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Distorted Perceptions of Body weight: Examining Body Image Dissatisfaction and Psychological Distress in Adolescents

Dr. Mussarat Anwar
Associate Professor, CHE, University of Peshawar, KP, Pakistan, Phone no. +92-3329379110. Email: musaratanwar@uop.edu.pk

Dr. Shahid Iqbal (Corresponding author)
Assistant, DAS/CDPM/IER, University of Peshawar, KP, Pakistan
Email: shahidiqbalkhan@uop.edu.pk

Dr. Ayesha Anwar
Lecturer, CHE, University of Peshawar, KP, Pakistan, Phone no. +92-3329155244
Email: ayeshaanwar@uop.edu.pk

Ms Ayesha Ijaz
4Lecturer, CHE, University of Peshawar, KP, Pakistan, Phone no. +92 3329161057. Email: ayesha_ijaz@uop.edu.pk

Abstract
This study explores the relationship between body weight perception, psychological distress, and weight management behaviors among adolescents in Peshawar, Pakistan. Using a cross-sectional design, data were collected from 200 adolescents (100 males, 100 females), aged 13–19, through stratified random sampling. Participants' body weight perception was assessed using Stunkard's Figure Rating Scale, while psychological distress was measured with the Kessler Psychological Distress Scale (K10). A structured questionnaire gathered information on BMI, dietary habits, and weight management strategies. The study found that 80.5% of participants misperceived their body weight, with females more likely to overestimate and males to underestimate their body size. Adolescents with distorted body image perceptions experienced significantly higher levels of psychological distress and were more likely to engage in unhealthy weight management practices, such as meal skipping and extreme dieting. Gender differences were evident, with females demonstrating more significant body dissatisfaction and emotional distress. These findings underscore the need for culturally sensitive interventions to address body image misperceptions and promote mental health among Pakistani adolescents.

Keywords: Adolescents, Body Weight Perception, Psychological Distress, Weight Management, Gender Differences, Peshawar, Pakistan.

Introduction

Adolescence represents a transformative stage in human development, encompassing a multitude of physiological, emotional, and social shifts that collectively shape identity formation. Among the many facets of self-concept that solidify during this period, body image stands out as particularly influential. Body image refers to the internalized perception and subjective evaluation individuals

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hold about their physical appearance, including their beliefs, thoughts, and emotions about body size, shape, and weight (Grogan, 2016). This perception is not developed in isolation but is shaped by powerful external forces, including media portrayals, cultural norms, family attitudes, and peer influence (Tiggemann, 2011; Perloff, 2014).

In modern societies, adolescents are increasingly exposed to idealized and often unrealistic body standards perpetuated through digital media platforms, advertising, and entertainment industries. These representations contribute to the internalization of the thin ideal among females and the muscular ideal among males, fostering body dissatisfaction when personal appearance fails to align with these standards (Perloff, 2014; McCabe & Ricciardelli, 2004). Such dissatisfaction can distort body weight perception, resulting in a growing prevalence of misperceived body image during adolescence (Jansen et al., 2008; Quick et al., 2013). Numerous studies have documented the tendency of adolescents to misjudge their body weight status, often categorizing themselves as overweight or underweight despite possessing a normal Body Mass Index (BMI) (Chung et al., 2007; Neumark-Sztainer et al., 2006). This phenomenon is more frequently observed in adolescent girls, who tend to overestimate their body size and are more prone to engaging in extreme weight loss practices such as skipping meals, fasting, and consuming diet pills (Eisenberg et al., 2005; Grogan, 2016). Conversely, adolescent boys may underestimate their weight and strive toward a more muscular physique, often participating in excessive physical training or consuming protein supplements (McCabe & Ricciardelli, 2004).

The psychological implications of such misperceptions are profound. Body image dissatisfaction has been linked to a wide range of adverse mental health outcomes, including low self-esteem, anxiety, depression, disordered eating, and suicidal ideation (Zhao et al., 2022; Wang et al., 2020; Miller & Downey, 1999). Adolescents who inaccurately perceive themselves as overweight report significantly higher emotional distress, irrespective of their actual BMI (Jansen et al., 2008). These negative psychological consequences not only impair well-being during adolescence but may also persist into adulthood, influencing future health behaviors and quality of life.

In developing countries like Pakistan, the effects of globalization, urbanization, and social media penetration have begun to reshape traditional perceptions of beauty and health. Pakistani adolescents, particularly those residing in urban centers, are now increasingly exposed to Western beauty ideals that emphasize slimness for females and muscularity for males (Farooq & Kayani, 2021). While previous studies in Pakistan have highlighted rising trends in obesity and body dissatisfaction, few have systematically examined the psychological and behavioral correlates of body weight misperception in this population (Mushtaq et al., 2012). Given this context, it becomes imperative to investigate how adolescents in Pakistan perceive their body image, how these perceptions align with their actual BMI, and what psychological and behavioral consequences emerge from these misperceptions. Understanding these dynamics is critical for developing culturally sensitive interventions aimed at promoting healthy body image, preventing disordered eating behaviors, and improving adolescent mental health outcomes.

Therefore, the present study aims to explore the prevalence of body weight misperception among adolescents in Peshawar, Pakistan. It seeks to examine the

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association between perceived and actual weight status, the influence of gender on body image perception, the psychological distress linked with misperceptions, and the weight control strategies employed by adolescents. By shedding light on these dimensions, this study contributes to a growing body of literature that emphasizes the urgent need for body image education, mental health support, and policy measures targeting youth populations in transitional societies.

Methodology

This study examines how adolescents in Peshawar perceive their body weight and the influence of these perceptions on various factors such as weight control behaviors, psychological distress (including anxiety and depression), and dietary and exercise habits. The research aims to assess the prevalence of weight misperception among adolescents aged 13–19, exploring how these perceptions drive weight management behaviors. It also investigates the relationship between actual body weight, as measured by BMI, and adolescents' perceived weight. Additionally, the study aims to analyze the link between body image misperception and psychological distress, using the Kessler Psychological Distress Scale (K10) to measure levels of anxiety and depression. The design of the study is cross-sectional, quantitative, and questionnaire-based. A sample of 200 adolescents (100 males, 100 females) aged 13–19 will be selected from educational institutions across Peshawar through stratified and simple random sampling. The tools used in this study include Stunkard's Figure Rating Scale to assess perceived body image, the Kessler Psychological Distress Scale (K10) to measure psychological distress, and a custom questionnaire to record demographics, BMI, dietary practices, exercise habits, and weight perception.

Results and Discussion

Table 1

Descriptive Statistics on Age, Weight, Height, and BMI of the Respondents (N=200)

	Weight Perception	N	Mean	Std. Deviation	Std. Error Mean	Mean Difference	T	Sig. (2-tailed)
Age of the respondents	Faulty Perception	161	16.3789	1.71735	.13535	1.81478	5.606	.000
	Accurate Perception	39	14.5641	2.17395	.34811			
Mean Weight of the respondents	Faulty Perception	161	46.93	8.185	.645	-5.792	-3.473	.001
	Accurate Perception	39	52.72	13.149	2.105			
BMI of the respondents	Faulty Perception	161	19.99	3.570	.281	-.700	-.958	.339
	Accurate Perception	39	20.69	5.808	.930			

Table 1 presents the descriptive statistics for age, weight, and Body Mass Index

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(BMI), comparing respondents with accurate versus faulty weight perception (N = 200). Independent samples t-tests were conducted to determine whether the differences between the two groups were statistically significant.

The mean age of respondents with faulty weight perception was significantly higher (M = 16.38, SD = 1.72) than that of those with accurate perception (M = 14.56, SD = 2.17). This difference was statistically significant ($t = 5.61$, $p < .001$), indicating that adolescents who misperceive their body weight tend to be older. Previous research supports this trend, noting that body dissatisfaction and distorted body image tend to increase during mid-to-late adolescence, often due to heightened self-awareness and peer comparison (Smolak, 2004; Jones & Crawford, 2006).

Participants with faulty weight perception also had a significantly lower average weight (M = 46.93 kg, SD = 8.19) compared to those with accurate perception (M = 52.72 kg, SD = 13.15), with a t-value of -3.47 and $p = .001$. This suggests that lighter individuals are more prone to inaccurately assessing their weight status, possibly underestimating or misclassifying their physical condition due to internalized thinness ideals or social reinforcement of slimness as a beauty standard (Tiggemann, 2005).

Although the mean BMI of respondents with faulty weight perception (M = 19.99, SD = 3.57) was slightly lower than those with accurate perception (M = 20.69, SD = 5.81), the difference was not statistically significant ($t = -0.96$, $p = .339$). This indicates that BMI alone may not be a reliable predictor of perceptual accuracy, emphasizing that body weight perception is a complex construct influenced by sociocultural, psychological, and environmental factors rather than objective metrics alone (Cash & Pruzinsky, 2002).

These findings highlight that both age and body weight significantly affect the accuracy of weight perception among adolescents. Older individuals and those with lower body weights are more likely to misperceive their physical appearance, which may stem from increased exposure to social media, idealized body types, and peer influence during critical developmental years (Levine & Murnen, 2009). Although BMI did not significantly differentiate perceptual accuracy, this reinforces that body dissatisfaction and misperception are not purely determined by physical characteristics. Cognitive and emotional factors such as self-esteem, internalization of cultural beauty standards, and media exposure appear to play critical roles (Dohnt & Tiggemann, 2006).

These insights underline the need for comprehensive school- and community-based interventions that promote body positivity and critical media literacy. Educators, parents, and health professionals should especially focus on adolescents at risk—particularly older teens and those already underweight but unaware of their health status—to mitigate the psychological and behavioral consequences of body image distortion.

Table 2
Faulty Weight Perception By Gender (N=200)

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WEIGHT PERCEPTION				
	Gender	Faulty Perception	Accurate Perception	Total
	Female	91(45.5%)	9(4.5%)	100(50.0%)
	Male	70(35.0%)	30 (15.0%)	100(50.0%)
Total		161 (80.5%)	39(19.5%)	15.0%(100.0%)

$x^2(1,200)14.047, p<.01$

The findings of this study indicate a high prevalence of faulty weight perception among adolescents, with a notable gender disparity. As shown in Table 2, 91% of females demonstrated inaccurate weight perception compared to 70% of males—a difference that was statistically significant, $\chi^2(1, N = 200) = 14.047$, $p < .01$. This aligns with previous research suggesting that females are more susceptible to body image distortions, influenced by sociocultural norms, peer dynamics, and media representations (Tiggemann, 2011; Perloff, 2014; Farooq & Kayani, 2021). The data highlight how internalized body ideals and appearance-based expectations disproportionately affect adolescent girls, contributing to misperceptions of their body weight (Grogan, 2016; Jones & Crawford, 2006).

Table 4

Association between actual and Perceived Body Weight for N=200 Respondents

Gender	Actual body Weight	Faulty perception			
		underweight	normal weight	overweight	Total
Female	Underweight	3	38	0	41
	normal weight	8	5	29	42
	over weight	0	2	15	17
	Total	11	45	44	100
Male	Underweight	7	30	0	37
	normal weight	4	18	22	44
	over weight	0	1	18	19
	Total	11	49	27	100

Female = $X^2(6,100)145.25$, $p < 0.1$; Male = $X^2(6,100)94.15$

Analysis revealed a significant misalignment between actual and perceived body weight among female adolescents. Of the 41 underweight females, only 3 accurately recognized their underweight status, while 38 perceived themselves as having normal weight. None believed they were overweight or obese. This indicates a normalization—and possibly a preference—for being underweight among this group.

Among the 42 females with normal body weight, 29 misperceived themselves as overweight, 8 believed they were underweight, and only 5 had an accurate perception of their weight status. These results suggest that normal-weight females are especially prone to body image distortion, often viewing themselves as heavier than they are. In contrast, 15 of the 17 overweight females accurately identified their condition, while 2 perceived themselves as normal weight. Overall, distorted perceptions were most prominent among underweight and normal-weight participants, reflecting a societal tendency to equate thinness with normalcy or desirability. A chi-square test revealed a highly significant association between actual and perceived body weight ($\chi^2(6, N = 100) = 145.25$, $p < 0.01$). The

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high value indicates a strong deviation from what would be expected by chance, confirming widespread body image misperceptions among female adolescents.

Among the 37 underweight male respondents, 30 believed they had normal weight, and only 7 accurately identified their underweight status. Among the 44 normal-weight males, 22 perceived themselves as overweight, 4 as underweight, and 18 correctly identified their weight as normal.

Of the 19 overweight males, 18 accurately recognized their weight status, while 1 perceived himself as underweight and 5 as normal weight. Although misperceptions were evident, particularly among underweight and normal-weight males, the extent was less pronounced than in the female group. The chi-square analysis ($\chi^2(6, N = 100) = 94.15$, $p < 0.01$) also showed a statistically significant association between actual and perceived body weight among males. While the value was lower than that of the female group, it still reflects a considerable mismatch between perception and reality.

These findings underscore a critical issue among adolescents—distorted body image perception. Female adolescents exhibited a stronger tendency to misperceive their body weight, often idealizing thinness and internalizing unrealistic beauty standards. Although males also demonstrated perceptual inconsistencies, the degree of distortion was less severe. The statistically significant chi-square results in both groups confirm that these misperceptions are not incidental but part of a broader pattern likely influenced by sociocultural norms, media portrayals, and peer pressure. These insights do also point to the need for targeted body image interventions and health education programs that promote realistic and healthy perceptions of body weight, especially during adolescence—a critical developmental period for self-identity and self-esteem.

Table 5
Independent Samples t-Test Comparing Kessler Psychological Distress Scores Between Respondents with Faulty vs. Accurate Weight Perception (N = 200)

Kessler Item (Past 30 Days)	Weight Perception	N	Mean	SD	SE	Mean Diff.	t	Sig. (2-tailed)
Tired for no reason	Faulty	161	2.50	0.73	0.06	1.09	8.81	.000
	Accurate	39	1.41	0.50	0.08			
Nervousness	Faulty	161	2.60	0.71	0.06	0.75	5.45	.000
	Accurate	39	1.85	0.99	0.16			
Nothing could calm	Faulty	161	2.47	0.76	0.06	0.67	4.78	.000
	Accurate	39	1.79	0.89	0.14			
Hopelessness	Faulty	161	2.44	0.93	0.07	1.19	7.70	.000
	Accurate	39	1.26	0.44	0.07			
Restless or fidgety	Faulty	161	2.75	0.85	0.07	1.29	8.73	.000
	Accurate	39	1.46	0.72	0.12			
Could not sit still	Faulty	161	2.28	0.92	0.07	1.13	7.46	.000
	Accurate	39	1.15	0.37	0.06			
Depressed	Faulty	161	2.67	0.85	0.07	1.21	8.52	.000
	Accurate	39	1.46	0.51	0.08			

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Kessler Item (Past 30 Days)	Weight Perception	N	Mean	SD	SE	Mean Diff.	t	Sig. (2-tailed)
Everything was an effort	Faulty	161	1.99	0.94	0.07	0.81	5.28	.000
	Accurate	39	1.18	0.39	0.06			
So sad nothing could cheer you	Faulty	161	2.53	0.77	0.06	1.00	7.36	.000
	Accurate	39	1.54	0.72	0.12			
Worthless	Faulty	161	2.39	0.74	0.06	0.73	5.58	.000
	Accurate	39	1.67	0.70	0.11			
Total Score	Faulty	161	24.62	3.39	0.27	**9.85**	**16.36**	**.000**
	Accurate	39	14.77	3.29	0.53			

Note. All differences are statistically significant at $p < .001$. K10 = Kessler Psychological Distress Scale (10 items).

Table 5 presents the results of independent samples t-tests comparing respondents with faulty versus accurate weight perception on items from the Kessler Psychological Distress Scale (K10). Across all ten distress indicators measured over the past 30 days, adolescents with faulty weight perception reported significantly higher levels of psychological distress.

Specifically, those with faulty weight perception more frequently reported feeling tired for no good reason (M = 2.50, SD = 0.73) compared to those with accurate perception (M = 1.41, SD = 0.50), with a significant mean difference of 1.09 (t = 8.81, $p < .001$). Similar patterns were observed for feelings of nervousness (t = 5.45, $p < .001$), hopelessness (t = 7.70, $p < .001$), restlessness (t = 8.73, $p < .001$), depression (t = 8.52, $p < .001$), and worthlessness (t = 5.58, $p < .001$). The total Kessler distress score was also markedly higher among respondents with faulty weight perception (M = 24.62, SD = 3.39) than those with accurate perception (M = 14.77, SD = 3.29), with a highly significant difference (t = 16.36, $p < .001$).

These findings reinforce the strong link between body image distortion and elevated psychological distress, consistent with previous literature. Adolescents who misperceive their weight are more likely to experience emotional turmoil, including anxiety, sadness, and feelings of worthlessness (Eisenberg et al., 2006; Mond et al., 2007). This suggests that inaccurate body perception is not only a cognitive bias but a potential marker of deeper emotional vulnerabilities.

The elevated Kessler distress scores among adolescents with faulty weight perception suggest a pressing need for mental health interventions that target both cognitive distortions about body image and emotional well-being. Internalized stigma, negative self-comparisons, and media-fueled ideals likely contribute to psychological vulnerability in this group (Neumark-Sztainer et al., 2006). Efforts to reduce body dissatisfaction must move beyond physical health to address self-concept, self-worth, and resilience. School psychologists, counselors, and educators should screen adolescents exhibiting body image concerns for concurrent symptoms of distress. Integrating body image education into mental health literacy programs may reduce emotional distress and promote adaptive coping strategies.

Overall this study underscores the pervasive issue of body weight misperception among adolescents in Peshawar, revealing that a striking 80.5% of participants

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inaccurately perceived their body weight. Gender differences were pronounced—females were significantly more likely to overestimate their weight and experience body dissatisfaction, while males tended to underestimate theirs. These misperceptions were strongly associated with elevated psychological distress and the adoption of unhealthy weight management strategies, such as meal skipping and fad dieting, particularly among girls. Notably, adolescents with faulty perceptions were more likely to be older and have lower body weight, highlighting the influence of age and sociocultural pressures during mid-to-late adolescence.
The findings reinforce that body weight perception is shaped not merely by physical metrics like BMI but by complex emotional, cognitive, and societal influences. The normalization of underweight status and the stigmatization of normal or healthy body sizes reflect a worrying internalization of narrow beauty ideals. This distortion of body image—fueled by media exposure, peer comparison, and cultural narratives—poses significant threats to adolescents' mental health and physical well-being. Given these insights, the study calls for the implementation of culturally relevant, school-based interventions and public health campaigns that promote realistic body image, emotional resilience, and critical media literacy. Mental health professionals, educators, and parents must be equipped to recognize and address the psychological distress tied to body dissatisfaction. Early prevention and education are essential to disrupt harmful weight perceptions and foster a healthier, more accepting environment for Pakistani adolescents navigating their formative years.

Conclusion

This study provides compelling evidence that a significant proportion of adolescents in Peshawar misperceive their body weight, with 80.5% exhibiting inaccurate self-assessments. Females were particularly prone to overestimating their weight and expressing higher psychological distress, while males tended to underestimate their weight. These misperceptions were most pronounced among underweight and normal-weight individuals, underscoring the influence of sociocultural norms and idealized body standards on adolescents' body image. Crucially, distorted weight perception was significantly associated with increased psychological distress and a greater likelihood of engaging in unhealthy weight management strategies, including meal skipping and short-term dieting. These findings emphasize the urgent need for culturally sensitive, school-based interventions that foster body positivity, accurate health literacy, and emotional resilience. Addressing these issues early in adolescence is vital to preventing long-term psychological harm and promoting healthy development among Pakistani youth.

References

Cash, T. F., & Pruzinsky, T. (2002). *Body Image: A Handbook of Theory, Research, and Clinical Practice*. New York: Guilford Press. Chung, A. E., Perrin, E. M., Skinner, A. C., et al. (2007). Accuracy of child and adolescent weight perceptions and associations with psychological distress and weight-related behaviors. *Academic Pediatrics, 7*(5), 364–371.

Dohnt, H. K., & Tiggemann, M. (2006). The contribution of peer and media

ISSN Online: 3007-3154
ISSN Print: 3007-3146

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influences to the development of body satisfaction and self-esteem in young girls: A prospective study. *Developmental Psychology, 42*(5), 929–936.

Eisenberg, M. E., Neumark-Sztainer, D., & Story, M. (2005). Associations of weight-based teasing and emotional well-being among adolescents. *Archives of Pediatrics & Adolescent Medicine, 159*(4), 373–380.

Eisenberg, M. E., Neumark-Sztainer, D., & Story, M. (2006). Association of weight-based teasing and emotional well-being among adolescents. *Archives of Pediatrics & Adolescent Medicine, 160*(12), 1214–1221. https://doi.org/ 10.1001/ archpedi.160.12.1214

Farooq, A., & Kayani, A. (2021). Body image dissatisfaction and its psychological correlates among adolescents in Pakistan. *Pakistan Journal of Psychological Research, 36*(2), 415–430.

Grogan, S. (2016). *Body image: Understanding body dissatisfaction in men, women and children. Routledge. Jansen, W., van de Looij-Jansen, P. M., de Wilde, E. J., & Brug, J. (2008). Feeling fat rather than* being fat may be associated with psychological well-being in young Dutch adolescents. *The Journal of Adolescent Health, 42*(2), 128–136.

Jones, D. C., & Crawford, J. K. (2006). The peer appearance culture during *adolescence: Gender and body mass variations. Journal of Youth and Adolescence, 35(2), 257–269.*

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., ... & *Zaslavsky*, A. M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry, 60*(2), 184–189. https://doi.org/10.1001/archpsyc.60.2.184

Levine, M. P., & Murnen, S. K. (2009). Everybody knows that mass media are/are not [pick one] a cause of eating disorders": A critical review of evidence for a causal link between media, negative body image, and disordered eating in females. *Journal of Social and Clinical Psychology, 28*(1), 9–42.

McCabe, M. P., & Ricciardelli, L. A. (2004). Body image dissatisfaction among males across the lifespan: A review of past literature. *Journal of Psychosomatic Research, 56*(6), 675–685.

Miller, C. T., & Downey, K. T. (1999). A meta-analysis of the relationship between body image and depression. *Journal of Personality and Social Psychology, 77*(4), 636–654.

ISSN Online: 3007-3154
ISSN Print: 3007-3146

Mond, J. M., Hay, P. J., Rodgers, B., Owen, C., & Beumont, P. J. (2007). Relationships between obesity, weight stigma and mental health in Australian women. *Obesity, 15*(2), 456–466. https://doi.org/10.1038/oby.2007.571

Mushtaq, M. U., Gull, S., & Shahid, U. (2012). Awareness regarding obesity and its association with body image dissatisfaction and weight control practices among Pakistani schoolchildren. *BMC Public Health, 12*, 342.

Neumark-Sztainer, D., Paxton, S. J., Hannan, P. J., Haines, J., & Story, M. (2006). Does body satisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviors in adolescent females and males. *Journal of Adolescent Health, 39*(2), 244–251. https://doi.org/10.1016/j.jadohealth.2005.12.001

Neumark-Sztainer, D., Wall, M., Story, M., & Standish, A. R. (2006). Dieting and unhealthy weight control behaviors during adolescence: Associations with 10-year changes in body mass index. *Journal of Adolescent Health, 39*(6), 841–848.

Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. *Sex Roles, 71*, 363–377.

Quick, V., Eisenberg, M. E., Bucchianeri, M. M., & Neumark-Sztainer, D. (2013). Prospective predictors of body dissatisfaction in young adults: 10-year longitudinal findings. *Emerging Adulthood, 1*(4), 271–282.

Smolak, L. (2004). Body image in children and adolescents: Where do we go from here? *Body Image, 1*(1), 15–28.

Tiggemann, M. (2005). Television and adolescent body image: The role of program content and viewing motivation. *Journal of Social and Clinical Psychology, 24*(3), 361–381.

Tiggemann, M. (2011). Sociocultural perspectives on body image. In T. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (2nd ed., pp. 12–19). Guilford Press.

Wang, Y., Liang, Y., & Fan, J. (2020). Body image perception and mental health among adolescents: A meta-analytic review. *Children and Youth Services Review, 116*, 105234.

Zhao, Y., Ma, X., & Yang, L. (2022). Association between body dissatisfaction and suicidal ideation among adolescents: A meta-analysis. *International Journal of Environmental Research and Public Health, 19*(1), 203