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Self-Compassion Enhances Intuitive Eating Patterns in Middle-Aged Adults

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Over time, humans have experienced varied and shifting relationships with food in both negative and positive ways. Mostly negative results have emerged from restrictive diets, while approaches to food that include more self-trust indicated healthier impacts. The current study focused on the positive approach to eating and addressed a relationship between intuitive eating and dimensions of self-compassion and wellbeing. Data were collected using an online survey, which assessed demographics, BMI, self-compassion, intuitive eating, and wellbeing. A cohort of 234 participants, comprising both men and women, predominantly women aged 36-65, responded to the survey. Within this group, a subset of 148 participants provided supplementary information regarding their weight and height. Regression analysis showed that after controlling for wellbeing, 24% of the variance in intuitive eating was explained by self-compassion. Specifically, the self-compassion components that best predicted intuitive eating were reduced self-judgement and increased common humanity. No correlation was observed between self-compassion and BMI, age and gender. Contrary to previous research, a positive correlation between BMI and intuitive eating was observed. Further research is needed to study the relationship among IE, BMI, and dietary quality, along with investigating the connection between IE and varying physiological responses according to BMI status, age and gender. The results are discussed in the context of policy and practice.

Keywords: Self-compassion, intuitive eating, wellbeing, positive mental health, middle-aged adults

Intuitive Eating (IE) has emerged as a method for reducing overeating. It is an adaptive way of eating that relies on hunger and satiety cues (Tylka, 2006); and assumes the body is wise and will crave the kind of food and quantity it needs to remain nutritionally balanced and within a healthy weight range (Gast & Hawks, 1998). IE is one of the alternative eating approaches to restrictive diets, food deprivation and disordered eating (Polivy, 1996). IE followers are guided by their awareness and trust in the physiological hunger and satiety signals (Tylka et al., 2015). They eat for physical rather than emotional reasons, and focus on 'gentle nutrition' where their food choices honour their body and taste (Smith et al., 2020; Tylka & Wilcox, 2006). The inherent flexibility in 'permission to eat' (Tribole & Resch, 2012) results in food choices for both health and pleasure, respect for the body regardless of shape or weight and less disordered eating (Bruce & Ricciardelli, 2016). The practice of IE encourages rejecting the 'diet mentality', replacing the cognitive response to intake determination with the body's natural self-regulation intentionally focused on hunger and satiety cues (Grider et al., 2021). In the context of weight management and dietary restrictions, this permission in IE to eat when hungry, as opposed to a conditional avoidance of 'bad' or 'forbidden' foods, shifts the focus from body weight to wellbeing (Barraclough et al., 2019). Tylka et al. (2015) compared IE with flexible dietary control and concluded that IE is related to lowering rigid control, and psychological distress, and improving psychological adjustment. Furthermore, IE is associated with lower BMI and not regarded as a form of dietary restraint but rather as an adaptive approach that fosters a positive attitude towards food, the body and physical activity (Tylka et al., 2015).

Eating behaviour in IE is assessed using The Intuitive Eating Scale (IES). It was initially developed by Tylka et al. in 2006 with a further revision in 2013 (Intuitive Eating Scale- 2 (IES-2) to measure attitudes and behaviours including a focus on 'gentle nutrition' (Tylka and Kroon Van Diest, 2013). As a valid and reliable tool, it assesses 23-items under four areas: eating for physical rather than emotional reasons, reliance on hunger and satiety cures, unconditional permission to eat, and body-choice congruence i.e., the choice of tasty and healthy nutrition in line with body's preferences and physical needs (Ruzanska & Warschburger, 2019). The later measurement which aligns 'gentle nutrition' practices into daily food choice is according to Barrada et al., (2018) a promising new dimension of IE (Barrada et al., 2018). From a positive psychology perspective, IES-2 scores positively relate to body appreciation, positive affect and self-esteem (Bruce & Ricciardelli, 2016; Tylka & Kroon Van Diest, 2013).

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Self-Compassion

Self-compassion (SC) is the practice of guarding the self against suffering or feeling inferior by using compassion inwardly to create a self-kindness response (Neff, 2003b). An emotion-focused coping strategy, SC mindfully manages difficult emotions, helping mitigate self-criticism when overeating (Bennett-Goleman, 2002). There is increasing evidence on the impact of SC on eating disorders (Braun et al., 2016), including the finding that it may be more impactful than mindfulness as an intervention (Messer et al., 2021). Emotional regulation through SC may result in a shift from negative to more positive emotions, which may increase the chances of a more favourable outcome (Neff, 2003b). Kelly and Stephen (2016) explored the role of self-compassion in positive body image and IE in a group of female college students; on days when they were self-compassionate, there was less dietary restraint and a greater tendency to eat intuitively, which positively influenced their body appreciation and lessened body dissatisfaction (Kelly & Stephen, 2016). A more recent study by Turk and Waller (2020) supports the role of self-compassion as a valuable tool for emotionally driven behaviour in treating body image and eating disorders (Turk & Waller, 2020). Increasing self-compassion in women can support engagement with IE (Carbonneau et al., 2021).

Neff's (2003) SC theory is highly applicable to the process of eating. The theory is comprised of three tenants of Buddhism: common humanity, self-kindness and mindfulness (Neff, 2003b). Common humanity emphasizes one's connection to humanity rather than self-isolation. Self-kindness replaces self-criticism by extending understanding and warmth. In SC, mindfulness emphasizes a sense of balance in the face of suffering instead of over-identifying with the debilitating aspects of suffering. Since body image and overeating are often the cause of self-judgment and shame, Neff's (2003b) theory was chosen for this research. Her theory is also most relevant because it is non-evaluative and dissuades the act of comparing one's self to others. Neff's theory when viewed through a relationship study between SC and IE may shed light on what trends may help people in the future if they want to learn to eat in a way that is based on body acceptance and IE. Some have considered SC to be an approach that may encourage letting one's self off the hook (Neff, 2003a), but Breines and Chen (2012) suggest that forgiving the self may encourage insight into one's weaknesses. This, in turn, may provide the motivation to improve, which for some may be a useful approach to their food relationship (Breines & Chen, 2012).

Wellbeing

Wellbeing (WB) can be defined as "a dynamic optimal state of psychosocial functioning that arises from functioning well across multiple psychosocial domains" (Butler & Kern, 2016) taking into consideration several psychological realms, such as "relationships" and "meaning of life" (Seligman, 2011). Wellbeing in the context of intuitive eating can be perceived as the presence of wellbeing resources, e.g. engagement, life meaning or a sense of accomplishment; and the absence of wellness, e.g. mood, eating and other disorders (Burke, 2020). The indices of wellbeing in assessing IE relate to psychological adjustment, i.e., positive psychological health (life satisfaction, positive affect, body appreciation) and psychological distress linked to negative emotional states and eating disorders (binge eating, food preoccupation, adverse effect, poor interceptive awareness; Tylka & Kroon Van Diest, 2013). From a positive psychology perspective, IE positively relates to body appreciation, positive affect and self-esteem (Bruce & Ricciardelli, 2016). The protective potential of these three variables, along with IE, on eating disorders, has lowered the incidence of the onset of disorder eating symptoms (Linardon, 2021).

When considering specific WB theories for this study, Seligman's PERMA theory explores hedonic (life's pleasures such as eating) and eudemonic (life's meaning) approaches, as well as "engagement" and "achievement" which other theories do not include (Coffey et al., 2016). Taking all of this under consideration, the PERMA theory was the most applicable for this research (Butler & Kern, 2016). There are five components of PERMA that predict the ability to flourish, all of which were correlated with IE in this research. Happiness, joy and hope are examples of "positive emotions" (PE; Seligman, 2011). PE are positively correlated with physical health and sense of life satisfaction (Kern et al., 2014) which supports a hypothesis to this study that people who enjoy more PE may experience healthier eating behaviors since healthier eating is related to better physical health. The second domain is "engagement" which in PP is related to "flow". Csikszentmihalyi (1990) defines flow as the state that is characterized by extreme attentional absorption when in the midst of an activity (Csikszentmihalyi & Csikzentmihaly, 1990). The third component of PERMA is "relationships". Healthy relationships play a critical part in feeling supported and valued, which has predicted fewer frequencies of depression, increased health behaviors and stronger health (Tay et al., 2013). Meaning in life is the fourth component of PERMA that considers feeling part of a bigger whole, and having purpose and meaning in life (Seligman, 2011) which has been linked to stronger health (Steger, 2012). "Accomplishment" in PERMA refers to mastery and the attainment of goals, and the self-belief that accompanies that experience (Seligman, 2011).

Current Research

The aim of the present work focused on the positive approach to eating and wellbeing and investigated the relationship between intuitive eating, self-compassion and wellbeing among the adult population. Previous research on the relationship between SC and IE focused on young adults, mainly female university students e.g.(Carbonneau et al., 2021; Webb & Hardin, 2016). Our research aimed to address a wider population sample in terms of age and gender and explore potential novel trends in the relationship between IE, SC and WB when compared to younger population studies. By using the PERMA scale, the study also aimed to assess whether SC and IE would have the potential to be used in conjunction as a positive psychological intervention to enhance wellbeing around food and nutrition habits. The following are research questions derived from the literature:

1. What is the correlation between intuitive eating, wellbeing and components of self-compassion?
2. How much of the variance in intuitive eating can be explained by compassion after controlling for wellbeing?
3. What are the differences in intuitive eating between participants with varied BMI?

Method

Participants And Procedure

This is an online, cross-sectional quantitative research study. A total of 234 participants completed the questionnaire fully. 148 participants (63% of participants) provided weight and height data which allowed to calculate their BMI (BMI subsample). Most of the sample was female (75%), a quarter (24%) were male, and 1% preferred not to say. Nearly half (43%) of participants were between the ages of 46-55, a quarter (24%) were aged 36-45, 11% from 56-65, 9% from 25-35, 7% at 18-25, and 6% at 66 or older. Most participants resided in the United States (74%); others lived in Great Britain (9%), Ireland (3%) and 16 other countries under 1% (see Table 1 for details). Participants identifying as Caucasians made up the majority (96%), and a small percentage identified as other (2%), Asian (1%), black (.5%) and Hispanic (.5%). Over half of the sample was married or domestic partnered (60%), and the remainder was single (22%), partnered (9%), and divorced or separated (9%). Most (59%) had a household income of £60,000 (USD 77,500; €63,450) or higher. Table 1 provides further detail.

Table 1. Demographic detail

Demographic	***N***	***%***
Gender		
Female	180	76.6 %
Male	53	22.6 %
Prefer not to say	1	.4 %
Age		
18-24	16	6.8 %
25-35	25	10.7 %
36-45	47	20.1 %
46-55	102	43.6 %
56-65	29	12.4 %
66 or over	15	6.4 %
Residence		
USA	176	75.5 %
UK	28	12 %
Ireland	6	2.6 %
Canada	4	1.7 %
Denmark	2	.9 %
Netherlands	2	.9 %
New Zealand	2	.9 %
Other	2	.9 %
Ethnicity		
Caucasian	225	96.2 %
Other (not further reported)	5	2.1 %
Asian	3	1.3 %
Hispanic or Latino	1	.4 %
Household Composition		
Single	56	23.9 %
Married or domestic partnered	140	59.8 %
Partnered	17	7.3 %
Divorced or separated	21	9.0 %
Income		
£13,000 - £25,999	34	14.5 %
£26,000 - £35,999	20	8.5 %
£36,000 - £45,999	24	10.3 %
£56,000 and over	136	58.1 %

Table 2. BMI subsample demographic detail, frequency and percentage.

Variables	***N***	***%***
Demographic		
Female	112	75.7
Male	35	23.6
Age		
18-24	12	8
25-35	17	11
36-45	32	22
46-55	64	43
56-65	15	10
66 or over	8	5
Ethnicity		
Caucasian	141	95.3
Asian	3	2
Other	3	2
Hispanic or Latino	1	1
BMI categories		
Healthy (18-24.9)	68	46.25
Overweight (25-29.9)	36	24.5
Obese (30 and over)	43	29.25

BMI subsample. 148 participants provided their weight and height (63% of participants), which allowed us to identify their BMI. The sample was composed of mainly Caucasian (95%) female (75%) between 36 and 65 years old (75%). BMI was divided into four groups (underweight, healthy weight, overweight, and obese) as per the NHS guidelines (2022). However, only two participants were in the underweight group. One was an outlier with an extremely low BMI; therefore, she was removed; the other participants' BMI was 17.03, and she was included in the Healthy weight group. Therefore, a total of 147 participants' BMIs were entered in three groups. Participants in Group 1 were healthy weight (N=68, 46.3%), Group 2 were overweight (N=36, 24.5%), and Group 3 were obese (N=43, 29.3). See Table 2 for further information.

Data were collected after approval was obtained from the University of East London Research Ethics Committee, with approval dated 1 January 2018 (no approval number). Qualtrics, an online web-based survey platform, was used to collect data. Demographic data such as gender, age, information for BMI, country of residence, ethnicity, household composition and household income were collected before questions from the three questionnaires were answered. Social media (LinkedIn and Facebook) were used for data collection.

Measures

Intuitive Eating Scale-2 (IES; Tylka & Kroon Van Diest, 2013). This 23-item questionnaire assesses people's behaviors and motivations for eating with four sub-dimensions comprising the total score: (1) unconditional permission to eat, (2) eating for physical rather than emotional reasons, (3) reliance on hunger and satiety cues, and (4) body-food choice congruence. For purposes of this study, only the overall score was used in data analysis to respond to RQ1 and RQ2, while the four dimensions were used to investigate RQ3. It is based on a five-point Likert scale ranging from "strongly disagree" to "strongly agree". The total score is divided by 23 items to obtain an average score from 1 to 5. Sample statement is "I trust

my body to tell me when to eat". The higher number recorded indicates higher levels of IE. Past research reported excellent reliability of α>.87 (Tylka & Kroon Van Diest, 2013), so did the current study's reliability at α>.85.

The Self-Compassion Scale (SCS; Neff, 2003a). Tthe SCS was chosen for this research. The scale is a 26-item measure that assesses three areas of SC (common humanity, self-kindness and mindfulness) using six subscales: 1) self-kindness, 2) self-judgement, 3) common humanity, 4) isolation, 5) mindfulness, and 6) over-identity (Neff, 2003a). It is a 5-point Likert scale, ranging from "almost never" to "almost always". Higher scores indicated higher levels of SC. An example of a question is, "When something painful happens, I try to take a balanced view of the situation". Cronbach's alpha in previous study showed excellent reliability α>.86 (López et al., 2015), so did this study's reliability at α>.95.

PERMA Profiler (Seligman, 2011). PERMA Profiler is used extensively when assessing a range of positive interventions, which can be applied to improve wellbeing. This 23-item scale measures the level of people's WB with five sub-dimensions based on the five pillars of WB as well as questions about loneliness, negative emotions and health (Butler & Kern, 2016): 1) positive emotion, 2) engagement, 3) relationships, 4) meaning, 5) and accomplishment. Participants' results are reported across these dimensions of WB with higher scores demonstrating higher levels of WB. It is a 11-point Likert scale with ranging from "not at all", "terrible", or "never" to "completely", "excellent", or "always". A sample question is "In general, to what extent do you lead a purposeful and meaningful life?" Previous studies showed very good reliability at α>.70 (e.g. (Butler & Kern, 2016)). This study's reliability is excellent α>.86.

Table 3. Means and standard deviation for intuitive eating, wellbeing and self-compassion variables (*N*=234)

Scales	Variables	*M*	*SD*
Intuitive Eating Scale	Intuitive eating	2.70	.49
PERMA-Profiler	Wellbeing	6.81	.88
Self-Compassion Scale	Self-kindness	3.16	.81
	Self-judgement	2.98	.92
	Common humanity	3.38	.88
	Isolation	3.23	1.00
	Mindfulness	3.49	.73
	Over-identify	3.11	.96

Data Analysis

SPSS (v28) was used to analyze the data. A range of descriptive statistics correlation analysis and regression were used to exploring the relationships between SC, WB and IE. In the first step, data cleaning was performed, and missing values were identified. All survey questions were mandatory, except for the ones used to establish BMI, following ethical guidelines to respect participants' potential discomfort with providing personal data like weight and height. Consequently, the only missing data pertained to participant weight and height. In the second step, preliminary analyses were conducted to check for normal distribution of the data and to obtain descriptive statistics. In step three, Pearson correlation tests were used to identify potential correlations between variables. In step four, multiple regression analysis was performed.

Results

Intuitive Eating and Wellbeing

To respond to RQ1, the relationship between IE, wellbeing and components of self-compassion was examined using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. Means and standard deviation for all variables can be found in Table 3. The results showed statistically significant small to moderate, negative correlations across all variables (Table 4).

Table 4. Pearson correlation results across intuitive eating, wellbeing and self-compassion variables (*N*=234)

	IE	WB	SK	SJ	CH	I	M
WB	-.30**						
SK	-.27**	.44**					
SJ	-.41**	.31**	.71**				
CH	-.13*	.35**	.60**	.50**			
I	-.34**	.39**	.56**	.72**	.47**		
M	-.28**	.33**	.72**	.60**	.64**	.53**	
OI	-.29**	.19**	.53**	.74**	.48**	.68**	.60**

*p<.05; **p<.001; Legend: IE= Intuitive Eating, WB= PERMA-H, SK= Self-kindness, SJ= Self-judgement, CH= Common humanity, I= Isolation, M= Mindfulness, OI= Over-identify.

Intuitive Eating and Self-Compassion After Controlling for Wellbeing

To respond to RQ2, Hierarchical multiple regression was used to assess the ability of self-compassion components to predict levels of IE, after controlling for wellbeing (Table 5). Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. Wellbeing was entered at step 1, explaining 10% of the variance in IE. After entering IE subscales at step 2, the total variance explained by the model as a whole was 24%, $F(7,226) = 9.92$, $p<.001$. The control measured explained an additional 14% of the variance in IE, after controlling for wellbeing, *R* squared change =.14., *F* change (6,226) =6.89, $p<.001$. In the final model, only two components of self-compassion were statistically significant, with self-judgment recording a higher beta value (beta=-.41) than common humanity (beta=.20), meaning that less self-judgement and more common humanity predicted IE.

BMI Differences for Intuitive Eating

A one-way between-groups analysis of variance was conducted to explore the impact of BMI on levels of intuitive eating. There was a statistically significant difference at the $p<.001$ level in intuitive eating scores for the three groups: $F(2, 144)=7.84$, $p<.001$. The effect size calculated using eta squared was .19, which is small. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 (M=2.51, SD.49) was significantly lower than Group 2 (M=2.83, SD=.50) and Group 3 (M=2.80, SD=.49) at $p<.05$. However, Group 2 (M=2.83, SD=.50) did not differ significantly from Group 3 (M=2.80, SD=.49).

Discussion

This research investigated the relationships between IE, WB and components of SC among the adult population. While past research

explored it in the context of young adult women (Carbonneau et al., 2021; Kelly & Stephen, 2016), this research adds value to the less prevalent population of older women. Moreover, this is the first study to investigate the association between IE and SC after controlling for WB using the PERMA model scale (Butler & Kern, 2016) as a measure of WB and flourishing.

Table 5. Multiple regression models assessing the ability of self-compassion to predict variance in intuitive eating after controlling for wellbeing

Variable	*B*	*SE*	*β*
Model 1			
Wellbeing	-.31	.06	-.31**
R^2	.10		
F for change in R^2	24.43		
Model 2			
Self-kindness	.17	.13	.14
Self-judgement	-.44	.12	-.41**
Common humanity	.22	.09	.20*
Isolation	-.044	.10	-.04
Mindfulness	-.23	.13	-.14
Over-identity	.02	.10	.01
R^2	.24		
F for change in R^2	6.89		

*p<.05, **p<.001

In the current study, higher levels of self-compassion were associated with higher intuitive eating habits after controlling for wellbeing. This is in line with the previous studies demonstrating a positive correlation between SC and IE without controlling for wellbeing (Barraclough et al., 2019; Carbonneau et al., 2021). However, the current study identified two SC components that predicted intuitive eating, self-judgment and common humanity. The effect of self-judgement in IE is in line with the previous findings that show that SC is associated with less self-judgment and better relationship with body image, body acceptance and self-esteem (Schoenefeld & Webb, 2013); and positive psychological functioning (Arslan, 2023, 2024; Neff, 2003b); all of which lead to better engagement with IE (Turk & Waller, 2020). Moreover, Carbonneau et al. (2021), showed that self-compassion moderates the relationship between anxiety and intuitive eating, showing that those who practice self-compassion are more likely to self-regulate and tolerate distressing feelings and less likely to engage in dysregulated eating (Carbonneau et al., 2021). Therefore, being less judgmental of oneself and practicing self-kindness may have a direct positive impact on our relationship with food and protect us from developing emotional eating behaviors, and it is irrespective of previously reported wellbeing.

This is the first research that associated IE with common humanity. Common humanity accepts that everyone, including oneself, deserves compassion and that ones' faults and imperfections are just part of being human (Neff, 2003a). Being connected to common humanity allows us to accept ourselves just as we are, connect with the rest of the world and prevent individuals from isolation, which can lead to negative psychological traits and mental health problems (Muris & Petrocchi, 2017). Hence, in the context of IE, individuals that practice common humanity and self-compassion are more likely to see body-related flaws as part of being human and will not feel isolated by them; this in return brings positive emotional wellbeing and decreased levels of emotional eating, which may explain the findings.

Furthermore, BMI revealed no significant correlation to SC or WB, whereas BMI and IE were positively correlated. However, if we break up BMI and IE into their subcategories (for BMI: healthy, overweight and obese; and for IE: unconditional permission to eat, eating for physical reasons, reliance on hunger, body-food choice congruence), our research shows that both the overweight and obese samples were positively associated with eating for physical reasons, reliance on hunger cues and body-food choice congruence.

These findings are conflicting with past research showing that one of the main principles of IE is to follow the body's instinctive feedback in terms of amount and type of foods consumed; thus, eating intuitively should associate with decreased overeating and weight/BMI lowering, even if weight loss was never the goal (Gast & Hawks, 1998). Van Dyke and Drinkwater (2014) reviewed the relationship between IE and health indicators including BMI (Van Dyke & Drinkwater, 2014). Cross-sectional studies showed IE was inversely correlated with BMI, and positively associated with mental wellbeing as well as improved dietary habits; however, the majority of these were done with college students (mostly women) with a healthy average BMI (between 18 and 25) (S. Hawks et al., 2004; S. R. Hawks et al., 2004; Tylka & Kroon Van Diest, 2013; Van Diest & Tylka, 2010). In the same review, the authors analysed nine clinical IE interventions in people living with overweight and obesity (mostly Caucasian women); while the implementation of IE improved their psychological health indicators, it did not always result in BMI decline (Cole & Horacek, 2010; Leblanc et al., 2012). In some cases, however, it helped with weight maintenance and improvement in wellbeing (Bacon et al., 2005; Cole & Horacek, 2010).

Several factors may explain the different association between BMI and IE patterns. From a nutritional profile and quality of the diet perspective, many SC-EI-BMI studies omit diet quality assessment. This is also a limitation for the current research. In fact, the number of studies investigating the relationship between IE and dietary intake are limited and inconsistent. A recent review found IE improves or maintains diet quality while enhancing eating behaviour and relationship with food (Hensley-Hackett et al., 2022). However, Grider et al.'s review on mindful and intuitive eating's effect on dietary intake suggests limited evidence of IE interventions influencing diet quality and calorie intake (Grider et al., 2021).

Furthermore, individual physiology and appetite regulation may differ among individuals with different BMI. Leptin/ghrelin cycle regulates hunger-satiety. Ghrelin from stomach induces hunger, while leptin produced in fatty cells signals fullness (Lanham-New et al., 2019). Leptin sensitivity varies, especially in individuals with higher fat content, potentially leading to overeating despite intuitively eating for physical reasons (Zhang & Scarpace, 2006). From the psychological perspective, Schoenfeld and Webb (2013) showed that positive IE and body image correlated with higher SC among women aged 36-65 (Schoenefeld & Webb, 2013). Brown et al. (2016) support this, noting SC as inner resource aiding mid-life women's physical changes, potentially fostering WB amidst body changes (Brown et al., 2016). Thus, the majority of respondents may

have been able to practice more SC around their varying BMI and body size.

Limitations

We have identified two main limitations in our study. First, despite aiming for a diverse sample by recruiting from the general population, respondents were mostly Caucasian middle-aged women (36-65 years old), with low male participation (25%). However, the study enabled comparison of trends between IE, SC, and WB in older women and young female students, the main participants in previous IE and SC research. Further study is required for understanding IE, WB, and SC links in males.

Secondly, our study aimed to explore SC and IE relationship; thus, diet quality data was not collected. Having this diet quality data could have clarified IE-BMI link. Unlike prior research showing inverse IE-BMI correlation in young female students (S. Hawks et al., 2004; Tylka, 2006; Tylka & Kroon Van Diest, 2013; Tylka & Wilcox, 2006; Van Diest & Tylka, 2010), we found a positive association. This opens up an avenue to explore BMI-IE across age, gender, ethnicity, considering diet quality, physical activity, and social/physical environments. Lack of diverse population studies on IE patterns needs attention.

Implications For Research and Practice

This study provides further evidence of the positive association between SC, IE and WB and highlights the potential of practicing self-compassion to improve intuitive eating habits and hence lower the risk of disordered eating which could significantly benefit clinical interventions. It adds to the existing research by identifying the PERMA wellbeing model as a potential factor affecting IE. This opens the door to the opportunity to explore how positive psychology traits may positively influence intuitive eating. It also opens up opportunities to investigate the potential of combining positive psychological interventions with current weight management programs, as many of them have been based on the PERMA model. Moreover, the limitations of this study highlight the necessity for additional exploration into the relationship among IE, BMI, and dietary quality, along with investigating the connection between IE and varying physiological responses according to BMI status.

Compliance with Ethical Standards

Ethical Standards. All study procedures involving human participants followed institutional and/or national research committee ethical standards and the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study was approved by the University of East London Research Ethics Committee, with approval dated 1 January 2018 (no approval number).

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