:559. https://doi.org/10.3389/fpsyg.2018.00559

Mattick, R. P., & Clarke, C. (1998). Development and validation measures of social phobia scrutiny fear and social interaction anxiety. Behaviour Research and Therapy, 36(4), 455-470. https://doi.org/10.1016/S0005-7967(97)10031-6

Neel, R., Kendrick, D. T., White, A. E., & Neuberg, S. L. (2016). Individual differences in fundamental social motives. *Journal of Personality and Social Psychology*, 110(6), 887-907. https://doi.org/10.1037/pspp0000068

O'Cass, Aron. (2000). A psychometric evaluation of a revised version of the Lennox and Wolfe Revised Self-Monitoring Scale. *Psychology and Marketing*. 17. https://doi.org/10.1002/(SICI)1520-6793(200005)17:5<397::AID-MAR3>3.0.CO;2-D

Sadr, J., & Krowicki, L. (2019). Face perception loves a challenge: Less information sparks more attraction. *Vision Research, 157*, 61-83. https://doi.org/10.1016/j.visres.2019.01.009

Steim, R. I., & Nemeroff, C. J. (1995). Moral Overtones of Food: Judgments of Others Based on What they Eat. *Personality and Social Psychology Bulletin*, *21*(5), 480–490. https://doi.org/10.1177/0146167295215006.

Sutherland, C. A. M., Rhodes, G., Burton, N. S., & Young, A. W. (2020). Do facial first impressions reflect a shared social reality? *British Journal of Psychology, 111*(2), 215-232. https://doi.org/10.1111/bjop.12390

Vartarian, L. R., Herman, C. P., & Polivy, J. (2007). Consumption stereotypes and impression management: How you are what you eat. *Appetite, 48(3),* 265-277. https://doi.org/10.1016/j.appet.2006.10.008

Willis, J., & Todorov, A. (2006). First Impressions: Making Up Your Mind After a 100-Ms Exposure to a Face. *Psychological Science, 17(7)*, 592—598. https://doi.org/10.1111/j.1467-9280.2006.01750.x

Appendix

Visual Representations of Important Findings

Visual representations are included for three important findings: the analysis of calorie count between men with same or opposite sex dining partners by attractiveness levels, the total calories ordered between private and public condition, and the total calories ordered by participants pre-COVID-19 and post-COVID19.

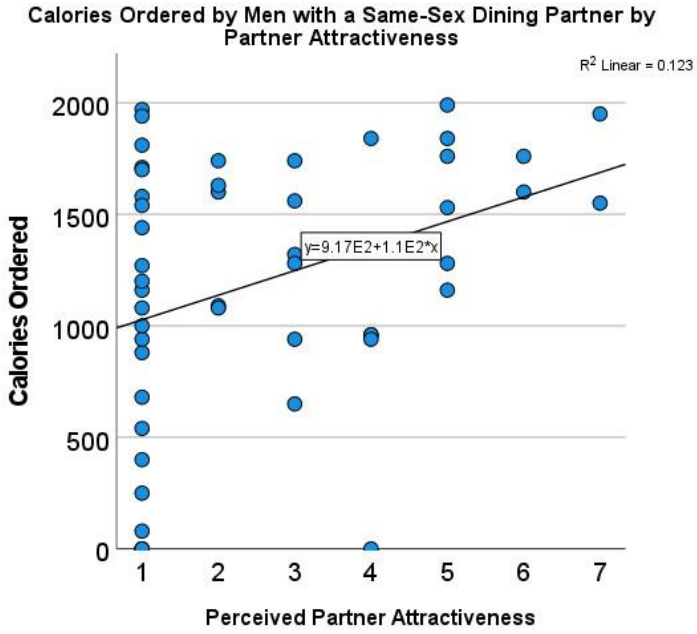

Figure 1. Calories ordered by men with a same-sex dining partner by partner attractiveness.

Perceived partner attractiveness was rated on a scale of 1 (not at all attractive) to 7 (extremely attractive). When men who were assigned same-sex dining partners rated their partner as a "1" on this scale, total calorie count varied from zero to around 2000 calories. As this group rated their partner as more attractive, higher calorie counts were ordered.

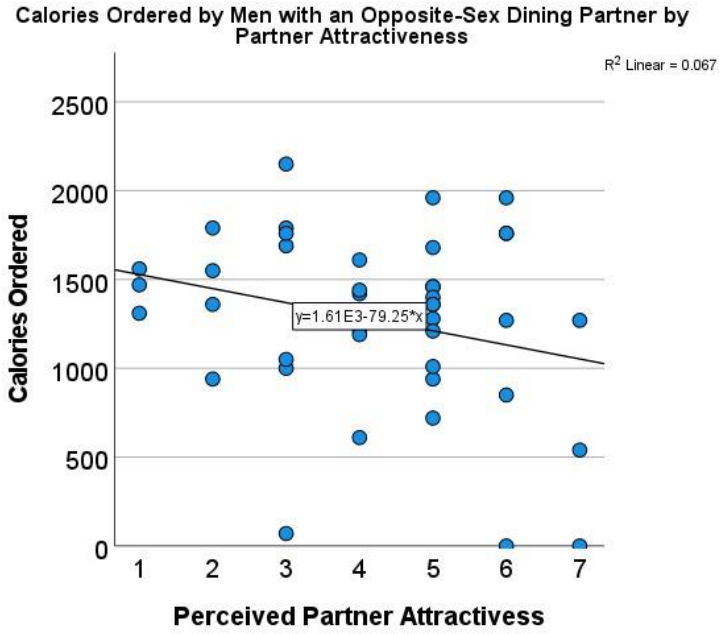

Figure 2. Calories ordered by men with an opposite-sex dining partner by partner attractiveness.

In opposition to the previous finding, men assigned to opposite-sex dining partners ordered nominally fewer calories when rating their partner as more attractive. This result did not reach significance.

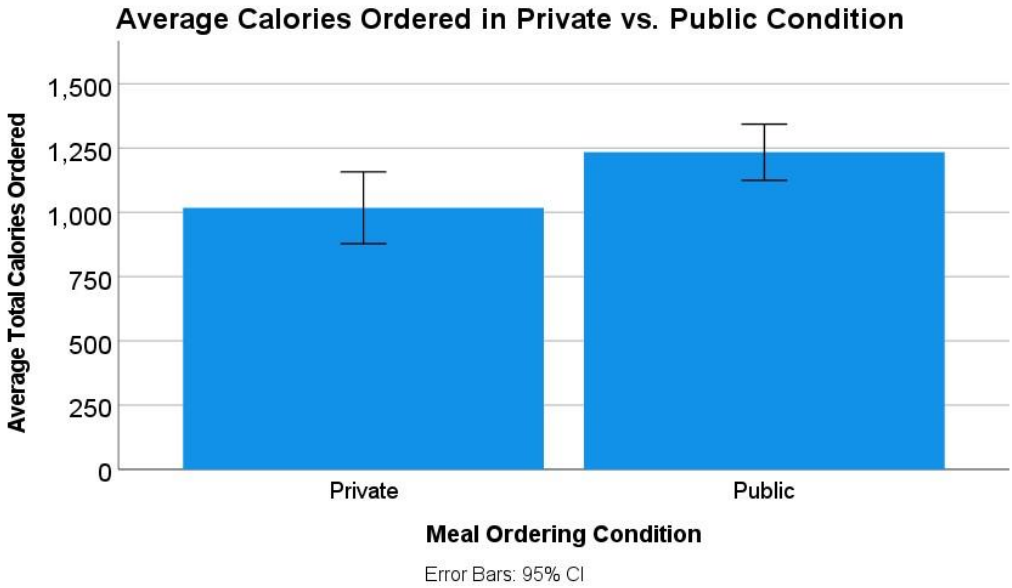

Figure 3. Average calories ordered for the public and private conditions.

Figure 3 represents the average calories ordered in the public and private conditions. This is not specific to participant sex, partner sex, or relationship status. Significantly more calories were ordered when participants discussed their meal order with their partner versus when participants did not discuss their meal order with their partner.

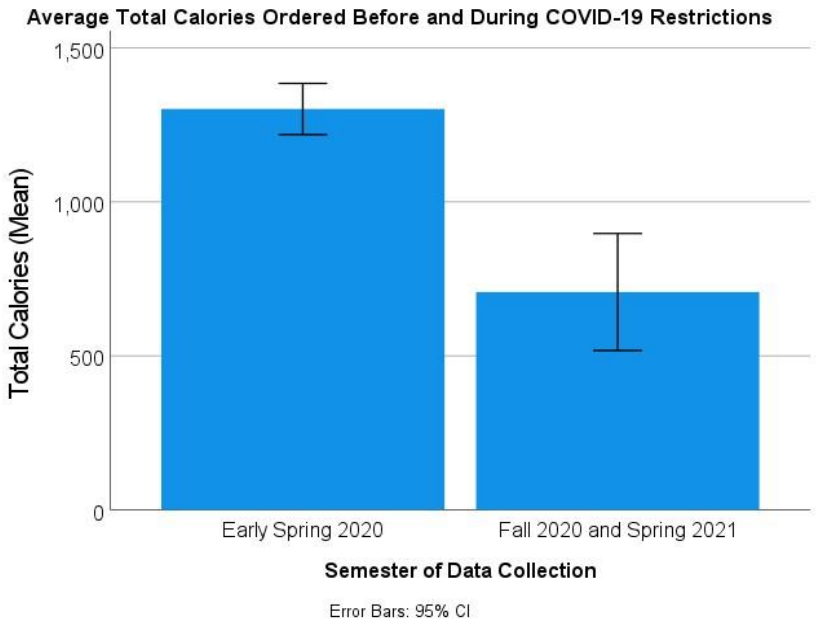

Figure 4. Average calories ordered in data collection before the onset of COVID-19 and after the onset of COVID-19.

The average calories ordered during data collection before the onset of COVID-19 was significantly higher than the average calories ordered after the onset of COVID-19. After the onset of COVID-19, many participants only ordered water or chose not to order a meal.