Higher meal disengagement and meal presentation are uniquely related to psychological distress and lower quality of life in undergraduate students

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Higher meal disengagement and meal presentation are uniquely related to psychological distress and lower quality of life in undergraduate students

Wesley R. Barnhart, Lauren A. Dial, Amy K. Jordan, Emma I. Studer-Perez, Maria A. Kalantzis, and Dara R. Musher-Eizenman

Department of Psychology, Bowling Green State University, Bowling Green, Ohio, USA

ABSTRACT
Objective: Picky eating (PE), which occurs in emerging adulthood and is associated with psychological distress and quality of life, has historically been conceptualized as unidimensional despite research suggesting it is a multifaceted construct. Participants: A large, undergraduate sample (N=509; Mage = 19.96). Methods: A cross-sectional survey assessed PE facets (food variety, meal disengagement, meal presentation, and taste aversion), disordered eating, anxiety, depression, stress, obsessive compulsive disorder (OCD), and social phobia symptoms, and quality of life. Results: Meal disengagement was uniquely related to higher anxiety, depression, stress, and social phobia symptoms and lower quality of life, whereas meal presentation was uniquely related to higher anxiety, stress, and OCD symptoms, above and beyond covariates and disordered eating. Food variety and taste aversion were not uniquely related to outcomes. Conclusions: Considering PE multidimensionally may yield important insights beyond the broader construct in terms of its relationship with psychological well-being in undergraduates.

Introduction
Picky eating is often a vexing behavior present across the lifespan. Indeed, while some research suggests that picky eating is limited by age (i.e., only present in children), other research suggests that picky eating persists across development and that approximately 35% of adults engage in picky eating in the general population. Research has explored picky eating in adulthood, and many of these studies sampled young adults, indicating that picky eating may also be prevalent among emerging adults (e.g., college-age). Importantly, picky eating is associated with poor dietary quality and significant psychological impairment including a range of mental health concerns and disordered eating (e.g., dietary restraint, eating concerns, binge eating, and overall eating pathology) in community adults (e.g., adults from the general population) and undergraduates.

Picky eating: definitions, multidimensional structure, and correlates
Most of the research in this area has conceptualized picky eating as unidimensional despite research suggesting it is a multifaceted construct. Picky eating includes difficulty trying new foods, eating a limited range of foods, and marked rigidity and sensory sensitivity around food presentation and preparation. Picky eating also includes the rejection of familiar foods - when an individual refuses to eat or rejects a food they have consumed before—which distinguishes it from related constructs like food neophobia, or the avoidance of novel foods. Because picky eating comprises many aspects, a multidimensional tool was created to assess four distinct facets of picky eating in community adults: (1) meal presentation, or strong preferences regarding food preparation; (2) food variety, or restricted dietary intake across food groups; (3) meal disengagement, or avoidant behavior around mealtimes; and (4) taste aversion, or rejection of bitter or sour foods. This tool was developed by using both qualitative and quantitative data from adults that self-identified as picky eaters. Qualitative data elicited via open-ended responses were analyzed to develop common themes from which 23 statements were then generated to describe picky eating behaviors and perceptions. Exploratory and confirmatory factor analyses revealed that a 16-item and four-facet structure was best suited to represent the variability of adult picky eating. This multidimensional approach to assessing picky eating has been identified as a key area for future research to define and elaborate on the nuances of adult picky eating, including the overlap between picky eating facets, psychological distress, and quality of life.
adult community samples, picky eaters displayed more obsessive-compulsive disorder (OCD) and depressive symptoms than nonpicky eaters.\textsuperscript{6,12} Relatedly, positive relationships have been identified between picky eating and anxiety symptoms in community adults\textsuperscript{7} and undergraduates,\textsuperscript{10} and preliminary evidence suggests that picky eating is positively associated with anxiety, depression, stress, OCD, and social phobia symptoms in undergraduates.\textsuperscript{15} Additionally, empirical support exists for a negative association between picky eating and eating-related quality of life.\textsuperscript{8}

In addition, research has begun to uncover links between specific facets of adult picky eating and psychological outcomes. For example, using a multidimensional approach to picky eating, one study found that meal presentation and meal disengagement predicted psychological inflexibility and psychosocial impairment in community adults.\textsuperscript{14} Furthermore, this same study found that meal disengagement predicted depressive symptoms,\textsuperscript{14} suggesting that meal disengagement may be a more proximal predictor of psychological distress than other facets of picky eating in community adults. A latent profile analysis using this multidimensional tool found that adults in the picky eating profile scored higher on picky eating, social eating anxiety, and eating-related impairment compared to other profiles.\textsuperscript{18} Additionally, another study using this multidimensional approach found that adult picky eating, disgust sensitivity, anxiety, and fear of negative evaluation predicted impaired eating-related quality of life.\textsuperscript{6} Still, the bulk of available research on the relation between picky eating and psychological distress and well-being operationalizes picky eating as unidimensional as opposed to exploring picky eating facets.\textsuperscript{11-13} Also, previous studies examining the relationship between picky eating and quality of life have largely focused on eating-related quality of life rather than overall, general quality of life.\textsuperscript{8} Finally, to the authors’ knowledge, no research to date has examined relationships between picky eating facets, psychological distress, and quality of life specifically in emerging adult samples such as undergraduate students.

The collegiate context

The undergraduate collegiate environment may be an important context in which picky eating may relate to psychological outcomes. For many students, college is the first time they are solely responsible for their eating. In the absence of parental and/or guardian influences, many students gain significant autonomy over their eating which may amplify picky eating behaviors. Furthermore, many students enter college with limited cooking skills or opportunities, and thus rely primarily on dining halls and fast food.\textsuperscript{19} This might further heighten picky eating behaviors. Finally, college students often eat in the company of other students, so picky eating behaviors might have especially strong social and psychological impacts.\textsuperscript{19} Given that picky eating is positively associated with poor dietary quality, psychological distress, and lower quality of life in adulthood, including undergraduate populations,\textsuperscript{6-9,13} the collegiate environment may be a particularly important context to further investigate picky eating facets in the service of gaining a finer level of detail on the precise nature of these relationships. Such information may serve researchers and clinicians interested in understanding more about and potentially treating picky eating behavior and associated psychological well-being in undergraduates.

The present study

To this end, the present study sought to examine relationships between picky eating facets (i.e., food variety, meal disengagement, meal presentation, and taste aversion) and psychological well-being, including anxiety, depression, stress, OCD, social phobia symptoms, and overall quality of life in undergraduate students. Furthermore, because some research suggests that adult picky eating is positively related to disordered eating,\textsuperscript{9,12,13} we adjusted for disordered eating symptoms to better understand the variance contributed by picky eating facets on outcome variables. Based on the previous research suggesting positive relationships between picky eating and psychological distress and lower quality of life,\textsuperscript{6,8,10,12-14,20,21} we hypothesized that picky eating facets would demonstrate positive relationships with outcome variables. Because of limited evidence on the nature of relationships between picky eating facets, psychological distress, and well-being, we did not make specific hypotheses based on which picky eating facets would describe unique variance in outcomes.

Methods

Participants

This secondary analysis (BLINDED) included undergraduate participants from a large, Midwestern university who completed an online survey on eating behaviors. Initially, 579 participants were recruited; of those, 70 participants were excluded due to completing 75% or less of the survey (n = 42), completing the survey multiple times (n = 17), or failing to meet quality standards (e.g., incorrect responses to attention checks; n = 11). The final sample (N = 509) ranged in age from 18 to 25 years (M = 19.96, SD = 2.93). On average, participants [women (n = 390; 77%), men (n = 116; 23%)] were overweight (BMI = M = 25.20, SD = 5.67); identified as White (n = 438; 85.7%), Black/African American (n = 55; 10.8%), Latinx/Hispanic (n = 19; 3.7%), Arab/Middle Eastern (n = 3; 0.6%), Native American (n = 5; 2.5%), or Other race/ethnicity (e.g., Asian; n = 13, 2.5%); and heterosexual (n = 436; 85.3%), Gay (n = 11; 2.2%), Lesbian (n = 9; 1.8%), Bisexual (n = 37; 7.2%), or Not Listed sexual orientation (e.g., asexual; n = 16; 3.1%). Participants’ socioeconomic status was middle class (n = 270; 52.8%), upper middle class (n = 127; 24.9%), lower middle class (n = 75; 14.7%), lower class (n = 26; 5.1%), and upper class (n = 9; 1.8%). Finally, 6.3% (n = 32) and 2% (n = 10) of participants reported past and current eating disorder disorder, respectively. See BLINDED for additional participant information.
measures anxiety, depression, and stress symptoms on a four-point Likert scale (0 = Did not apply to me at all; 3 = Applied to me very much, or most of the time). This study used subscale scores to examine anxiety, depression, and stress symptoms. Example items are “I experienced trembling (anxiety),” “I felt that I had nothing to look forward to (depression),” and “I found it hard to wind down (stress).” The DASS-21 has strong psychometric properties, including internal consistency and convergent validity. Higher scores indicate greater psychological distress.

**Social Phobia Scale (SPS)**

The Social Phobia Scale (SPS) is a 20-item self-report measure of social anxiety, defined as the fear of being negatively evaluated while being or in anticipation of being observed. The SPS has adequate internal consistency, good test-retest reliability, and can discriminate individuals with social phobia from healthy controls and most other anxiety disorders. Of the original SPS items, 7 were retained and modified to reflect social anxiety in eating situations (e.g., “I get nervous that people are staring at me as I eat.”). Participants rated how closely each item described them on a scale ranging from 1 (“Not at all”) to 5 (“Extremely”). Item responses were averaged, and higher scores indicate greater social anxiety.

**Short obsessive compulsive disorder screener (SOCDS)**

Symptoms of OCD were self-reported using the SOCDS. The SOCDS displays adequate internal consistency and test-retest reliability, as well as excellent specificity. The SOCDS is comprised of 7 items on which participants rate the degree to which they engage in certain thoughts or behaviors (e.g., “Are you particularly fussy about keeping your hands clean?”) on a scale of 0 (“No”), 1 (“A bit”), or 2 (“A lot”). Two items measuring the interference and resistance of OCD symptoms were omitted from the present study, and the remaining items were summed to create a total score. Higher scores suggest greater OCD symptoms.

**Quality of Life Scale (QOLS)**

The QOLS is a 16-item self-report instrument used to assess participants’ level of satisfaction on multiple indices of wellbeing (e.g., relationships with other people, recreation). Participants rate their satisfaction on a scale of 1 (“Terrible”) to 7 (“Delighted”). Of the original items, only the 7 items considered most relevant to the research questions and

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<th>Table 1. Descriptive statistics and internal consistency reliability among primary study variables.</th>
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<td>10. Quality of life</td>
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**Height and weight**

Body mass index (BMI; kg/m²) was calculated using self-reported height in feet and inches and weight in pounds.

**Demographics**

Participants self-reported demographic characteristics including age, gender, socioeconomic status, year in school, race, and sexual orientation. Data were also collected on current and past eating disorder diagnosis, current and past picky eating, and adherence to a particular eating style (e.g., vegetarian, vegan, etc.).

**Adult picky eating questionnaire (APEQ)**

Adult picky eating was examined using the APEQ. The questionnaire yields four subscales that are typically averaged to create a total score: meal presentation, food variety, meal disengagement, and taste aversion. This study focused on the subscales, not the total score. Example items are “I have a strong preference toward specific food presentation (meal presentation),” “I eat a limited number of items from each food group (food variety),” “I usually feel that I have something better to do than eating (meal disengagement),” and “I reject bitter foods, even if they are only slightly bitter (taste aversion).” Participants completed 16 items, on a five-point Likert scale (1 = Never, 5 = Always). The APEQ has strong internal consistency and convergent validity. Higher scores indicate greater picky eating. Internal consistency reliability estimates for all measures in the present study are reported in Table 1.

**Eating disorder examination questionnaire (EDE-Q)**

Disordered eating was self-reported using the EDE-Q. The 28-item scale assesses attitudes, cognitions, and behaviors related to disorder eating and yields four subscales: restraint, weight, shape, and eating concerns. Participants are instructed to rate how frequently an item applied to them over the past 28 days on a seven-point Likert scale (1 = No days; 7 = Everyday). The global score, which was entered as a covariate in multiple regression analyses, is calculated by averaging all items, with higher scores indicating greater disordered eating.

**Depression, anxiety and stress scale-21 items (DASS-21)**

Psychological distress was assessed using the DASS-21, a short version of the 42-item instrument. The DASS-21 has strong psychometric properties, including internal consistency and convergent validity. Higher scores indicate greater psychological distress.

**Measures**

**Notes.**
target population were retained (e.g., items assessing social functioning). Scores were summed, and higher scores reflect a greater quality of life. The QOLS generally has good internal consistency and construct validity\(^{30}\) in individuals with varying health concerns.\(^{31}\)

**Procedure**

Procedures were approved by the Institutional Review Board prior to data collection (IRB protocol #1530232). University instructors shared a recruitment script about the survey with their students. Interested students provided informed consent and accessed the survey on Qualtrics (SAP SE; co-headquarters in Seattle, Washington, and Provo, Utah). Participants provided demographic information followed by previously described self-report measures; median survey completion time was approximately 27 min. Participants received course credit or extra credit following survey completion and were asked to recruit their parents to complete a similar survey. However, only student responses were used in the present study.

**Analytic plan**

Descriptive statistics, including mean, standard deviation, skew, and kurtosis were calculated. Next, internal consistency was examined across primary study variables, and missing data were examined. Missedness was low (less than 5% across measures); thus, analyses utilized listwise deletion. Homoscedasticity, normality, and linearity were examined to determine if residual variability met assumptions of multiple regressions. Next, bivariate correlations were examined across study variables, namely picky eating facets, psychological distress, and quality of life. According to Cohen’s rule, effect sizes were interpreted as \(r = .10\) (small), \(r = .30\) (medium), and \(r = .50\) (large) for bivariate correlations. Finally, multiple regressions examined the unique variance contributed by picky eating facets in relation to psychological distress and quality of life after adjusting for theoretically-relevant covariates (e.g., BMI, a continuous variable, relevant to picky eating; gender, coded as male = 0, female = 1, relevant to psychosocial well-being)\(^{33-36}\) and disordered eating (e.g., a continuous variable, the global score from the EDE-Q). Specifically, disordered eating was added as a covariate to distinguish picky eating and adjust for the influence of disordered eating on psychological distress and quality of life.\(^{8,12,13}\)

Specifically, six multiple linear regressions were calculated in SPSS 27. Across all regression analyses, independent variables were mean centered. In step 1, BMI, gender, and disordered eating covariates were entered. In step 2, all four picky eating facets, food variety, meal disengagement, meal presentation, and taste aversion, were entered as independent variables. Across the six regression models, anxiety, depression, stress, OCD, and social phobia symptoms and quality of life were entered as outcome variables, respectively (see Tables 2–7). Finally, to account for potential Type 1 error, significant findings were reported at \(p\)-values \(\leq .01\).

**Results**

**Preliminary results**

See Table 1 for descriptive statistics and internal consistency reliability across primary study variables. Assumptions of multiple regression were confirmed via visual inspection of histograms, Q-Q plots, and scatterplots. Diagnostics confirmed there were no issues of multicollinearity (e.g., tolerance and variance inflation factors within acceptable ranges\(^{19}\)).

**Correlations between picky eating facets, psychological distress, and quality of life**

All \(p\)-values were < .01. Higher pickiness about food variety was associated with higher anxiety (\(r = .23\)), depression (\(r = .23\)), stress (\(r = .23\)), OCD (\(r = .28\)), and social phobia symptoms (\(r = .23\)), and lower quality of life (\(r = -.23\)), all small effect sizes. Higher meal disengagement was associated with higher anxiety (\(r = .45\)), depression (\(r = .48\)), stress (\(r = .45\)), OCD (\(r = .33\)), and social phobia symptoms (\(r = .45\)), and lower quality of life (\(r = -0.35\)), all medium effect sizes. Higher pickiness about meal presentation was associated with higher anxiety (\(r = .33\)), depression (\(r = .30\)), stress (\(r = .34\)), OCD (\(r = .44\)), and social phobia symptoms (\(r = .31\)), all medium effect sizes, and lower quality of life (\(r = -0.17\), small effect size). Finally, higher taste aversion was associated with higher anxiety (\(r = .21\)), depression (\(r = .22\)), stress (\(r = .22\)), OCD (\(r = .26\)), and social phobia symptoms (\(r = .22\)), and lower quality of life (\(r = -0.23\)), all small effect sizes.

**Multiple linear regressions**

**Picky eating facets as correlates of anxiety symptoms**

The overall model assessing covariates, disordered eating, and picky eating facets contributed significant variance in anxiety symptoms (\(F(7, 493) = 27.148, p < .001\), and \(R^2 = .28\); see Table 2). Higher meal disengagement (\(b = .31, t = 6.32\), and \(p < .001\)) and meal presentation (\(b = .13, t = 2.50\), and \(p = .01\)) were significantly and uniquely associated with anxiety. All other pickiness facets were not significantly associated with anxiety symptoms (see Table 2). Finally, to account for potential Type 1 error, significant findings were reported at \(p\)-values \(\leq .01\).

**Table 2.** Multiple linear regression describing anxiety symptoms.

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Notes. \(N = 500\). Bold values are significant at \(p \leq .01\).

EDE-Q: Eating Disorder Examination Questionnaire; PE, Picky Eating; Gender: Male = 0; Female = 1.
higher anxiety symptoms. Food variety and taste aversion were not uniquely associated with anxiety symptoms (p-values > .05; see Table 2).

**Picky eating facets as correlates of depression symptoms**

The overall model assessing covariates, disordered eating, and picky eating facets contributed significant variance in depression symptoms (F(7, 493) = 31.06, p < .001, and R^2 = .31; see Table 3). Higher meal disengagement (b = .37, t = 7.55, and p < .001) was significantly and uniquely associated with higher depression symptoms. Food variety, meal presentation, and taste aversion were not uniquely associated with depression symptoms (p-values > .05; see Table 3).

**Picky eating facets as correlates of stress symptoms**

The overall model assessing covariates, disordered eating, and picky eating facets contributed significant variance in stress symptoms (F(7, 493) = 36.02, p < .001, and R^2 = .34; see Table 4). Higher meal disengagement (b = .29, t = 6.18, and p < .001) and meal presentation (b = .15, t = 2.94, p = .003) were significantly and uniquely associated with higher stress symptoms. Food variety and taste aversion were not uniquely associated with stress symptoms (p-values > .05; see Table 4).
higher OCD symptoms were uniquely bound to higher meal presentation. While speculative in nature, the unique and significant associations between depression and social phobia symptoms and meal disengagement may reflect disturbances in eating behaviors (e.g., “I avoid mealtimes,” “I usually feel that I have something better to do than eating,” disturbances in eating behaviors can be a symptom of depression presentations) and social functioning during mealtime (e.g. “I am often disengaged/uninvolved when sitting at the table for mealtime.”) captured in this picky eating facet. Furthermore, again speculative in nature, the unique and significant association between OCD symptoms and meal presentation may reflect obsessive and/or compulsive tendencies during mealtime (e.g., “I am immediately suspicious of food and feel the need to carefully inspect the majority of food,” “I eat foods in a specific sequence.”) captured in this picky eating facet.

Importantly, research in this domain is significantly limited and future research is needed to disentangle precisely why differential relations emerged between these picky eating facets and psychological well-being. Furthermore, food variety and taste aversion were not uniquely related to outcomes. These findings are consistent with a previous study14 which found that meal disengagement alone described unique variance in depression symptoms. This replication speaks to the meaningful association between difficulties and disengagement with mealtime in relation to undergraduates’ depression symptoms. Furthermore, these findings are consistent with other research suggesting that the taste aversion facet of picky eating is not as strongly associated with psychosocial outcomes, perhaps because taste aversion is a physiological response with a biological predisposition.17

Taken together, findings suggested that picky eating attitudes and behaviors such as strong preferences for specific food presentation, experiencing negative affect (e.g., sadness, disappointment) in response to food that is not prepared/cooked the “right way” (meal presentation), and avoiding mealtime and disengagement while sitting down for mealtime (meal disengagement) were more strongly associated with psychological distress and lower quality of life in undergraduates. Importantly, food variety often sits at the center of picky eating conceptualizations,15,16 both in popular and academic thought, which might explain a bias toward an unidimensional conceptualization of picky eating. The present findings caution against this approach, emphasizing the role of more internal, control-based picky eating facets, including affective responses and rigidity around food, as more closely associated with psychological distress and lower quality of life in undergraduates. Importantly, food variety often sits at the center of picky eating conceptualizations,15,16 both in popular and academic thought, which might explain a bias toward a more nuanced understanding of the complex links between picky eating facets, psychological distress, and quality of life in the collegiate context.

**Limitations and future directions**

First, cross-sectional data do not allow us to make causal attributions. It is important for future research to confirm these findings with both experimental and experience sampling (e.g., ecological momentary assessment) methods to

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**Table 7. Multiple linear regression describing quality of life.**

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<th>Quality of life</th>
<th>$R^2$</th>
<th>Change $R^2$</th>
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<td>PE: Meal</td>
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<td></td>
<td>-.131</td>
<td>.035</td>
<td>-.180</td>
<td>-3.765</td>
<td>&lt;.001</td>
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<td>PE: Meal</td>
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Notes. N=500. Bold values significant at $p<.01$.

EDE-Q: Eating Disorder Examination Questionnaire; PE: Picky Eating; Gender: Male = 0; Female = 1.

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In the present study, we explored relationships between picky eating facets, psychological distress, and quality of life in undergraduates. At the bivariate level, findings provided overall support for our hypotheses such that higher levels of all measured picky eating facets, including food variety, meal disengagement, meal presentation, and taste aversion, were associated with psychological distress and lower quality of life in undergraduates. These findings map onto previous research suggesting that broad picky eating is associated with significant psychological distress and poorer overall quality of life in community adults (e.g., adults from the general population) and undergraduates.2,3,10-13 Bivariate findings also provide a finer level of detail by suggesting that all picky eating facets were related to outcomes in this way; however, effect sizes differed by picky eating facets such that meal disengagement and meal presentation demonstrated associations of medium strength with psychological distress and lower quality of life, whereas food variety and taste aversion demonstrated associations of small strength with psychological distress and lower quality of life. Findings with multiple linear regressions echoed the observed differences in strength of associations between picky eating facets, psychological distress, and quality of life at the bivariate level.

Specifically, with multiple linear regressions, the present study further identified that meal disengagement was uniquely related to higher anxiety, depression, stress, and social phobia symptoms and lower quality of life, whereas meal presentation was uniquely related to higher anxiety, stress, and OCD symptoms and lower quality of life, above and beyond covariates (e.g., BMI, gender) and disordered eating. Thus, higher depression and social phobia symptoms were uniquely bound to higher meal disengagement, and variance in quality of life ($F(7, 496)=16.84, p<.001$, and $R^2=.19$, see Table 7). Higher meal disengagement ($b = -0.27, t = -5.13, p<.001$) was significantly and uniquely associated with lower quality of life. Food variety, meal preparation, and taste aversion were not uniquely associated with quality of life ($p$-values>.05; see Table 7).

**Discussion**

In the present study, we explored relationships between picky eating facets, psychological distress, and quality of life in undergraduates. At the bivariate level, findings provided overall support for our hypotheses such that higher levels of all measured picky eating facets, including food variety, meal disengagement, meal presentation, and taste aversion, were associated with psychological distress and lower quality of life in undergraduates. These findings map onto previous research suggesting that broad picky eating is associated with significant psychological distress and poorer overall quality of life in community adults (e.g., adults from the general population) and undergraduates.2,3,10-13 Bivariate findings also provide a finer level of detail by suggesting that all picky eating facets were related to outcomes in this way; however, effect sizes differed by picky eating facets such that meal disengagement and meal presentation demonstrated associations of medium strength with psychological distress and lower quality of life, whereas food variety and taste aversion demonstrated associations of small strength with psychological distress and lower quality of life. Findings with multiple linear regressions echoed the observed differences in strength of associations between picky eating facets, psychological distress, and quality of life at the bivariate level.

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better map the temporal order and mechanistic links between picky eating facets, psychological distress, and quality of life (i.e., does meal disengagement precede depression symptoms or vice versa?). Second, although large and well-powered, the sample is convenient and primarily WEIRD (i.e., Western, Educated, Industrialized, Rich, and Democratic). Thus, findings should not be generalized to adolescents, community adults, clinical populations (e.g., people with Avoidant Restrictive Food Intake Disorder), or populations from other cultural contexts. Future research testing these relationships in diverse populations is an essential future direction. Third, the sample was imbalanced on the demographic of gender identity, with women overrepresenting the present sample (approximately 77% of the sample). Thus, future research is needed to collect more representative samples of women, men, and gender-diverse individuals (e.g., transgender individuals) to meaningfully examine gender differences across relations between picky eating and psychosocial well-being. Finally, data collected in the present study were self-reported; thus, concerns common to survey-based research such as social desirability and recall biases may compromise the validity of these findings.

Conclusions

Understanding relationships between picky eating facets, psychological distress, and quality of life provides a finer level of detail about what specific aspects of picky eating are related to these psychological outcomes. The present study suggests that meal disengagement and presentation, but not food variety or taste aversion, were significantly and uniquely related to psychological distress and lower quality of life in undergraduates. With future replication, these data may provide specific information about potential therapeutic targets (e.g., meal disengagement and meal presentation) in the domain of picky eating that may confer benefits in psychological well-being in undergraduate populations.

Author contributions

Wesley R. Barnhart: Conceptualization, Methodology, Formal Analysis, Investigation, Data Curation, Writing – Original Draft, Project Administration. Lauren A Dial: Conceptualization, Methodology, Validation, Investigation, Data Curation, Writing – Original Draft, Project Administration. Amy K. Jordan: Conceptualization, Methodology, Investigation, Writing – Review & Editing, Project Administration. Emma I. Studer-Perez: Writing – Review & Editing. Dara R. Musher-Eizenman: Conceptualization, Methodology, Validation, Investigation, Writing - Review & Editing, Supervision, Project Administration.

Conflict of interest

There are no conflicts of interest to disclose among authors.

Funding

The author(s) reported there is no funding associated with the work featured in this article.

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Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.


