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Development of A Multi-factorial Fear of Happiness Scale for Young Adults

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ABSTRACT

This study developed and tested the Fear of Happiness Scale for Young Adults (FHS-YA) to understand how young adults aged 18–26 experience fear of happiness. A total of 501 respondents from Davao del Sur, Philippines completed the survey. The data was analyzed using Exploratory Factor Analysis (EFA), and methods like Principal Axis Factoring (PAF) were used due to the non-normal data distribution. Four key factors were identified: Social and Emotional Avoidance (SEA), Future-Oriented Anxiety or Guilt (FOAG), Cognitive Distortion (CD), and Emotional Discomfort (ED). The scale showed excellent reliability with a Cronbach's Alpha of 0.975. This alternative tool provides a reliable way to explore fear of happiness in young adults and can help guide future research and interventions aimed at improving emotional well-being.

INTRODUCTION

Fear of happiness has emerged as a growing concern, particularly among young adults who are increasingly experiencing mental health challenges. Recent trends highlight the rise in well-being issues within this population, often associated with negative beliefs and attitudes toward happiness (Westberg *et al.*, 2022). Individuals with a high fear of happiness may suppress positive emotions, avoiding the pursuit of happiness to prevent perceived negative consequences of positive emotional states (Yildirim, 2019). There is increasing research to suggest that fears of, and resistances to, affiliative and positive emotions are linked to self-criticism and a range of psychopathologies (Gilbert *et al.*, 2011). This avoidance can contribute to broader mental health struggles, making it critical to understand and address this phenomenon to promote psychological well-being. There is a lack of research about predictors that might lead to fear of happiness particularly where both happiness and fear of happiness are studied (Dobos *et al.*, 2024).

Fear of happiness is the belief that experiencing happiness may lead to unfavorable and adverse outcomes, suggesting that it is something to be avoided (Sar *et al.*, 2019). This phenomenon, also referred to as chrophobia, involves absolute opposition to the idea of feeling happiness to any extent (Chakraborty & Pandey, 2024). To assess this concept, two primary tools have been developed. The first, the Fear of Happiness Scale (FHS), originally developed by Joshanloo (2013) and recently validated in Polish by Janus (2023), has demonstrated strong psychometric properties, with a Cronbach's α of .85 indicating excellent internal consistency, yet it remains unifactorial and consists of only five items. Similarly, an exploratory factor analysis of the second scale assessing fear of happiness, developed by Gilbert *et al.* (2011), initially suggested a two-factor solution. Due to cross-

loadings, a one factor model was ultimately adopted. This newly developed scale originally comprised 10 items but was later reduced to nine and demonstrated strong internal consistency with a Cronbach's α of .90. Despite their reliability, both scales are limited by their unifactorial structures and item exclusions, which may hinder a comprehensive understanding of the complexity of fear of happiness.

Several studies have investigated the concept of Fear of Happiness, its potential underlying factors, and its profound impact for mental health. However, existing assessment tools, despite their strong psychometric sound, fail to capture the multifaceted nature of this phenomenon, particularly among young adults who are increasingly vulnerable to mental health challenges. This highlights the need for a tailored instrument, such as a "Fear of Happiness for Young Adults Scale" to better understand the intricate attitudes toward happiness that impact mental health in this group. Developing a more comprehensive measure could provide valuable insights and support the creation of effective interventions to address and mitigate the effects of fear of happiness on young adults' well-being.

Development of the Survey Questionnaire

Initially, the researchers drafted a large pool of items guided by the literature and the researcher's observation to people. The items were carefully reviewed, finalized and then tested in a pilot study. A total of 55 respondents, selected based on the study's inclusion criteria, completed the questionnaire. Feedback from the pilot test led to revisions in the instrument. Consequently, a refined questionnaire with 68 items, using 7-point Likert scale (1 - Strongly Disagree, 2 - Disagree, 3 - Somewhat Disagree, 4 - Neutral, 5 - Somewhat Agree, 6 - Agree, 7 - Strongly Agree), was developed and is ready for use in the main study.

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MATERIALS AND METHODS

Study design

The study employed a quantitative Exploratory Factor Analysis (EFA) research design to identify the underlying structure of the data and to assess the dimensionality of the construct being measured.

Study setting and population

The researchers gathered a total of 501 young adults from Davao del Sur, Philippines, aged between 18 and 26, as respondents for the study. According to Sürücü *et al.* (2024), a sample size exceeding 400 is considered excellent for conducting EFA. Therefore, the sample size utilized in this study is more than enough to ensure reliable and accurate results. Among the age groups analyzed, individuals aged 20 showed the highest frequency (N=145), while those aged 26 had the fewest respondents (N=9).

Data analysis

To analyze the Fear of Happiness Scale for Young Adults (FHS-YA), an Exploratory Factor Analysis (EFA) was conducted to identify the underlying structure of the scale and evaluate its reliability (Watkins, 2018). Principal Axis Factoring (PAF) was employed as the extraction method due to the non-normal distribution of the data, ensuring accuracy under such conditions (Costello & Osborne, 2005). The analysis used multiple techniques to determine the number of factors, including eigenvalues, scree plots, parallel analysis, and MAP analysis. Additionally, the reliability of the scale was assessed using Cronbach's Alpha.

RESULTS AND DISCUSSION

The researchers created a total of 68 items to measure the fear of happiness, covering different aspects of the construct. These items were based on ideas from past studies, Cognitive-behavioral theory and personal observations of the researchers. Each item was carefully reviewed to make sure they were relevant and suitable for the respondents.

Data Screening

Data screening was conducted to ensure the dataset's suitability for Exploratory Factor Analysis (EFA). One critical step involved identifying and addressing multivariate outliers using Mahalanobis distance, a statistical measure that considers correlations between variables and their multivariate mean. Mahalanobis distance calculates how far each data point is from the center of the distribution (Etherington, 2021). In this study, cases with probability values less than 0.001, as suggested by Hair *et al.* (1998), were flagged as multivariate outliers. These outliers were subsequently removed using listwise deletion to prevent them from distorting the results of the analysis.

Another important step was performing a normality check to assess whether the data followed a normal distribution. The Shapiro-Wilk test was applied to each

group of items, testing the null hypothesis that the data was normally distributed. Results revealed that the data violated the assumption of normality, as the p-values were less than 0.05. This indicated non-normality and necessitated the use of Principal Axis Factoring (PAF) for EFA. PAF is a robust factor extraction method that performs well with non-normally distributed data, making it an appropriate choice for this study (Andrew, 2023). Addressing normality through the Shapiro-Wilk test ensured that the analysis was based on methods suited to the dataset's characteristics.

Factor Analysis

Factor analysis was conducted to examine the underlying structure of the group of items for the Fear of Happiness Scale for young adults. Table 1 shows the results of the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity, which assess the dataset's suitability for Exploratory Factor Analysis (EFA). KMO is a test conducted to examine the strength of the partial correlation (how the factors explain each other) between the variables. KMO values closer to 1.0 are considered ideal while values less than 0.5 are unacceptable (Analysis INN, 2020). The KMO value of 0.977 indicates excellent sampling adequacy, meaning the variables share enough common variance for factor analysis. Bartlett's test of Sphericity is used to test the null hypothesis that the correlation matrix is an identity matrix (Analysis INN, 2020). Bartlett's Test of Sphericity, with a Chi-Square value of 25489.984, 2278 degrees of freedom (df), and a significance level of 0.000, confirms that the variables are significantly related. These results demonstrate that the dataset is appropriate for factor analysis.

Table 1: KMO and Bartlett's Test Result

Kaiser-Meyer-Olkin Adequacy	Measure of Sampling	.977
Bartlett's Test of Sphericity	Approx. Chi-Square	25489.984
	df	2278
	Sig.	.000

To determine the number of factors affecting fear of happiness constructs, several methods were employed, including the total variance plot, scree plot, and parallel analysis. Table 2 shows the total variance explained, which identifies how much of the dataset's variance is captured by each factor. Using eigenvalues greater than 1.0 is a common criterion, as factors with eigenvalues above this threshold explain more variance than a single variable (UCLA, 2021). Moreover, the scree plot helps visualize the number of factors by identifying the "elbow," where the number of meaningful factors becomes apparent. (Reijer *et al.*, 2022). This table 2 shows the initial eigenvalues and their corresponding percentages of total variance explained by different factors. The first five factors accounted for substantial proportions

of the total variance—31.29, 3.39, 2.21, 1.50, and 1.29, respectively. However, relying solely on these eigenvalues is insufficient, as they can provide a partial view of the factor contributions. The total variance explained cannot stand alone because higher-order factors tend to explain smaller proportions of variance. To address this limitation, a scree plot is used in combination with eigenvalues to visually assess the point at which additional factors contribute minimally to the total variance. This approach helps in identifying the optimal number of factors to retain for a more accurate and meaningful interpretation of the data.

Table 2: Total Variance and Scree Plot

Factor	Eigenvalues	Variance Explained
1	31.290	46.01%
2	3.393	4.99%
3	2.213	3.25%
4	1.496	2.20%
5	1.291	1.89%
6	1.095	1.610
7	1.041	1.530
8	1.009	1.484

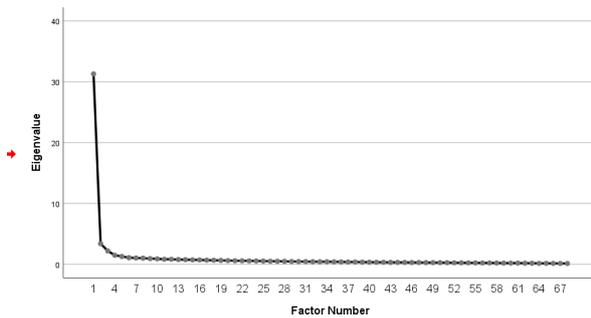


Figure 1: Scree plot

The study employed principal axis factoring as the extraction method because it does not rely on distributional assumptions (Grieder & Steiner, 2021), making it

appropriate for the study’s non-normally distributed data. The Kaiser criterion and scree plot usually align to each other (Çokluk & Koçak, 2016), but inconsistencies in the results were observed. Moreover, according to Sheytanova (2015), the Kaiser criterion has the poorest performance in determining a number of factors. While the scree plot does not substantially provide accurate and clear data as seen above. Therefore, another method was used to ensure accurate results, which is the parallel analysis. According to Horn (1965), parallel analysis uses the population’s correlation matrix to determine which factors are significant, with eigenvalues greater than 1. Table 3 presents a comparison of eigenvalues from the total variance explained and those derived from random data. Initially, the results suggested that 8 factors were extracted from the dataset.

Table 3: Total Variance and Parallel Analysis

Total Variance/ Initial Eigenvalues	Parallel Analysis
31.290	1.018030
3.393	.928374
2.213	.881356
1.496	.828677
1.291	.791112
1.095	.753348
1.041	.715271
1.009	.686636

An additional procedure was conducted to confirm the findings of parallel analysis. Specifically, the researchers used the MAP analysis, as shown in table 4, which involves performing detailed principal component tests and analyzing matrices of partial correlations (Watkins, 2018). According to Zwick and Velicer (1986), the MAP analysis is considered more reliable than both the eigenvalue-greater-than-1 rule and the visual scree test. Consequently, the final number of factors retained is based on the results of the Revised MAP test (2000), which indicated that 5 factors are retained.

Table 4: MAP analysis

The smallest average partial correlation	The smallest average 4rth power partial correlation	The Number of Components According to the Original (1976) MAP Test	The Number of Components According to the Revised (2000) MAP Test
.0057	.0001	5	5

The table 5 shows the results, that most of the communalities are high, indicating that the majority of items share a significant proportion of variance with the extracted factors. Specifically, the Initial communalities reflect the variance explained by each item before extraction, and many of these values are already relatively high, with several above 0.70. After extraction, the Extraction communalities exceed 0.70

for most items, with several items showing values above 0.80, demonstrating strong relationships with the factors. This suggests that these items are highly relevant in defining the constructs being measured. Items with high communalities contribute effectively to the overall model and help ensure the clarity and reliability of the factor structure. Conversely, items with lower extraction values (below 0.40) show weak associations and may need to be

reconsidered or excluded to improve the factor structure. Notably, there are no communalities below 0.40, reinforcing the strength of the factor structure, as all items show strong associations with the extracted factors. During factor loadings, a total of 18 items were removed due to cross-loading, meaning they did not strongly align

with a single factor and were found to be associated with other factors. The items removed were numbers 7, 8, 11, 12, 14, 16, 19, 35, 36, 40, 42, 44, 50, 53, 54, 61, 63, and 66. This removal was necessary to improve the clarity of the factors, ensuring that each item was strongly associated with only one factor.

Table 5: Factor Loadings and Communalities for Promax Rotation

	Factor Loading					Communalities
	1	2	3	4	5	
1. I feel uncomfortable after experiencing happiness.				.559		.483
2. I worry that people might judge me for being too happy.				.506		.562
3. I avoid getting too excited about good news.				.633		.418
4. Happiness makes me feel vulnerable.				.528		.664
5. I feel uneasy about planning for happiness in the future.				.612		.698
6. I worry that others might be jealous of me if I express my happiness.				.499		.676
7. I avoid activities that might make me too happy.	.438			.538		.665
8. I feel like being too happy might attract problems.		.373		.551		.526
9. Happiness feels overwhelming.				.497		.649
10. Expressing happiness feels like bragging to me.				.493		.659
11. I hesitate to try new activities that might bring me happiness.	.534			.402		.693
12. I fear that my happiness will be taken away.		.534		.320		.640
13. I associate happiness with feelings of guilt.				.468		.661
14. I hold back my happiness to avoid drawing attention to myself.	.355			.422		.713
15. I limit my expression of happiness.	.461					.743
16. I worry that enjoying happiness will lead to tears soon after.		.593		.352		.643
17. I feel a sense of fear when I am in a good mood.				.372		.672
18. I hesitate to express positive feelings to others.	.660					.617
19. When I'm happy, I try to quickly shift my focus to something else.	.616			.359		.546
20. Happiness might make me ignore reality.		.433				.552
21. I experience more fear than relief after achieving something good.	.590					.614
22. I avoid posting or sharing good news about myself publicly.						.691
23. I tend to overanalyze moments of happiness.						.663
24. I think being happy will lead to higher expectations I can't meet.						.488
25. I find myself questioning whether I deserve happiness.						.650
26. I find excuses to leave when others are celebrating something.	.713					.486
27. I avoid reflecting on my positive achievements.	.580					.661
28. Happiness made me worry about what's to come.						.630

29. Happiness feels undeserved if others around me are suffering.					.704
30. I think happiness will make others think I have no problems.					.660
31. I distance myself from people to avoid feeling too happy.	.695				.654
32. I fear that happiness is just a brief escape from reality.					.616
33. Being happy feels like betraying my pastpain.	.615				.663
34. I worry that expressing happiness will make others upset.	.423				.650
35. I find myself preparing for failure rather than success.	.465				.544
36. Happiness feels like an illusion that will soon fade away.	.307				.626
37. Happiness feels empty to me.	.627				.600
38. I feel uneasy when I see someone smiling or laughing.	.730				.639
39. I associate happiness with punishment.	.625				.722
40. I feel disconnected from myself when I am truly happy.	.522				.689
41. I avoid optimistic people.	.819				.684
42. I think it is safer to feel neutral than to feel happy.					.622
43. I associate moments of joy with potential future regret.	.438				.570
44. Happiness is too good to last for someone like me.					.577
45. I fear that feeling happy will make me seem gullible to people.			.458		.596
46. I resist engaging in hobbies or activities Used to enjoy.	.569				.644
47. I feel like happiness is a mask people wear to hide their struggles.	.709				.698
48. I find myself worrying even during happy moments.	.534				.700
49. Being overly happy might make me ignore the needs or feelings of others.			.421		.601
50. I think being overly happy is a sign of weakness.	.499		.410		.490
51. I am afraid that happiness might make me selfish.			.660		.642
52. Being overly happy might make others see me as immature.			.655		.532
53. I avoid planning for happiness in the future.	.349		.439		.698
54. I think happiness is a distraction from what's important.	.301		.647		.548
55. I second-guess my moments of happiness.			.489		.687
56. I worry that others will expect too much from me if I am happy.			.602		.707
57. I avoid happiness because it might make me irresponsible.			.749		.654
58. I think happiness requires too much energy to sustain.			.641		.684
59. I feel anxious when things are going well.			.373		.662

60. Being overly happy will distract me from what's important.			.635			.684
61. It feels wrong to be happy when things aren't perfect.	.403		.365			.596
62. I fear that being happy will make me miss the things I've lost.			.492			.696
63. I believe that happiness is a luxury I can't afford to enjoy.	.468		.304			.654
64. When something good happens, I tend to look for hidden problems.			.451			.661
65. I might lose control when I feel happy.			.561			.623
66. I feel uneasy when others are happier than me.	.551		.350			.652
67. I hold back from smiling or laughing in public settings.	.492					.676
68. I think happiness is superficial.			.331			.584

Note: Factor loadings < .3 are suppressed

Table 6 shows the Factor Correlation Matrix, which shows how five factors are related. Factors 1 to 4 have strong correlations, meaning they are closely connected and measure similar things. For example, Factor 1 and Factor 3 have a correlation of 0.735, and Factor 2 and Factor 3 have a correlation of 0.655. On the other hand, Factor 5 has weak correlations with the other factors, like 0.142 with Factor 1 and 0.168 with Factor 2, because it only has one item. Since Factor 5 does not meet the standard of having at least three items, it is excluded from further analysis. Factors 1 to 4 are reliable and show strong relationships, while Factor 5 is not considered valid due to its limited number of items. Therefore, item number 68 was removed.

Table 6: Factor Correlation Matrix

Factor	1	2	3	4	5
1	1.000	.607	.735	.698	.142
2	.607	1.000	.655	.649	.168
3	.735	.655	1.000	.622	.170
4	.698	.622	.622	1.000	.76
5	.142	.168	.170	.76	1.000

Table 7 presents the items along with their factor loadings for each of the four factors (F1, F2, F3, F4) derived from factor analysis. For Factor 1 (F1), which represents Social and Emotional Avoidance (SEA), items demonstrate significant factor loadings, with SEA4, "I find excuses to leave when others are celebrating something," having the highest loading of .713. These items reflect individuals' tendencies to avoid emotional engagement or social

interactions that trigger happiness, suggesting a discomfort with positive emotional expression in social contexts. Factor 2 (F2), corresponding to Future-Oriented Anxiety or Guilt (FOAG), exhibits high factor loadings for items related to anticipatory anxiety or guilt about happiness, such as FOAG19, "I think being happy will lead to higher expectations I can't meet," and FOAG22, "Happiness feels undeserved if others around me are suffering," with loadings of .704 and .696, respectively. These items highlight individuals' future-oriented concerns, including fears that happiness may result in negative consequences, such as increased pressure or guilt.

Factor 3 (F3), representing Cognitive Distortion (CD), includes items reflecting irrational thoughts and beliefs about happiness, such as CD29, "I am afraid that happiness might make me selfish," and CD33, "I avoid happiness because it might make me irresponsible," with loadings of .660 and .749, respectively. These items reflect cognitive distortions related to happiness, where individuals hold negative or unrealistic views about the emotional and social consequences of feeling happy. Finally, Factor 4 (F4), corresponding to Emotional Discomfort (ED), captures items that express emotional unease or vulnerability associated with experiencing happiness, such as ED40, "I feel uncomfortable after experiencing happiness," and ED42, "I avoid getting too excited about good news," with loadings of .559 and .633, respectively. These items suggest an emotional discomfort with happiness, where individuals may feel vulnerable, overwhelmed, or unable to handle the emotional intensity associated with positive experiences.

Table 7: Factor Loading of items

	SEA	FOAG	CD	ED
1. I limit my expression of happiness	.461			
2. I hesitate to express positive feelings to others.	.660			
3. I experience more fear than relief after achieving something good.	.590			

4. I find excuses to leave when others are celebrating something.	.713		
5. I avoid reflecting on my positive achievements.	.580		
6. I distance myself from people to avoid feeling too happy.	.695		
7. Being happy feels like betraying my past pain.	.615		
8. I worry that expressing happiness will make others upset.	.423		
9. Happiness feels empty to me.	.627		
10. I feel uneasy when I see someone smiling or laughing.	.730		
11. I associate happiness with punishment.	.625		
12. I avoid optimistic people.	.819		
13. I associate moments of joy with potential future regret.	.438		
14. I resist engaging in hobbies or activities I used to enjoy.	.569		
15. I hold back from smiling or laughing in public settings.	.492		
16. Happiness might make me ignore reality.		.433	
17. I avoid posting or sharing good news about myself publicly.		.614	
18. I tend to overanalyze moments of happiness.		.655	
19. I think being happy will lead to higher expectations I can't meet.		.704	
20. I find myself questioning whether I deserve happiness.		.678	
21. Happiness made me worry about what's to come.		.596	
22. Happiness feels undeserved if others around me are suffering.		.696	
23. I think happiness will make others think I have no problems.		.659	
24. I fear that happiness is just a brief escape from reality.		.671	
25. I feel like happiness is a mask people wear to hide their struggles.		.709	
26. I find myself worrying even during happy moments.		.534	
27. I fear that feeling happy will make me seem gullible to people.			.458
28. Being overly happy might make me ignore the needs or feelings of others.			.421
29. I am afraid that happiness might make me selfish.			.660
30. Being overly happy might make others see me as immature.			.655
31. I second guess my moments of happiness.			.489
32. I worry that others will expect too much from me if I am happy.			.602
33. I avoid happiness because it might make me irresponsible.			.749
34. I think happiness requires too much energy to sustain.			.641
35. I feel anxious when things are going well.			.373
36. Being overly happy will distract me from what's important.			.635
37. I fear that being happy will make me miss the things I've lost.			.492
38. When something good happens, I tend to look for hidden problems.			.451
39. I might lose control when I feel happy.			.561
40. I feel uncomfortable after experiencing happiness.			.559
41. I worry that people might judge me for being too happy.			.506
42. I avoid getting too excited about good news.			.633
43. Happiness makes me feel vulnerable.			.528
44. I feel uneasy about planning for happiness in the future.			.612
45. I worry that others might be jealous of me if I express my happiness.			.499
46. Happiness feels overwhelming.			.497
47. Expressing happiness feels like bragging to me.			.493
48. I associate happiness with feelings of guilt.			.468
49. I feel a sense of fear when I am in a good mood.			.372

1 - Strongly Disagree , 2- Disagree, 3- Somewhat Disagree, 4- Neutral, 5- Somewhat Agree, 6- Agree, 7- Strongly Agree

The table 8 presents the reliability statistics for a questionnaire consisting of 49 items, completed by 501 participants. The key metric, Cronbach's Alpha, is reported as 0.975, indicating excellent internal consistency. Cronbach's Alpha ranges from 0 to 1, with higher values reflecting greater reliability. Generally, a value above 0.7 is considered acceptable, while values above 0.9, like the one in this study, suggest that the items in the questionnaire are highly consistent in measuring the same underlying concept. The inclusion of 49 items means that the survey comprehensively covers the construct it aims to assess, and the large sample size of 501 participants strengthens the reliability analysis by ensuring the results are stable and representative.

The high Cronbach's Alpha value indicates that participants responded to the items in a consistent manner, meaning the questionnaire is highly reliable. This level of reliability suggests that if the questionnaire were administered again to a similar group, it would likely produce consistent results. However, it is important to note that while high reliability ensures consistency, it does not guarantee that the questionnaire is valid or measure what it is intended to measure. Additional tests for validity would be needed to confirm this. Nonetheless, the high reliability score provides confidence in the data collected and ensures that the findings based on this survey are dependable.

Table 8: Reliability Statistics

Cronbach's Alpha	N of Items	N
.975	49	501

CONCLUSION

The focus of the study was to provide an alternative instrument for measuring fear of happiness. After thorough analysis, the questionnaire was refined to 49 items that capture four key factors: Social and Emotional Avoidance, Future-Oriented Anxiety or Guilt, Cognitive Distortion, and Emotional Discomfort. These factors represent the different ways fear of happiness can manifest in thoughts, emotions, and behaviors. The scale demonstrated excellent reliability, with a Cronbach's Alpha of 0.975, indicating strong internal consistency. This high reliability reinforces the FHS-YA's ability to measure fear of happiness accurately and consistently. The reduction of items from 68 to 49 ensured the scale's efficiency while maintaining its focus on capturing the most relevant aspects of the construct. The application of Exploratory Factor Analysis (EFA) and Principal Axis Factoring (PAF) was pivotal in validating the scale, particularly given the non-normal data distribution.

The study also highlighted the possible influence of cultural and social norms on fear of happiness. For example, some young adults may associate happiness with guilt, vulnerability, or social judgment, which can discourage them from embracing positive emotions. These findings suggest the need for culturally sensitive approaches to help individuals overcome these fears. While the FHS-YA has shown strong reliability and validity, future research is needed to test its applicability across diverse populations and cultural contexts. Further studies could also explore the relationship between fear of happiness and other psychological factors, such as resilience, self-esteem, and coping strategies. This study provides a valuable tool for researchers and mental health professionals by identifying the key factors contributing to the fear of happiness. The FHS-YA can support the development of interventions aimed at helping young adults build healthier relationships with happiness and improve their overall emotional well-being.

Limitations of the study

This study has several limitations. First, the sample was limited to young adults from Davao del Sur, which may not be representative of other geographic regions, limiting the generalizability of the findings. Second, the study relied on self-reported data, which is subject to response biases such as social desirability or misunderstanding of the questions. This reliance on self-reporting may limit the accuracy of the findings, as participants may not always express their true feelings or may be influenced by external factors, such as current emotional states or social pressures. Additionally, the exclusion of Factor 5 from the final analysis due to its weak correlation with other factors raises concerns about the stability of the factor model and suggests that the construct of fear of happiness might not be fully captured in this study. Future revisions of the scale could address this issue by refining the model or adding new items to improve its comprehensiveness. Another limitation is the study's reliance on a single theoretical framework, Cognitive Behavioral Theory (CBT). While CBT provides a useful basis for understanding fear of happiness, the scale might not fully capture other psychological processes or theories, such as social or existential factors, which could be relevant for understanding this phenomenon more holistically. These limitations highlight the need for further research to refine the Fear of Happiness Scale, address potential biases, and explore additional theoretical perspectives to enhance the understanding of this complex phenomenon.

REFERENCES

- Analysis INN. (2020). *KMO and Bartlett's Test of Sphericity*. Analysis INN. <https://www.analysisinn.com/post/kmo-and-bartlett-s-test-of-sphericity>
- Andrew, F. (2023). *Performing Principal Axis Factoring (PAF) using Python: A Practical Guide*. <https://www.linkedin.com/pulse/performing-principal-axis-factoring-paf-using-python-practical-f>
- Chakraborty, R., & Pandey, D. N. (2023). Correlation of Fear of Happiness with Flourishing and Hope in Young Adults. *International Journal of Indian Psychology*, 11(4). <https://doi.org/10.25215/1104.131>
- Çokluk, Ö., & Koçak, D. (2016). *Using Horn's parallel analysis method in exploratory factor analysis for determining the number of factors*. Educational Sciences Theory & Practice. <https://doi.org/10.12738/estp.2016.2.0328>
- Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10(1), 1–9. <https://doi.org/10.7275/jyj1-4868>
- Dobos, B., Mellor, D., & Piko, B. F. (2024). Exploring fear of happiness among university students: The role of perfectionism, academic burnout, loneliness, and hopelessness. *Scandinavian Journal of Psychology*, 65(3), 559–567. <https://doi.org/10.1111/sjop.13001>
- Etherington, T. R. (2021). Mahalanobis distances for ecological niche modelling and outlier detection: implications of sample size, error, and bias for selecting and parameterising a multivariate location and scatter method. *PeerJ*, 9, e11436. <https://doi.org/10.7717/peerj.11436>
- Gilbert, P., McEwan, K., Gibbons, L., Chotai, S., Duarte, J., & Matos, M. (2011). Fears of compassion and happiness in relation to alexithymia, mindfulness, and self-criticism. *Psychology and Psychotherapy Theory Research and Practice*, 85(4), 374–390. <https://doi.org/10.1111/j.2044-8341.2011.02046.x>
- Grieder, S., & Steiner, M. D. (2021). Algorithmic jingle jungle: A comparison of implementations of principal axis factoring and promax rotation in R and SPSS. *Behavior Research Methods*, 54(1), 54–74. <https://doi.org/10.3758/s13428-021-01581-x>
- Hair Jr., J. F. (1998). *Multivariate Data Analysis with Readings*. Englewood Cliffs, NJ Prentice-Hall. Scientific Research Publishing. <https://www.scirp.org/reference/referencespapers?referenceid=1450075>
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 30(2), 179–185.
- Joshanloo, M. (2013). The influence of fear of happiness beliefs on responses to the satisfaction with life scale. *Personality and Individual Differences*, 54(5), 647–651. <https://doi.org/10.1016/j.paid.2012.11.011>
- Reijer, A. D., Otter, P., & Jacobs, J. P. a. M. (2022). A scree plot criterion for the number of factors. SSRN. *Electronic Journal*. <https://doi.org/10.2139/ssrn.4129079>
- Sar, V., Türk, T., & Öztürk, E. (2019). Fear of happiness among college students: The role of gender, childhood psychological trauma, and dissociation. *Indian Journal of Psychiatry*, 61(4), 389. https://doi.org/10.4103/psychiatry.indianjpsychiatry_52_17
- Sheytanova, T. (2015). *A Monte Carlo Study Comparing Three Methods for Determining the Number of Principal Components and Factors* (Dissertation). Retrieved from <https://urn.kb.se/resolve?urn=urn:nbn:se:oru:diva-47703>
- Watkins, M. W. (2018). Exploratory Factor Analysis: A Guide to Best practice. *Journal of Black Psychology*, 44(3), 219–246. <https://doi.org/10.1177/0095798418771807>
- Westberg, K. H., Nyholm, M., Nygren, J. M., & Svedberg, P. (2022). Mental Health Problems among Young People—A Scoping Review of Help-Seeking. *International Journal of Environmental Research and Public Health*, 19(3), 1430. <https://doi.org/10.3390/ijerph19031430>
- Yildirim, M. (2019). Mediating the role of resilience in the relationships between fear of happiness and affect balance, satisfaction with life, and flourishing. *Europe's Journal of Psychology*, 15(2), 183–198. <https://doi.org/10.5964/ejop.v15i2.1640>
- Zwick, W. R., & Velicer, W. F. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin*, 99, 432–442.