

The Relationship between Self-Objectification, Appearance Anxiety and Psychological Well-Being among Female University Students In Malaysia

Wong Jia Ee¹ & Ms Raihan Munira Moh Sani^{1,2*}

¹School of Psychology, Asia Pacific University of Technology and Innovation, 57000, Kuala Lumpur, Malaysia, ²Faculty of Educational Studies, Universiti Putra Malaysia, 42000,

Serdang, Selangor, Malaysia

Email: raihan.munira@mail.apu.edu.my

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v15-i9/26479>

Published Date: 26 September 2025

Abstract

Self-objectification, a process in which individuals internalise an external observer's opinion of their bodies, has been related to negative psychological effects in the face of increasing social and media demands to adhere to idealised beauty standards. This study investigates the relationships between self-objectification, appearance anxiety, and psychological well-being among female university students in Malaysia during the critical developmental stage of emerging adulthood which falls from 18 to 25 years old. In the current study, a descriptive correlational design was used and 128 participants completed validated scales measuring self-objectification (SOBBS), appearance anxiety (AAS), and psychological well-being (RPWBS). Data were analysed using Pearson correlation and independent samples t-tests via SPSS Version 29. Results revealed a significant, moderately strong positive correlation between self-objectification and appearance anxiety ($r = .601, p < .001$), and a weak but significant negative correlation between self-objectification and psychological well-being ($r = -.233, p = .008$). However, no significant differences were found between local and international students across the three variables. These findings support the applicability of Objectification Theory in the Malaysian context and suggest that body image concerns are pervasive across cultural backgrounds due to globalised beauty norms. The study highlights the need for targeted interventions to mitigate the impact of appearance-based pressures. While limitations include reliance on self-report data and a cross-sectional design, the findings contribute valuable insights into promoting mental well-being and healthier self-perceptions among young women in higher education.

Keywords: Self-Objectification, Appearance Anxiety, Psychological Well-Being, Female University Students

Introduction

Female university students face unique challenges during emerging adulthood, which is a period of significant transition and instability (Arnett, 2000; Othman & Jaafar, 2022). This critical developmental phase, spanning ages 18 to 25, is marked by numerous changes, including adapting to new educational environments, financial pressures, and academic demands (Asif et al., 2020). Emerging adulthood is characterised by five key features: self-focus, instability, limitless possibilities, identity exploration, and feeling "in-between" adolescence and adulthood (Auerbach, 2018; Othman & Jaafar, 2022). With a substantial number of female students enrolled in higher education in Malaysia, there's a growing concern about their ability to navigate these characteristics successfully (Siddharta, 2022). Failure to do so can lead to significant psychological stress, as female students have been shown to experience a more severe impact on their mental health, psychological stress, and academic performance compared to their male counterparts (Rahman et al., 2021).

The correlation between self-objectification and sexual objectification forms a harmful cycle, where self-objectification can lead to sexual objectification by others, which in turn reinforces self-objectification (Hardt et al., 2022). Women experience unwanted sexual encounters and body-focused judgments, often from the onset of puberty, which can increase concerns about how their bodies are perceived, especially by men (Holland et al., 2017; Stratemeyer & Holland, 2019). When women internalise these criticisms and prioritise their physical appearance over other personal qualities, the objectification becomes particularly dangerous. Fredrickson and Roberts (1997) identify self-objectification as a primary cause of appearance anxiety, especially for women, for whom appearance plays a significant role in self-perception (Petersen et al., 1984). Women are more susceptible to appearance anxiety than men, a consequence of internalising societal sexual objectification (Dion et al., 1990). According to Carvalho et al. (2020), this perspective frequently causes women to idealise unrealistic and unachievable body images, which are driven by social media trends and comparisons with peers and models. This leads to an obsession with thinness or a toned physique.

Research underscores the widespread nature of appearance anxiety among university students. A poll by China Youth Daily's campus media in 2021 revealed that 59.03% of college students experienced appearance anxiety, with only a small minority expressing high satisfaction with their looks (Ningning, 2021). Further, studies indicate that female university students are more prone to body image dissatisfaction than males, with a significant proportion reporting dissatisfaction regardless of their BMI (Riyami et al., 2024). The Dove Self-Esteem Project (2017) highlighted that 70% of young women feel beauty is overemphasised in defining happiness, and a majority experience pressure to always look "acceptable" and "beautiful."

Cultural factors play a crucial role in shaping the degree and form of self-objectification. For instance, Gattino et al. (2023) examined five culturally distinct countries and found that Western nations, such as the UK and Italy, showed stronger associations with peer and media pressures, while non-Western countries like Iran experienced more family-driven appearance expectations. BMI and self-esteem also emerged as important predictors of body shame and surveillance across different cultures (Cella et al., 2020; Gattino et al.,

2018). Similarly, Wollast (2021) discovered that American women reported the highest levels of body shame and surveillance compared to women from Thailand, Russia, and Belgium.

While an overemphasis on appearance can have drawbacks (Wu et al., 2019), it is critical to acknowledge the awareness of mental health issues among college students globally (Auerbach et al., 2019; Quek et al., 2019; Forte et al., 2021). Self-objectification, driven by media and societal influences, has been strongly correlated with various mental and physical health concerns, including eating disorders, drug abuse, sexual dysfunction, and body dissatisfaction (Daniels et al., 2020; Faro et al., 2021; Niu et al., 2019; Sun, 2018). In particular, young women who use media extensively and are going through a critical stage in the development of their self and body image are more likely to experience body dissatisfaction, lower self-esteem, and increased appearance anxiety as a result of social media's widespread influence (Rounsefell et al., 2019; Vandenbosch et al., 2021).

Asian cultures are more vulnerable to body dissatisfaction because of the dominant ideals of beauty (Jung & Forbes, 2007). Malaysia's collectivist culture, which prioritises social harmony and respect, might put additional pressure on women to conform to traditional beauty norms (Burns & Brady, 1992). Direct or indirect comments from family, friends, and neighbours about physical appearance further contribute to self-objectification. Research in Malaysia has consistently shown that women are more dissatisfied with their weight and physical characteristics than men (Cheah et al., 2017). Studies on Malaysian university students have also revealed a higher prevalence of disordered eating behaviours among females, with perceived social pressure, drive for muscularity, and perfectionism being significant predictors (Cheah et al., 2022; Chin et al., 2020). Moreover, studies by Razak and Al (2023) and Mei et al. (2023) indicate that Malaysian youth are increasingly exposed to appearance-based pressures, with social media usage, appearance anxiety, and selfie culture contributing to self-objectification. Yet, few studies have comprehensively examined how self-objectification affects both appearance anxiety and psychological well-being in this demographic.

The specific objectives of this study are to explore key psychological factors affecting female university students in Malaysia. Firstly, it aims to determine the relationship between self-objectification and appearance anxiety (RO1), as well as the relationship between self-objectification and psychological well-being (RO2). Additionally, the study seeks to examine potential differences in these constructs between local and international students by investigating variations in levels of self-objectification (RO3), appearance anxiety (RO4), and psychological well-being (RO5).

Despite the growing evidence of the impact of self-objectification and appearance anxiety on young women's well-being, there is a notable gap in empirical research specifically examining how self-objectification directly influences appearance anxiety and psychological well-being among female university students in Malaysia. While some studies have explored self-objectification in older populations (Salomon & Brown, 2020; Barzoki et al., 2018), young women in Malaysia are increasingly subjected to societal pressures to conform to specific beauty standards, which can lead to heightened self-awareness and body image concerns, ultimately undermining their mental health and overall quality of life. Understanding these relationships is crucial for developing targeted interventions that promote healthier self-

perceptions and psychological well-being within the Malaysian university context. This study aims to address this critical research gap by investigating the relationship between self-objectification, appearance anxiety and psychological well-being among female university students in Malaysia.

Methodology

The present study adopted a quantitative research method with a descriptive correlational design to examine the relationships between self-objectification, appearance anxiety, and psychological well-being among female university students in Malaysia. This design enables the identification of statistical relationships between variables without manipulating them, allowing the researcher to observe natural associations (Mekonnen, 2020). As Stangor and Walinga (2014) asserted, while correlational research allows the testing of theoretical relationships and prediction-making, descriptive research ensures a valid depiction of the current state.

The sample size was determined using G*Power software to ensure sufficient statistical power for detecting relationships among the variables (Faul, 2007; Kang, 2021). Using parameters for a medium effect size ($r = 0.3$), an alpha level of 0.05, and a power of 0.95, the estimated sample size was 111. To account for potential participant attrition (estimated at 15%), the final target sample was increased to 128 participants (Gattino et al., 2023; Lin et al., 2022). The study utilised a convenience sampling technique, a non-probability method where participants were selected based on their availability, accessibility, and willingness to participate (Rahi, 2017). Specifically, the research was conducted in Malaysia, a multicultural country with over 1.2 million higher education students as of 2021 (Ministry of Higher Education Malaysia, 2022).

To align with the research focus, several inclusion criteria were established. First, only female participants were selected due to the higher prevalence of self-objectification and appearance anxiety in women (Adams et al., 2017). Second, the study targeted participants aged 18 to 25 years, a developmental stage known as emerging adulthood, where individuals are particularly susceptible to body image concerns. Third, only currently enrolled university students in Malaysia were included to ensure the relevance of the academic environment to the research objectives. Finally, English proficiency was required to ensure accurate comprehension and completion of the research instruments.

To ensure data validity, the study also established exclusion criteria. Participants with diagnosed psychological or medical conditions, such as anxiety disorders or body dysmorphic disorder, were excluded as these factors could act as confounding variables. Additionally, participants who withdrew or failed to provide informed consent were excluded to maintain ethical standards and ensure voluntary participation.

The data collection was conducted via an online survey created with Google Forms, allowing participants to complete it conveniently and anonymously. Prior to the main study, a pilot test involving 13 participants was conducted following the 10% guideline (Whitehead et al., 2015). The pilot tested the clarity, reliability, and timing of the instruments, and feedback from participants was used to refine the survey (In, 2017; Anupama et al., 2023). The full survey consisted of five sections: informed consent, sociodemographic data, the Self-

Objectification Beliefs and Behaviors Scale (SOBBS), Appearance Anxiety Scale (AAS), and Ryff's Psychological Well-Being Scale (RPWBS). Participants first provided informed consent outlining their rights and confidentiality assurance, followed by answering sociodemographic questions and completing the three validated scales measuring the key constructs of the study. Data were securely stored in a password-protected database, and upon survey closure, statistical analysis was conducted using SPSS version 29, applying descriptive statistics, Pearson's correlation coefficients, and independent t-test to explore the relationships among the variables.

The Self-Objectification Beliefs and Behaviors Scale (SOBBS) by Lindner and Tantleff-Dunn (2017) includes 14 items across two subscales which are Observer's Perspective and Body as Self and demonstrated strong internal consistency ($\alpha = .91-.92$) and validity (Hu et al., 2025; Cascalheira et al., 2022). The Appearance Anxiety Scale (AAS) developed by Dion and Keelan (1990) consists of 14 items that measure appearance-related anxiety, showing high reliability ($\alpha = .86-.94$) and established construct validity (Denchik, 2005; Dion & Keelan, 1990). The Ryff's Psychological Well-Being Scale (RPWBS) (Ryff & Keyes, 1995) includes 18 items measuring six dimensions of well-being, with excellent internal consistency ($\alpha = .86-.93$), test-retest reliability, and strong convergent validity (Chiang et al., 2019; Ryff, 1989; Neugarten et al., 1961; William, 1965).

Data were analysed using IBM SPSS Statistics version 29, starting with descriptive statistics to summarise the sociodemographic characteristics of the participants (Pallant, 2020). Measures such as means, standard deviations, frequencies, and percentages were computed to present an overview of the sample. To test the hypotheses, inferential statistics were applied. Pearson's correlation coefficient was used to explore the relationships between self-objectification, appearance anxiety, and psychological well-being, assessing the strength and direction of associations between variables (Tabachnick & Fidell, 2019). Additionally, independent t-tests were conducted to examine differences in the variables between local and international students, comparing mean scores based on levels of self-objectification, anxiety, and well-being (Field, 2018).

Results

The relationship between self-objectification and appearance anxiety among female university students in Malaysia was examined using Pearson correlation analysis. Results revealed a moderately strong and statistically significant positive correlation between scores on the SOBBS and AAS ($r = .601, p < .001$), indicating that higher levels of appearance anxiety are associated with increased self-objectification.

The null hypothesis (H01) suggested that there would be no relationship between self-objectification and appearance anxiety among female university students in Malaysia. Conversely, the alternative hypothesis (Ha1) proposed that a significant relationship does exist. Since the p-value was less than the alpha level of .01, the correlation was found to be statistically significant. As a result, H01 was rejected and Ha1 was accepted ($p = .001 < .01$).

Table 3.1

Main Study Results of Pearson Product-Moment Correlation Coefficient for Self-Objectification and Appearance Anxiety

Variable	Appearance Anxiety	
	r	p
Self-Objectification	.601**	< .001

Note. **Correlation is significant at the 0.01 level (2-tailed).

Additionally, the association between self-objectification and psychological well-being was analysed. A weak but statistically significant negative correlation was found between SOBBS and RPWBS scores ($r = -.233$, $p = .008$), suggesting that greater self-objectification is linked to lower psychological well-being among the participants.

For the second hypothesis, the null (H02) claimed there was no relationship between self-objectification and psychological well-being, while the alternative (Ha2) suggested a significant relationship between the two. The results showed a statistically significant correlation at the .01 level, leading to the rejection of H02 and acceptance of Ha2 ($p = .008 < .01$).

Table 3.2

Main Study Results of Pearson Product-Moment Correlation Coefficient for Self-Objectification and Psychological Well-Being

Variable	Psychological Well-Being	
	r	p
Self-Objectification	-.233**	.008

Note. **Correlation is significant at the 0.01 level (2-tailed).

An independent t-test was conducted to compare the SOBBS scores between local and international female university students. The results indicated that there was no statistically significant difference in self-objectification levels between local students ($M = 41.326$, $SD = 13.057$) and international students ($M = 42.333$, $SD = 12.612$), $t(126) = -.415$, $p = .679$. This suggests that both groups exhibited similar tendencies toward self-objectification.

The analysis found no statistically significant difference in self-objectification scores between local and international students. Therefore, the null hypothesis (H03) was accepted, and the alternative hypothesis (Ha3) was rejected.

Table 3.3

Main Study Results of Independent T-Test Analysis for Self-Objectification

Variable	Local		International		<i>t</i> (126)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Self-Objectification	41.326	13.057	42.333	12.612	-.415	.679

To explore differences in appearance anxiety based on student nationality, an independent samples t-test was conducted comparing AAS scores of local and international students. The results indicated no statistically significant difference between local students ($M = 46.99$, $SD = 7.07$) and international students ($M = 48.67$, $SD = 7.79$); $t(126) = -1.219$, $p = .225$.

Similarly, there was no meaningful difference in appearance anxiety between local and international female university students. Thus, the null hypothesis (H_{04}) was accepted, while the alternative hypothesis (H_{a4}) was rejected.

Table 3.4

Main Study Results of Independent T-Test Analysis for Appearance Anxiety

Variable	Local		International		<i>t</i> (126)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Appearance Anxiety	46.988	7.074	48.667	7.789	-1.219	.225

A further independent samples t-test assessed whether psychological well-being differed between local and international students. The findings showed no significant difference in RPWBS scores between local ($M = 79.90$, $SD = 14.35$) and international students ($M = 81.48$, $SD = 18.37$); $t(66.26) = -0.489$, $p = .626$.

Lastly, the findings revealed no significant difference in psychological well-being between local and international students. As a result, the null hypothesis (H_{05}) was accepted, and the corresponding alternative hypothesis (H_{a5}) was rejected.

Table 4.10

Main Study Results of Independent T-Test Analysis for Psychological Well-Being

Variable	Local		International		<i>t</i> (66.26)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Psychological Well-Being	79.895	14.354	81.476	18.369	-.489	.626

Discussion

Self-Objectification and Appearance Anxiety

The significant and strong positive correlation between self-objectification and appearance anxiety indicated that female students who tend to view their bodies from an external observer's perspective are more likely to experience higher levels of anxiety about their appearance. This is consistent with previous research in both Western and non-Western settings, which suggests that objectifying one's body increases vulnerability to negative emotional outcomes (Dimas et al., 2021; Liu et al., 2024). The cognitive processes involved in constant body surveillance such as monitoring how one looks in social or academic settings can contribute to heightened anxiety, particularly in environments that value physical attractiveness.

In Malaysia, where beauty standards are increasingly influenced by both local culture and globalised media, these findings are particularly relevant. Many university-aged women may be navigating dual pressures such as adhering to traditional expectations while also internalising Western beauty ideals promoted through social media platforms. The resulting internal conflict can increase appearance-related anxiety and reinforce the tendency to self-objectify. Similar findings have been observed in other collectivist societies such as China and India, where social conformity and appearance-based judgments contribute to self-objectification and appearance-related distress (Behera & Khuntia, 2025; Ruan et al., 2025).

Importantly, this strong correlation suggests a reciprocal cycle in which heightened appearance anxiety may further reinforce self-objectifying behaviours. Students who worry excessively about how others perceive their appearance may engage more in mirror-checking, social comparison, or appearance-altering behaviours, which could increase anxiety and lower self-esteem. Hence, understanding this cyclical link is crucial to developing interventions that break the cycle of self-surveillance and emotional distress.

Self-Objectification and Psychological Well-Being

The study also found a weak but statistically significant negative correlation between self-objectification and psychological well-being, suggesting that increased self-objectification is modestly linked to poorer well-being. While the relationship is not strong, it aligns with the idea that self-objectification can lead to negative mental health outcomes, including diminished self-acceptance, lower life satisfaction, and increased depressive symptoms (Sherman et al., 2023; Saylan & Soyyiğit, 2023). When young women internalise societal standards that emphasise appearance over competence, they may devalue their non-physical attributes, which undermines their overall psychological functioning.

This finding is in line with Ryff's (1989) model of psychological well-being, which emphasises aspects such as autonomy, purpose in life, and self-acceptance. Self-objectification may conflict with these domains, especially autonomy and self-acceptance, by fostering external validation and appearance-based self-worth. Students who are preoccupied with how others perceive their bodies may be less likely to feel authentic, self-directed, or emotionally fulfilled.

Although the correlation was relatively weak, this could be due to the presence of buffering factors within the sample. Some students may possess strong family support,

cultural identity, or religious beliefs that mitigate the negative impact of self-objectification on their well-being. Previous research has shown that protective factors such as self-compassion, spirituality, or internalised values can buffer the effects of body image concerns (Moradi & Huang, 2008; Nasreen & Fareed, 2023).

Cultural Similarities Between Local and International Students

Interestingly, the study found no significant differences between local and international students in their levels of self-objectification, appearance anxiety, or psychological well-being. This result suggests that body image concerns and their psychological consequences are not limited to any single cultural or national group within the university context. The shared exposure to globalised media and university culture may create a diverse environment in which appearance norms are widely internalised regardless of students' backgrounds.

Social media is a likely contributor to this trend. Both local and international students are active users of online platforms where beauty ideals are constantly reinforced. Studies have shown that increased time spent on image-focused social media is positively associated with self-objectification and negatively associated with psychological well-being (Boursier et al., 2020; Wollast, 2021). In the Malaysian context, multiculturalism may further contribute to overlapping beauty standards, which integrate both Western and Asian influences. As a result, students from diverse cultural backgrounds may develop similar anxieties and coping responses to their appearance.

Moreover, the university setting itself may act as an equalising force. Academic pressure, social comparison, and the desire for peer acceptance are common to all students, potentially overriding cultural differences in body perception. Thus, the results support that self-objectification and its emotional consequences are increasingly globalised phenomena.

Theoretical and Practical Implications

These findings reinforce the relevance of objectification theory in explaining the psychological challenges faced by young women in Asia. While the theory was developed in Western countries, the present study adds to the growing body of cross-cultural research supporting its applicability in non-Western societies. As social media and globalised beauty norms continue to shape body image perceptions worldwide, understanding how self-objectification operates across cultures is crucial for informing mental health interventions and policy.

The study offers several practical implications for mental health services, educators, and university administrators. First, universities should consider implementing body image education and media literacy programs that help students critically engage with beauty standards and resist internalising harmful ideals. Such programs can be embedded within orientation sessions, peer mentoring schemes, or health workshops to reach a wide student population.

Second, counselling services should include screening tools for body image concerns and appearance anxiety, especially for female students. Cognitive-behavioural therapy (CBT) techniques, including thought restructuring and body image exposure, have shown promise

in reducing self-objectification and improving well-being (Moradi & Huang, 2008). Additionally, workshops on self-compassion and mindfulness may help students redirect attention from physical appearance to internal values and strengths.

Third, campus-wide campaigns that promote diverse representations of beauty and celebrate individual uniqueness can foster a more inclusive environment. These campaigns can also challenge the idea that physical attractiveness equates to social or academic success.

Finally, the findings could inform national education policies that include mental health literacy and body image awareness in secondary and tertiary education curricula. By addressing these issues earlier in life, students may enter university with greater resilience against the pressures of appearance-based evaluation.

Limitations and Future Directions

Despite the study's contributions, several limitations should be noted. First, the use of self-report questionnaires may have introduced social desirability bias. Second, the cross-sectional design limits the ability to infer causality between variables. Lastly, the sample included only female university students from Malaysia, limiting the generalisability of the results to other gender identities and age groups. Future research should consider longitudinal methods, include more diverse samples, and examine moderating variables such as social media use, self-esteem, or cultural values to build a more comprehensive understanding of these relationships.

Conclusion

In summary, this study explored the associations between self-objectification, appearance anxiety, and psychological well-being among female university students in Malaysia. The findings revealed significant correlations between self-objectification and both appearance anxiety and psychological well-being, lending support to the core concepts of Objectification Theory. Although no significant differences were found between local and international students regarding these variables, the results suggest that societal beauty norms and external expectations impact both groups similarly.

Importantly, a stable sense of self and strengthening self-efficacy may help reduce the objectification of women and lower the risk of self-objectification. By gaining a deeper understanding of the roots and effects of objectification, women can cultivate greater self-awareness and confidence in their capabilities. They may also come to value their personal growth and individuality through education, rather than prioritising physical appearance. As such, this research underscores the need to create supportive environments that empower young women, particularly those in the stage of emerging adulthood, to adopt healthier attitudes toward appearance and enhance their psychological well-being. These insights also provide a foundation for future studies to design and evaluate targeted interventions aimed at promoting mental health among this population.

This research contributes significantly to both theory and context. Theoretically, it demonstrates that the fundamental assumptions of Objectification Theory are valid among female university students in Malaysia which is a collectivist and multicultural society, thereby extending its applicability to a non-Western setting. The study supports the universality of

objectification processes and emphasises the intersection of globalised beauty norms with local cultural expectancies by establishing considerable relationships between self-objectification, appearance anxiety, and psychological well-being. Contextually, this research addresses a significant shortcoming in Malaysian scholarship by providing empirical evidence regarding the psychological consequences of self-objectification during emerging adulthood. In doing so, the widespread prevalence of body image concerns among students from all over the world has been highlighted to indicate that these difficulties traverse cultural boundaries within higher education.

References

- Adams, K. E., Tyler, J. M., Calogero, R., & Lee, J. (2017). Exploring the relationship between appearance-contingent self-worth and self-esteem: The roles of self-objectification and appearance anxiety. *Body Image, 23*, 176–182. <https://doi.org/10.1016/j.bodyim.2017.10.004>
- Anupama K, Chaudhary, P., & T. Lakshmi. (2023). Introduction of a pilot study. *International Journal of Ethics, Trauma and Victimology, 9(2)*, 33–35. <https://doi.org/10.18099/ijetv.v9i02.07>
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55(5)*, 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Asif, S., Azka, M., Shahzad, T. Z., Raouf, M., & Pervaiz, T. (2020). Frequency of depression, anxiety and stress among university students. *Pakistan Journal of Medical Sciences, 36(5)*. <https://doi.org/10.12669/pjms.36.5.1873>
- Auerbach, R.P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D.D., Green, J.G., Hasking, P., Lee, S., Lochner, C., McLafferty, M., Nock, M.K., Petukhova, M.V., Pinder-Amaker, S., Rosellini, A.J., Sampson, N.A., Vilagut, G., Zaslavsky, A.M., Kessler, R.C. (2019). Mental disorder comorbidity and suicidal thoughts and behaviors in the world health organization world mental health surveys international college student initiative. *International Journal of Methods in Psychiatric Research, 28(2)*, e1752. <https://doi.org/10.1002/mpr.1752>
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2018). WHO world mental health surveys international college student project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology, 127(7)*, 623–638. <https://doi.org/10.1037/abn0000362>
- Barzoki, M. H., Vahedi, M., Nourmohamadi, S., & Kalantari, S. E. (2018). The mediating role of contingent self-esteem in the association between self-objectification and self-esteem. *Sexuality & Culture, 22(4)*, 1300–1309. <https://doi.org/10.1007/s12119-018-9533-3>
- Behera, N., & Khuntia, S. (2025). Self-esteem, self-objectification, appearance anxiety, resilience, and gender: Testing a moderated mediational analysis. *The Open Psychology Journal, 18(1)*. <https://doi.org/10.2174/0118743501347628250114054620>
- Boursier, V., Gioia, F., & Griffiths, M. D. (2020). Objectified body consciousness, body image control in photos, and problematic social networking: The role of appearance control beliefs. *Frontiers in Psychology, 11*. <https://doi.org/10.3389/fpsyg.2020.00147>

- Burns, D., & Brady, J. (1992). A cross-cultural comparison of the need for uniqueness in Malaysia and the United States. *The Journal of Social Psychology, 132*(4), 487–495. <https://doi.org/10.1080/00224545.1992.9924728>
- Carvalho, M., Branquinho, C., & de Matos, M. G. (2020). Cyberbullying and bullying: Impact on psychological symptoms and well-being. *Child Indicators Research, 14*(1), 435–452. <https://doi.org/10.1007/s12187-020-09756-2>
- Cascalheira, C. J., Nelson, J., & Kalkbrenner, M. T. (2022). Factorial invariance of scores on the self-objectification beliefs and behaviors scale (SOBBS) among transgender and nonbinary people. *Measurement and Evaluation in Counseling and Development, 56*(1), 48–63. <https://doi.org/10.1080/07481756.2022.2032758>
- Cella, S., Iannaccone, M., & Paolo Cotrufo. (2020). Does body shame mediate the relationship between parental bonding, self-esteem, maladaptive perfectionism, body mass index and eating disorders? A structural equation model. *Eating and Weight Disorders - Studies on Anorexia Bulimia and Obesity, 25*(3), 667–678. <https://doi.org/10.1007/s40519-019-00670-3>
- Cheah, W. L., Chin, E., & Helmy Hazmi. (2022). Examining gender difference in disordered eating behaviour and its associated factors among college and university students in Sarawak. *Nutrition and Health, 026010602211325-026010602211325*. <https://doi.org/10.1177/02601060221132597>
- Cheah, W. L., Hazmi, H., & Chang, C. T. (2017). Disordered eating and body image issues and their associated factors among adolescents in urban secondary schools in Sarawak, Malaysia. *International Journal of Adolescent Medicine and Health, 29*(2). <https://doi.org/10.1515/ijamh-2015-0044>
- Chiang, H.-H., Lee, T.-H., & Sun, H.-F. (2019). Development and validation of the short-form Ryff's psychological well-being scale for clinical nurses in Taiwan. *Journal of Medical Sciences, 39*(4), 157–157. https://doi.org/10.4103/jmedsci.jmedsci_191_18
- Chin, Y. S., Mahenderan Appukutty, Kagawa, M., Gan, W. Y., Wong, J. E., Poh, B. K., Shariff, Z. M., & Mohd. (2020). Comparison of factors associated with disordered eating between male and female Malaysian university students. *Nutrients, 12*(2), 318–318. <https://doi.org/10.3390/nu12020318>
- Daniels, E. A., Zurbriggen, E. L., & Ward, L. M. (2020). Becoming an object: A review of self-objectification in girls. *Body Image, 33*, 278–299. <https://doi.org/10.1016/j.bodyim.2020.02.016>
- Denchik, A. (2005). Development and psychometric evaluation of the interpersonal sexual objectification scale. *The Interpersonal Sexual Objectification Scale*. <https://kb.osu.edu/server/api/core/bitstreams/b4fd321b-532c-5534-811b-948cfc587d12/content>
- Dimas, M. A., Galway, S. C., & Gammage, K. L. (2021). Do you see what I see? The influence of self-objectification on appearance anxiety, intrinsic motivation, interoceptive awareness, and physical performance. *Body Image, 39*, 53–61. <https://doi.org/10.1016/j.bodyim.2021.05.010>
- Dion, K. L., Dion, K. K., & Keelan, J. P. (1990). Appearance anxiety as a dimension of social-evaluative anxiety: Exploring the ugly duckling syndrome. *Contemporary Social Psychology, 14*(4), 220–224. <https://psycnet.apa.org/record/1991-17196-001>
- Dove. (2017). *The 2017 Dove Global Girls Beauty and Confidence Report*. <https://digitaluniversity.womendeliver.org/wp-content/uploads/2020/05/Mod-1-2017-Dove-Global-Girls-Beauty-and-Confidence-Report.pdf>

- Faro, J. M., Whiteley, J. A., Hayman, L. L., & Napolitano, M. A. (2021). Body image quality of life related to light physical activity and sedentary behavior among young adults with overweight/obesity. *Behavioral Sciences*, 11(8), 111–111. <https://doi.org/10.3390/bs11080111>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191. <https://doi.org/10.3758/BF03193146>
- Field, A.P. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage. <https://www.scirp.org/reference/referencespapers?referenceid=3504991>
- Forte, A., Vichi, M., Ghirini, S., Orri, M., Pompili, M. (2021). Trends and ecological results in suicides among Italian youth aged 10–25 years: A nationwide register study. *Journal of Affective Disorders*, 282, 165–172. <https://doi.org/10.1016/j.jad.2020.12.142>.
- Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21(2), 173–206. <https://doi.org/10.1111/j.1471-6402.1997.tb00108.x>
- Gattino, S., Kamila Czepczor-Bernat, Fedi, A., Brytek-Matera, A., Boza, M., Lemoine, J. E., Sahlan, R. N., Wilson, E., Piccoli, N. D., & Chiara Rollero. (2023). Self-objectification and its biological, psychological and social predictors: A cross-cultural study in four European countries and Iran. *Europe's Journal of Psychology*, 19(1), 27–47. <https://doi.org/10.5964/ejop.6075>
- Gattino, S., Piccoli, N. D., Fedi, A., Boza, M., & Chiara Rollero. (2018). A cross-cultural study of biological, psychological, and social antecedents of self-objectification in Italy and Romania. *Sex Roles*, 78(5-6), 325–337. <https://doi.org/10.1007/s11199-017-0804-5>
- Hardt, S., Stöckl, H., Wamoyi, J., & Ranganathan, M. (2022). Sexual harassment in low- and middle-income countries: A qualitative systematic review. *Trauma Violence & Abuse*, 24(5), 3346–3362. <https://doi.org/10.1177/15248380221127255>
- Holland, E., Koval, P., Stratemeyer, M., Thomson, F., & Haslam, N. (2017). Sexual objectification in women's daily lives: A smartphone ecological momentary assessment study. *British Journal of Social Psychology*, 56(2), 314–333. <https://doi.org/10.1111/bjso.12152>
- Hu, Z., Wood, C., & Buckland, N. (2025). Measuring self-objectification in cisgender heterosexual women and men: A psychometric validation of the self-objectification beliefs and behaviors scale. *Body Image*, 52, 101844. <https://doi.org/10.1016/j.bodyim.2024.101844>
- In, J. (2017). Introduction of a pilot study. *Korean Journal of Anesthesiology*, 70(6), 601–601. <https://doi.org/10.4097/kjae.2017.70.6.601>
- Jung, J., & Forbes, G. B. (2007). Body dissatisfaction and disordered eating among college women in China, South Korea, and the United States: Contrasting predictions from sociocultural and feminist theories. *Psychology of Women Quarterly*, 31(4), 381–393. <https://doi.org/10.1111/j.1471-6402.2007.00387.x>
- Kang, H. (2021). Sample size determination and power analysis using the G*Power software. *Journal of Educational Evaluation for Health Professions*, 18, 17. <https://doi.org/10.3352/jeehp.2021.18.17>
- Lin, S., Li, L., & Jiang, L. (2022). Online interpersonal sexual objectification experiences and teenage girls' self-objectification: The role of broad conceptualization of beauty. *Behavioral Sciences*, 12(7), 210–210. <https://doi.org/10.3390/bs12070210>

- Lindner, D., & Tantleff-Dunn, S. (2017a). Self-Objectification beliefs and behaviors scale. *PsycTESTS Dataset*. <https://doi.org/10.1037/t85424-000>
- Liu, L., Liu, G., & Wang, H. (2024). Self-objectification and appearance anxiety in university students: Physical activity as a moderator. *Social Behavior and Personality an International Journal*, 52(8), 1–9. <https://doi.org/10.2224/sbp.13340>
- Mei, K., He, J., & Tan, Y. H. (2023). *The mediation effect of self-objectification from selfie behavior to body esteem: A relationship between selfie-behavior, self-objectification, and body esteem among female undergraduates in Malaysia*. UTAR Institutional Repository. http://eprints.utar.edu.my/6182/1/2001259_FYP.pdf
- Mekonnen, W. (2020). Review on correlation research. *International Journal of English Literature and Culture*. <https://doi.org/10.14662/IJELC2020.085>
- Ministry of Higher Education Malaysia. (2022). *Higher education statistics 2021*. Ministry of Higher Education Malaysia. http://www.mohe.gov.my/web_statistik/
- Moradi, B., & Huang, Y. P. (2008). Objectification theory and psychology of women: A decade of advances and future directions. *Psychology of Women Quarterly*, 32(4), 377–398. <https://doi.org/10.1111/j.1471-6402.2008.00452.x>
- Nasreen, S., & Fareed, H. (2023). Appearance related commentary, self-objectification and psychological well-being in young adults. *Pakistan Languages and Humanities Review*, 7(2), 58–67. [https://doi.org/10.47205/plhr.2023\(7-II\)06](https://doi.org/10.47205/plhr.2023(7-II)06)
- Neugarten, B. L., Havighurst, R. J., & Tobin, S. S. (1961). The measurement of life satisfaction. *Journal of Gerontology*, 16(2), 134–143. <https://doi.org/10.1093/geronj/16.2.134>
- Ningning, C. (2021). Nearly 60% of college students have appearance anxiety. *China Youth Daily*. https://txs.youth.cn/xw/202102t20210225_12728555.htm
- Niu, G., Sun, L., Liu, Q., Chai, H., Sun, X., & Zhou, Z. (2019). Selfie-posting and young adult women's restrained eating: The role of commentary on appearance and self-objectification. *Sex Roles*, 82(3-4), 232–240. <https://doi.org/10.1007/s11199-019-01045-9>
- Othman, A. A., & Marzuki, W. (2022). Features of emerging adulthood: What are their relationship with depression symptoms? *The Open Psychology Journal*, 15(1). <https://openpsychologyjournal.com/VOLUME/15/ELOCATOR/e187435012208010/>
- Pallant, J. (2020). SPSS survival manual. In *Routledge eBooks*. Informa. <https://doi.org/10.4324/9781003117452>
- Petersen, A. C., Schulenberg, J. E., Abramowitz, R. H., Offer, D., & Jarcho, H. D. (1984). A self-image questionnaire for young adolescents (SIQYA): Reliability and validity studies. *Journal of Youth and Adolescence*, 13(2), 93–111. <https://doi.org/10.1007/bf02089104>
- Quek, T. T.-C., Tam, W. W.-S., Tran, B. X., Zhang, M., Zhang, Z., Ho, C. S.-H., & Ho, R. C.-M. (2019). The global prevalence of anxiety among medical students: A meta-analysis. *International Journal of Environmental Research and Public Health*, 16(15), 2735. <https://doi.org/10.3390/ijerph16152735>
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 06(02), 1–5. <https://doi.org/10.4172/2162-6359.1000403>
- Rahman, M. A., Shariful, M., Alif, S. M., Sultana, F., Sharif, A., Hoque, N., Cross, W. M., Salehin, M., & Nazim, N. B. (2021). Reliability of the tools used to examine psychological distress, fear of COVID-19 and coping amongst migrants and non-migrants in Australia. *International Journal of Mental Health Nursing*, 30(3), 747–758. <https://doi.org/10.1111/inm.12845>

- Razak, A., & Al, A. (2023). The impact of communication mediators on self-objectification among Malaysians - IJUM Repository (IRep). *lium.edu.my*. http://irep.ium.edu.my/103772/2/103772_The%20Impact%20of%20Communication%20Mediators.pdf
- Riyami, A., Senani, A., Brashdi, A., Balushi, A., Ahmed, J., & Almarabheh, A. J. (2024). Young females experience higher body image dissatisfaction associated with a high social media use: a cross-sectional study in Omani university students. *Middle East Current Psychiatry*, 31(1). <https://doi.org/10.1186/s43045-024-00477-8>
- Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., Truby, H., & McCaffrey, T. A. (2019). Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutrition & Dietetics*, 77(1), 19–40. <https://doi.org/10.1111/1747-0080.12581>
- Ruan, J., Yu, R., Zhao, Y., Xie, L., & Mei, Y. (2025). Body talk on social networking sites and appearance anxiety among college students: the mediating role of self-objectification and moderating role of gender. *Frontiers in Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1513923>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <https://doi.org/10.1037/0022-3514.69.4.719>
- Salomon, I., & Brown, C. S. (2020). That selfie becomes you: examining taking and posting selfies as forms of self-objectification. *Media Psychology*, 24(6), 1–19. <https://doi.org/10.1080/15213269.2020.1817091>
- Saylan, E., & Soygiğit, V. (2023). Self-Objectification and subjective well-being: A serial mediation analysis on the role of social appearance anxiety and body image. *Journal of Evidence-Based Psychotherapies*, 23(2), 119–136. <https://doi.org/10.24193/jebp.2023.2.13>
- Sherman, A. M., Tran, S., & Sy, J. (2023). Objectification and body esteem: age group patterns in women's psychological functioning. *Aging & Mental Health*, 28(4), 706–716. <https://doi.org/10.1080/13607863.2023.2273338>
- Siddharta, A. (2022). *Malaysia: number of university students by gender | Statista*. Statista. <https://www.statista.com/statistics/1458926/malaysia-number-of-university-students-by-gender/>
- Stangor, C., & Walinga, J. (2014). Psychologists use descriptive, correlational, and experimental research designs to understand behaviour. *Opentextbc.ca*. <https://opentextbc.ca/introductiontopsychology/chapter/2-2-psychologists-use-descriptive-correlational-and-experimental-research-designs-to-understand-behavior/>
- Stratemeyer, M., & Holland, D. E. (2019, July 23). *Sexual objectification harms women*. Unimelb.edu.au; The University of Melbourne. <https://pursuit.unimelb.edu.au/articles/sexual-objectification-harms-women>
- Sun, Q. (2018). Materialism, self-objectification, and capitalization of sexual attractiveness increase young Chinese women's willingness to consider cosmetic surgery. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.02002>
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics (7th ed.)*. Pearson. <https://scirp.org/reference/referencespapers?referenceid=3132273>

- Vandenbosch, L., Fardouly, J., & Tiggemann, M. (2021). Social media and body image: Recent trends and future directions. *Current Opinion in Psychology, 45*, 101289–101289. <https://doi.org/10.1016/j.copsyc.2021.12.002>
- Whitehead, A. L., Julious, S. A., Cooper, C. L., & Campbell, M. J. (2015). Estimating the sample size for a pilot randomised trial to minimise the overall trial sample size for the external pilot and main trial for a continuous outcome variable. *Statistical Methods in Medical Research, 25*(3), 1057–1073. <https://doi.org/10.1177/0962280215588241>
- William. (1965). A Self-Rating Depression Scale. *Archives of General Psychiatry, 12*(1), 63–63. <https://doi.org/10.1001/archpsyc.1965.01720310065008>
- Wollast, R., Riemer, A. R., Gervais, S. J., Grigoryan, L., Bernard, P., & Klein, O. (2021). How cultural orientation and self-compassion shape objectified body consciousness for women from America, Belgium, Russia, and Thailand. *Self and Identity, 20*(7), 930–950. <https://doi.org/10.1080/15298868.2020.1787220>
- Wu, L., Niu, G., Ni, X., Shao, X., & Luo, Y. (2019). Body image flexibility moderates the association between photo-related activities on WeChat moments and the body dissatisfaction of female adolescents in China. *Current Psychology, 41*(1), 99–104. <https://doi.org/10.1007/s12144-019-00553-x>