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Young Adults' Attitudes and Perceptions of Obesity and Weight Management: Implications for Treatment Development

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Abstract

Young adults are underrepresented in standard behavioral weight loss trials, and evidence suggests that they differ from older adults on many weight related constructs. The aim of this review is to explore young adults' attitudes toward obesity and weight management, with particular attention to those factors that may play a role in development of future treatment efforts. Both intrapersonal and interpersonal considerations unique to young adulthood are assessed; in addition, we examine young adults' perceptions of specific weight-related behaviors such as dieting, physical activity, and self-weighing. Conclusions are consistent with other findings suggesting that weight management interventions should be adapted and designed specifically for this age group.

Keywords

young adults; emerging adults; weight management; overweight; obesity; treatment development

Introduction and Context

The development of lifestyle interventions for weight management has evolved beyond a one-size-fits-all approach, focusing instead on creating tailored interventions for specific populations based on identified risk factors. Great advances have been made in behavioral weight loss interventions for children, adolescents, women, and racial/ethnic minorities; however, one high-risk group that has been largely overlooked is young adults. Young adulthood, typically defined as 18–35 [1], is associated with a variety of life events known to

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Conflict of Interest

Autumn Lanoye, Amy A. Gorin, and Jessica Gokee LaRose declare that they have no conflict of interest.

Human and Animal Rights and Informed Consent

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be associated with weight gain, such as enrolling in college [2], getting married [3] and beginning a family [4]. In addition, young adults engage in high rates of specific behaviors known to contribute to weight gain including eating fast food, drinking sugar-sweetened beverages, alcohol use, and sedentary activity [5–9].

Reflecting these risk factors, recent estimates indicate that over 50% of U.S. young adults are overweight or obese [10]. Young adults – especially those who are already overweight – also experience the highest rate of weight gain of any age group, which is of great concern given the longitudinal association with increased cardiometabolic risk [11–12]. Furthermore, perhaps due in part to the lack of tailored approaches for this age group, young adults are markedly underrepresented in adult behavioral weight loss programs [13]. Those who do enroll in such programs are less engaged, lose less weight, and are more likely to drop out than their older adult counterparts [13].

In recent years, the importance of developing interventions that target weight loss and weight gain prevention in young adults has been recognized [1, 14], yet significant work remains. This paper explores young adults' attitudes toward obesity and weight related behaviors, with particular attention to those factors that may play a role in future treatment development efforts. Due to widely varying operational definitions of “young adult” in the extant literature, we adopt a broad conceptualization and include studies with emerging adult samples (ages 18–25), college student samples, and young adult samples more generally (e.g. ages 18–35) but recognize that these various subgroups each have their own weight management considerations and where appropriate, highlight distinctions between these subgroups. In order to limit cultural effects on weight-related attitudes and perceptions, this review is restricted to U.S. findings.

Individual Considerations

Gender

Significant gender differences exist with respect to perceptions of weight and related constructs. In a large, nationally representative sample of overweight adults, men were more likely than women to misclassify their weight status as “underweight” or “about the right weight,” and women were more likely to report weight dissatisfaction [15]. This pattern holds true in young adults as well: compared to their female counterparts, young adult males are less concerned about weight gain [16] and less likely to perceive themselves as overweight [16–17] – even those at the highest BMI categories [18]. Interestingly, young men who endorse weight dissatisfaction are more likely to be trying to gain weight or “bulk up” than trying to lose weight [17, 19], which reflects the societal representation of the ideal male body image, which is muscular, as opposed to the ideal female body, which is thin [20].

This misperception of overweight and obesity coupled with societal pressures to avoid becoming thin makes recruiting young men into weight loss programs particularly challenging. Even among those young adults who report wanting to lose weight, fewer men than women are willing to join a weight loss program to help them achieve this goal [21]. Further, young men are underrepresented within the few current weight management trials

targeting young adults [22–24]. Thus, additional work is needed in order to determine the best ways to recruit and engage young men in lifestyle interventions for weight management. Such programs might attract more young male participants if they implemented targeted ads [25] framed to promote “fitness” rather than “weight loss” and provide treatment content in this same vein.

Race/Ethnicity

The extent to which racial disparities in the prevalence of overweight/obesity are produced by cultural differences in ideal body shape and acceptance of larger body types is contested [26]. In particular, it has been suggested that African Americans may value a fuller figure than members of other races, thereby contributing to their demonstrated high rates of overweight and obesity [26]. Though a full exploration of such theories is outside the scope of the current review, we present the most relevant findings for weight loss treatment with ethnically diverse young adults.

While African American young adults have been found to report their BMI (i.e. height and weight) more accurately than their white peers [27], they are also more likely to report a smaller perceived body size at the same BMI [28]. Among young women, overweight African Americans are more likely than overweight Caucasians to misclassify their weight as normal [26, 29], though young black men make this underassessment error at greater rates than their female peers [30]. Further, only a small percentage of black overweight young adults perceive health risks due to their weight [30], despite the fact that overweight and obesity in young adulthood is predictive of future cardiometabolic risk [11]. These findings suggest lower perceived susceptibility to obesity and related health problems among African American young adults, which may serve as a barrier to their interest and enrollment in weight loss programs.

Direct comparisons between African American and Caucasian young adults reveal greater body dissatisfaction for Caucasian respondents [28], with results of a meta-analysis indicating that this discrepancy may be greatest during young adulthood [31]. Young black women may not have internalized the thin ideal to the extent of their white peers [29]; however, they do report considerable body dissatisfaction [30, 32]. This dissatisfaction may have less to do with their overall size and weight than it does with specific areas of the body [30]. One study found that it is not necessarily a larger overall size that is more desirable and attractive among African American young adults, but instead a larger waist-to-hip ratio [33], i.e. a “curvy” figure. These findings again point to framing recruitment messages not in terms of “weight loss” per se, but rather “achieving the body you want” or reducing abdominal fat in order to appeal to black young adults.

Aside from the challenges of enrolling African American young adults into weight loss programs [34], treatment development efforts must also address the unique barriers that this population may experience throughout the weight loss process. Among adults as a whole, African Americans tend to achieve lower weight losses than Caucasians [35–36], and data suggest that this pattern exists among young adults as well [37]. Culturally tailored weight loss interventions addressing beliefs related to specific weight-related behaviors have

produced positive outcomes [38], and these same tailoring strategies may be of use in designing more effective weight loss programs for racially diverse young adult populations.

Motivation

Sustaining motivation is predictive of long-term weight loss [39], and is recognized by young adults as an important factor for success in weight loss efforts [19, 40]. Evidence suggests that weight loss motivations differ between young and older adults. Among successful weight losers in the National Weight Control Registry (NWCR), medical triggers and health related motivations are less frequently reported among young adults relative to older adults, and young adults in the NWCR are more likely to cite appearance and social factors as motivations for their weight loss [41]. Appearance-related motivations for weight loss are also much stronger in young adults presenting for weight loss treatment programs [42]. In general, young adults tend to endorse more proximal benefits of weight loss as motivation such as wanting to lose weight in order to “feel better,” improve their social image, and feel more confident, particularly with respect to attracting a romantic partner [19, 41–44].

Given the association between health triggers and long-term weight loss success [45], weight loss interventions designed for young adults might improve outcomes by raising health concerns among young adults, who may perceive health consequences of overweight and obesity as relatively distal. Providing normative feedback regarding current health behaviors has been an effective intervention component for changing alcohol use in young adults [46]; this same strategy may be applicable to weight loss interventions in order to bridge the gap between current behaviors and future health outcomes. Alternatively, harnessing young adults’ high level of social motivation for weight loss may improve recruitment and engagement with this population. More research is needed to determine how these stated reasons for weight loss map on to known constructs such as intrinsic and extrinsic motivation and autonomous self-regulation to better understand their potential role in treatment programs for young adults.

Stress

Stress management may be particularly important to address in treatments designed for young adults, given the many life changes associated with this developmental stage. Recent surveys of young adults indicate that stress is a major concern, as evidenced by high rates of perceived stress [47] especially when compared to other age groups [48]. These high stress levels may be due in part to learning how to independently manage multiple responsibilities, which leaves many young adults pressed for time [49]. As a result, young adults report frequent consumption of convenience foods and a pattern of skipping meals followed by consuming large amounts of food due to hunger build-up [50–51]. Young adults are also more likely than older adults to consume low-nutrient, high-calorie snack foods as “comfort foods” in response to stress [52]. On the other side of the energy balance equation, competing demands for time are associated with infrequent exercise among young adults [53].

Young adults recognize the connection between stress and unhealthy weight practices [40, 54], but may lack appropriate skills to manage the stressors they encounter. Indeed, evidence suggests that young adults cope with stress by engaging in weight gain promoting behaviors such as drinking alcohol and eating at greater rates than other age groups [48]. Even among young adults for whom weight gain is a concern, a busy lifestyle with multiple priorities remains a significant barrier to engaging in weight loss behaviors [55]. In light of these findings, weight management interventions for this age group should consider including stress management modules, integrate time management practices, and develop strategies that can be framed as “quick and easy” in order to reduce the perception that healthy eating necessitates neglecting other activities [49]. Similarly, the structure of weight management programs for this age group should incorporate flexible and convenient scheduling [43], which may involve the use of mobile and web platforms [56–58]. In addition, engaging in short bouts of exercise as a stress reduction technique should be reinforced in programs, given that approximately 50% of young adults are already implementing this strategy [48].

Socioeconomic Factors

Data indicate that socioeconomically disadvantaged young adults may be at increased risk for obesity and weight gain promoting behaviors [59–61]. Concern regarding weight gain and obesity may be crowded out due to more pressing concerns (such as satisfying basic needs) and increased demands on time [49]. In a study of women ages 20–45, low-income participants reported that they would have to gain more than 10 pounds before noticing and nearly 20 pounds before taking action to reduce their weight, compared to the 6 pound and 10 pound thresholds reported by higher-income participants [62]; of note, income was not related to ideal body size or the importance of weight relative to other areas of life in this study. Perceived consequences of obesity and motivation for weight loss appear to differ for lower-income compared to other young adults, with greater emphases on weight loss bettering chances for employment and preventing negative health outcomes [59]. However, the majority of research regarding young adults’ perceptions of weight gain and related practices has been conducted with four-year college students; as such, there exists a relative dearth of research regarding these constructs among low-SES young adults.

A large proportion of young adults more generally exhibit some degree of financial concern, and the demonstrated high rates of stress in this age group are attributed mainly to money and job stability [48]. Financial constraints are associated with weight-related practices in young adulthood [63]; credit card debt in particular has been linked to higher BMI, sedentary behavior, and body dissatisfaction [64]. In addition, perceived monetary cost has been identified as a barrier to weight management in this population in terms of both increasing physical activity and improving nutrition quality [40]. Weight management interventions for young adults must be prepared to address these financial concerns by providing practical resources in order to reduce the cost burden for participants. Strategies may include offering the program at reduced or no cost, providing free weight management tools such as scales, measuring cups, or exercise equipment, and developing treatment materials that include cost comparisons for healthy versus unhealthy foods and free/low-cost local resources for physical activity. Offering incentives for meeting behavioral and weight loss goals may further help to promote engagement with this population, and young adults

report that they would be more interested in a weight loss program with this type of structure [43].

Social Considerations

Peer Influences

Social networks, social norms, and peer modeling represent powerful determinants of weight-related health behaviors for young adults [65–67]. Overweight young adults tend to be surrounded by a network of individuals who themselves are overweight or obese. Interestingly, while studies suggest that overweight young adults are more likely than those of normal weight to have romantic partners, close friends, casual friends, and relatives who are also overweight, these differences in social network composition are not associated with differences in perceived social acceptability for being overweight [68]. This finding may reflect an awareness among overweight young adults that they are in violation of social norms, thus increasing their desire to lose weight for social reasons. This same study demonstrated that number of social contacts trying to lose weight and perceived social norms for weight loss were positively associated with intention to lose weight among overweight young adults, which underscores the potential influence of social and peer networks on weight loss intentions and behaviors in this age group. This finding may be explained in part by social comparison processes, which have been found to be associated with increased diet and exercise behaviors in young women—particularly when comparisons occurred within friend groups [69]. Romantic relationships in young adulthood have been found to serve a protective function, particularly for women, such that supportive intimate relationships are associated with improved body image, reduced anxiety about physical appearance, and greater likelihood to adopt partners' healthy weight management behaviors [70–72].

Taken together, findings underscore the importance of social relationships in the development of young adults' perceptions of weight status and attitudes toward weight loss. Future treatment efforts with this population may find success in harnessing these social influences by enrolling young adults and their known peers as supportive dyads or clusters. Indeed, the engagement of existing social networks has emerged as a theme associated with increased likelihood of participating in healthy lifestyle programs among overweight young adults [43, 73]. Delivering weight management interventions via Facebook or other technology-mediated social networks has produced mixed success [73–75], but may become promising avenues with additional refinement.

Stigma

Not all social influences are positive, however, and overweight young adults in particular are susceptible to the negative effects of weight-related bias [76]. Data indicate that overweight young adults are judged by others to be less likable [77] and less suitable sexual partners [78]—even when those making judgments are overweight themselves [77, 79]. Further, perceived weight-related social control has been linked to body dissatisfaction, low self-esteem, and infrequent physical activity among young adults, particularly when this social pressure to lose weight stems from their parents [80].

Young adults' experiences of weight-related stigma are associated with heightened cortisol responses [81], exercise avoidance [82], and increased caloric consumption [83]—all of which may contribute to continued weight gain. As such, addressing bias and discrimination due to weight within the context of a weight management program for young adults may minimize these negative effects. Teaching social skills to manage unsupportive interpersonal situations, and fostering the development of autonomous self-regulation for weight loss may reduce the influence of social control and judgment.

Perceptions of Specific Weight-Related Behaviors

Physical Activity

Young adults seem receptive to physical activity as a tool for weight management, and evidence suggests that regular exercise is associated with weight control for this age group [84]—perhaps more so than for older adults [41]. Focus groups conducted with young adults indicate that engagement around physical activity is central to their interest in participating in a weight loss program [55]. Motivations for physical activity have been shown to differ across the lifespan, with young adults more strongly motivated by interpersonal factors such as affiliation, competition, and social recognition than older adults [85]. Thus, motivations for exercise among young adults are consistent with those for weight loss, with social motivations endorsed at higher rates than health-related motivations [41]. Recent data suggest that these social motivations for physical activity tend to be stronger for young men compared to their female peers, and may be better predictors of exercise behavior in this age group given lower rates of exercise among young women [86–87].

Despite this apparent interest in physical activity and recognition of the benefits of regular exercise [43, 53], data indicate that the most significant declines in rates of exercise occur during emerging adulthood [88]. Reported barriers to regular activity for young adults include beliefs that exercise is tiring and hard work; however, these barriers are endorsed more strongly among those who do not exercise [53]. Thus, early stages of treatment programs with this age group may benefit from focusing on cognitive strategies for reducing negative beliefs about exercise while providing behavioral strategies for building a physical activity routine. Providing opportunities for supervised exercise may also improve adherence to exercise recommendations with this age group [84]. Additional research is needed in order to develop methods for facilitating physical activity among young adult females in particular.

Eating Habits

Food choice and related attitudes among young adults have multiple determinants, with influences including perceived convenience, physical characteristics of food, social context, perceived cost, and willpower [40, 89]. In general, young adulthood is associated with a marked decline in nutritional quality, due in part to increased fast food consumption [5–6]. Cooking for oneself may serve as a protective factor against this trend given its associations with increased consumption of fruits and vegetables, greater dietary quality, and future healthy eating habits for this age group [90–91]. Despite these demonstrated benefits and reported enjoyment of cooking [90], young adults infrequently prepare their own meals,

citing lack of resources including time, money, availability of healthy food, and cooking skills as perceived barriers [92]. These barriers can be addressed within the context of a weight management program for young adults by offering healthy food tastings and/or cooking skills classes in addition to providing strategies for making healthier choices when dining out at fast food restaurants or campus dining halls.

Another concerning risk factor is the reported absence of forethought when choosing what to eat, with one recent study finding that 63% of the young adult sample denied planning what to eat ahead of time [93]. This same study also found high rates of dining alone and a tendency to eat while doing something else, such as work or watching television; these practices were associated with the consumption of low nutrition density foods [93]. These results highlight the importance of increasing young adults' awareness related to eating behaviors, which may be achieved through the teaching of mindfulness skills [94]. Mindfulness might also help to decrease emotion-related eating by promoting intuitive eating, i.e. eating only in response to bodily hunger cues, which has been linked to lower BMI and higher motivation for exercise among young adult women [95].

Self-Weighing

Some concern exists with respect to encouraging regular self-weighing for this age group, given the relatively high rates of disordered eating and body image concerns—even among those of normal weight [96]. Some research indicates that frequent self-weighing in young adulthood is associated with binge eating and depression [97]—particularly among young women [98]. Within treatment-seeking samples of young adults, however, frequent self-weighing is associated with better weight outcomes [99–100] and healthy weight control behaviors [101]. Further, these studies report a lack of adverse psychological effects [100–102] and unhealthy weight control behaviors [101–102] associated with frequent self-weighing; in addition, young adults reported positive perceptions of regular self-weighing [103]. Weight management interventions targeting young adults should continue to include screening for previous disordered eating practices and excessive body dissatisfaction, but frequent self-weighing within the context of supervised weight gain prevention or weight loss trials appears to be appropriate and beneficial for most young adults.

Conclusions and Future Directions

Young adulthood is a unique developmental period that presents many challenges and opportunities for weight management. As young adults move through the normative process of individuation, exploration, and identity formation, health beliefs and practices solidify into long-lasting habits. To engage young adults in weight management, interventions need to be adapted and designed specifically for this age group. Simply offering existing adult interventions to young adult samples does not work [13, 104]. Formative work conducted with this age group has yielded important conclusions about the perceived barriers and facilitators to weight management among young adults, but future work to this end should focus on increasing the representativeness of samples beyond college students and highly educated samples, and further exploring the gender and racial differences discussed above [16, 37, 73].

Similarly, additional research is needed with respect to emerging adulthood, typically defined as ages 18–25, as a period distinct from both adolescence and young adulthood more broadly. The effects of life changes, the development of self-esteem and self-efficacy, and the role of social influences may be especially pertinent considerations for this age group [105]. Continued development and maturation of executive functioning among emerging adults may be related to food choice and time management capabilities in unique ways [106]. Evidence suggests that perceptions of weight management differ between emerging and other young adults; for instance, in a sample of 18–25 year-olds, health-related reasons for weight loss were not particularly strong motivators, but in a sample of 18–35 year-olds, health was reported as a strong motivation for weight loss [43–44]. In addition, healthy weight management behaviors practiced during emerging adulthood have been shown to influence healthy habits in later young adulthood more so than behaviors practiced in adolescence [90], suggesting that interventions in childhood and adolescence may not be sufficient for creating lasting behavior change. Unfortunately, few studies have examined this age group compared with other developmental periods in order to determine systematic differences with respect to attitudes toward weight gain and obesity.

An additional caveat to the conclusions presented herein is the role of generational influences on these beliefs and attitudes; data on our current Millennial young adults may demonstrate marked differences from research conducted with Generation X. Increases in the prevalence of overweight and obesity over the past several decades have been found to be associated with complementary changes in weight perception, such that more recent young adults are less likely than previous cohorts of young adults to identify as overweight [107]. Other cultural influences, such as the increasing role of the media [108] and the Health at Every Size movement [109] may also play a role in potential generational differences.

Despite the challenges that exist for weight management in young adulthood, this time of life is in many ways ideal for obesity prevention and intervention efforts. As they begin to assume responsibility for their own health and well-being, young adults are poised to gain much from evidence-based assistance with food purchasing and preparation, stress management, balancing competing demands, and building exercise habits. Intervention with this age group has important implications for future generations as well, underscored by the finding that pre-pregnancy weight is associated with infant weight trajectories [110]. Young adults' willingness to engage with technology offers the potential to develop programs that can be delivered via mobile or web, and are thus more readily scaled. However, more research is needed to determine the best methods for adapting current models and developing new strategies specific to this vulnerable age group.

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