

The Impact of Social-engagement, Social-support and Self-esteem on Life Satisfaction in UK Youth: A Sequential Explanatory Mixed Methods Study

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Abstract: Significant changes in adolescent physiology and psychology have been linked to a decline in adolescents' sense of well-being. That's why it's so important to study what makes people happy in order to help teenagers flourish. The purpose of this research is to demonstrate the value of a correlational design and thematic analysis in revealing the underlying mechanisms at play in teenage social connection, self-esteem, and life satisfaction through the use of a mixed-methods sequential explanatory display. Our predictions that self-esteem (26%), social-support (1%) and social-engagement (1%) each accounted for a significant portion of the unique variance on the Satisfaction with Life Scale are supported by data from the Seventh-Sweep Study-Wave 7 Dataset (N=759). The quantitative results are corroborated by a thematic analysis of social-media and newspaper comments (N=126), which reveals that young people with high self-esteem are more likely to have positive school and social connections, use coping techniques, and express their true selves. Low self-esteem, on the other hand, may have detrimental effects on happiness, such as the promotion of psychological disorder and risky behaviours as well as underpinning academic and social isolation. Therefore, it may be beneficial for adolescents' well-being to place an emphasis on school connectedness, social support, and positive self-perception.

Keywords: thematic analysis, adolescents, self-esteem, life satisfaction

1. Introduction

Positive psychology has consistently highlighted the significance of subjective well-being among young adults. In addition to emotional well-being, social well-being, and physical well-being, life satisfaction is frequently regarded as a crucial component of well-being, according to the findings of researchers. Recent research in this field has revealed that social networks, comprised of social participants and perceived social support [1, 2], have a significant impact on the level of life satisfaction in adolescents. In addition, the early development of self-esteem is a significant predictor of well-being throughout the lifespan and remains a research priority [3, 4]. Thus, previous research suggests that higher levels of life satisfaction are associated with higher levels of perceived social support, self-esteem, and social engagement.

Nonetheless, it remains unclear whether the combination of these three factors is positively associated with life satisfaction, as well as the mechanism underlying this association. The use of

qualitative methods can provide deeper subjective insights, but there have been few published studies that assessed this issue using qualitative methods [5]. To address these research questions, a mixed-methods approach that incorporates both quantitative and qualitative methodologies based on a pragmatic theoretical paradigm was employed.

The purpose of the present study is to quantify latent variables that young people identified as contributing to their life satisfaction. The hypothesis is that the combination of these three variables would be positively associated with life satisfaction (H1), and that more days engaged in social activities (H2), higher perceived social support (H3), and high self-esteem (H4) would predict higher levels of life satisfaction.

On the basis of these quantitative findings, the qualitative component of the study aims to gain a deeper understanding of the relationship between high self-esteem and subjective well-being, as well as low self-esteem and depression or mental health. Therefore, it is reasonable to infer that the level of contentment one feels with regard to their own life is linked to their involvement in school connectedness, receiving social support, and possessing a positive sense of self-esteem.

2. Method

2.1. Research Design

A combination of quantitative and qualitative techniques was used in an explanatory sequential design. To begin, a multiple regression analysis of social connections and self-esteem was conducted to see whether these variables can account for unique variance in life satisfaction after controlling for the initial predictors. Second, qualitative methods were employed to investigate how youth self-esteem affects happiness. These results were combined to learn more about how self-esteem influences happiness in general. (Figure 1) Code for ethical review: 10296.

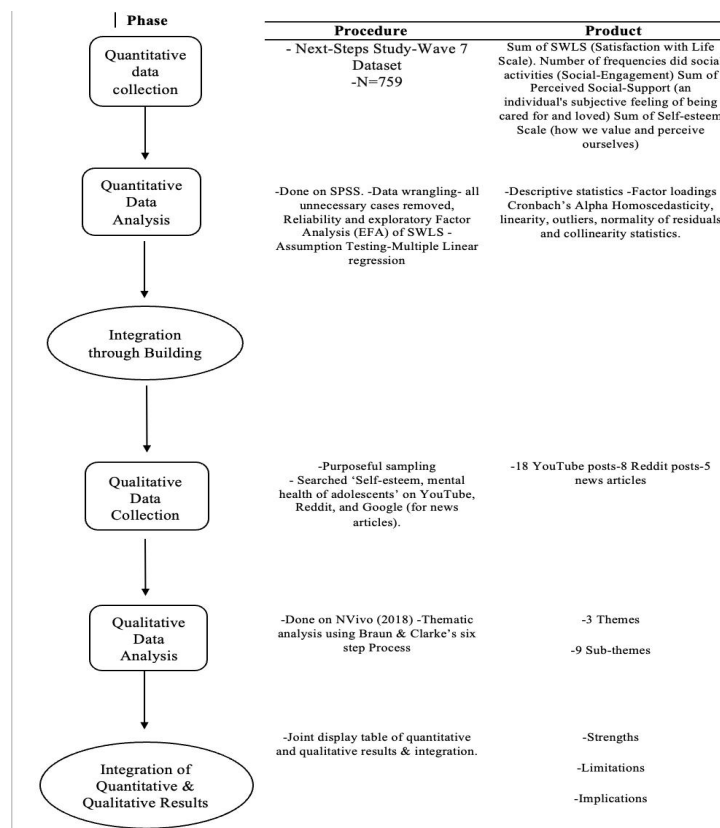
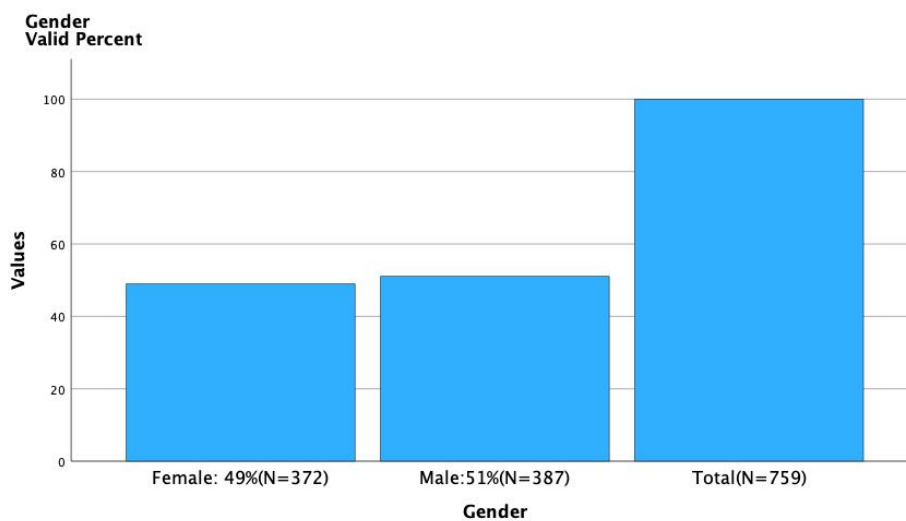


Figure 1: Mixed methods sequential explanatory design flowchart.

2.2. Data Sources

Quantitative information for this investigation was drawn from the Wave 7 dataset of the prospective cohort study Seventh Sweep, which followed a representative sample of people born in the United Kingdom between 2000 and 2002 [6]. After excluding those with missing data, 759 participants were included, with 49% being male and 51% being female (Table 1); the average age of all participants was 17. With the current sample size ($N=759$), the study had a power of 0.80, $\alpha=0.05$, two-tailed, to identify extremely minor effects for both the overall model ($R^2=0.12$) and individual predictors ($\eta^2=0.06$).

Table 1: Characteristics of Participants.



To gather qualitative information, a systematic sampling strategy was used. An exhaustive search was conducted for the terms “self-esteem” and “mental health of adolescents”, and comments from people sharing their own insights and perspectives on the topics were cherry-picked. Although exact details are lacking, it is inferred that they were primarily American and British teenagers and young adults. Then, a Jeffersonian method of transcription was implemented.

Using secondary data for ongoing research initiatives is an attractive option as it saves time and money versus conducting primary research. In addition, data from trusted sites, like the Seventh-Sweep Study done by UCL, can often be more credible than data collected independently [6]. Larger entities are in a better position to collect copious amounts of longitudinal data, which can be used to draw meaningful conclusions about trends over time.

2.3. Data Analysis

The quantitative variables analyses were the number of frequencies of social activities, five items of the Self-Esteem Scale, three items of the Social Provisions Scale, and seven items of the Satisfaction with Life Scale (SWLS). The Social Provisions Scale measures social support on a three-point scale, whereas the SWLS measures general mental health on a seven-point Likert scale. To ensure accuracy, absent data cases related to social engagement, the Social Provisions Scale, self-esteem, and SWLS items were eliminated. All scores were reverse-coded, with the lowest score (0) representing the worst levels of life satisfaction, social engagement, social support, and self-esteem. Multiple-regression analysis (MRA) was then conducted with these predictors.

For the qualitative strand, data-collection (N=126) was de-identified, processed, and imported into Nvivo (2018); open-ended responses from YouTube and newspaper comments were analysed thematically using grounded theory methodology [7]; and themes regarding factors that contributed to life satisfaction were derived and described (Figure 2). Using the quantitative findings to guide the collection of qualitative data enabled integration. The quantitative and qualitative data were evaluated separately, and the themes were compared to the quantitative findings so that meta-inferences could be drawn. Then, these meta-inferences were used to arrive at generalisations.

The study's strength is its use of integration, which provides a more holistic view of teenagers' self-esteem. The qualitative discoveries give a more in-depth explanation of the key quantitative findings, while the quantitative results inform the sampling and data collecting for the qualitative thread. Consequently, meta-inferences could be drawn that would not have been possible with either technique employed independently. They are simple and effective since both sets of data are collected simultaneously, and there is no dependence between the two lines of inquiry. The data for each type is collected and analysed individually using standard methods, allowing for straightforward comparisons. Until you reach integration, there is nothing new to study or apply.

2.4. Validity, Reliability and Methodological Integrity

The SWLS factor of a young individual after oblique rotation of the primary axis factoring. Data suitability for factor analysis was confirmed by preliminary checks. There were sufficient correlations between items to warrant a factor analysis, as the Kaiser-Mayer-Olkin (KMO) measure was above the recommended value of 0.6 (at .87), and Bartlett's test for sphericity was significant ($X^2(21) = 14559, p = .001, \text{determinant} = .107$).

One factor was identified by factor analysis that explained 41.97 % of the variation. The item loadings for the factors in Appendix A indicate a good fit between the items and the factors. Cronbach's alpha for the 7-item scale is 0.83, indicating high levels of internal consistency and reliability.

3. Results

3.1. Quantitative

MRA was used to evaluate the hypotheses. Before interpreting the MRA findings, a number of hypotheses were examined, and tests were performed in Appendix B. First, the histogram of standardised residuals to standardised predicted values was inspected to confirm that the residuals satisfied the assumptions of linearity, normality, and homoscedasticity. The scatterplot, coupled with a Mahalanobis distance that did not exceed the necessary χ^2 for $df=3$ (at $=.001$), of 15.66, and the fact that no cases exceeded 1 for Cook's distances, disclosed the absence of outliers or influential cases. The final regression model's high tolerances for all three predictors indicated that there were no multicollinearity issues. Table 2 displays bivariate correlations between variables and means and standard deviations.

Table 2: Intercorrelations, means and standard deviations or percentages all measured variables (N = 758).

Variables	Pearson's				M	SD
	1	2	3	4		
1.life satisfaction scale	1.00	0.09***	0.27***	0.53***	3.13	0.57
2. social engagement		1.00	0.11***	0.12***	30.83	7.73
3.perceived social support			1.00	0.34***	8.23	1.14

Table 2: (continued).

4.self-esteem	1.00	15.02	3.19
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*** $p < .001$.

In combination, the three predictor variables explained 33.7% of the variance in SWLS, with $R^2 = .34$, adjust $R^2 = .26$, $F(3,755) = 127.66$, $p < .001$. Table 3 reports the unstandardised (B) and standardised (β) regression coefficients and squared semi-partial correlations (sr^2) in the MRA.

Table 3: Unstandardised (B) and standardised (β) regression coefficients, and squared semi-partial correlations (sr^2) for each predictor variable on each block of a multiple regression predicting young person's satisfaction with life (N = 759).

Variable	B [95% CI]	β	sr^2	$sr^2(\%)$	p
Intercept constant	1.22***	-	-	-	0.001
Frequency of social engagement	0.00 [0.00, 0.01]	0.08	0.01	1	0.012
Perceived social support	0.03 [0.12, 0.05]***	0.1	0.01	1	0.001
Self-esteem	0.08 [0.07, 0.09]***	0.54	0.26	26	0.001

Note. CI = confidence interval.
 *** $p < .001$.

According to Table 3, all three predictors had a significant effect on SWLS. Self-esteem ($sr^2 = 0.26$) accounted for the greatest variance in the SWLS model, followed by perceived social support ($sr^2 = .01$) and social engagement ($sr^2 = .01$). A one standard deviation increase in self-esteem predicted a 0.54 standard deviation rise in SWLS, after controlling for perceived social support and social engagement.

3.2. Qualitative

The next stage was to examine the relationship between self-esteem and mental health, as self-esteem emerged as the strongest predictor of SWLS, and the orientation of the relationship was consistent with the hypothesis. According to Figure 2, three overarching themes and nine subthemes were identified after a thematic analysis of the data.

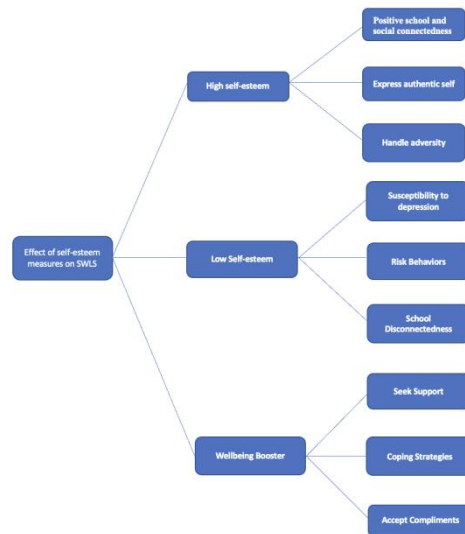


Figure 2: Thematic map of constructed themes.

3.2.1. High Self-esteem

For many, high self-esteem entails having confidence in oneself and recognising one's valuable contribution to the world [8]. Having high self-esteem enables individuals to develop positive relationships, deal with adversity, and express their true selves to the world. Afolabi [9] demonstrated that college students with higher self-esteem performed better in school and were better socially adjusted to living away from family.

Positive school and social connectedness

High self-esteem is associated with school connection (felt support, sense of belonging, inclusion, and concern from school and peers) and positive social relationships for many adolescents. As one individual stated:

"I derive a good amount of self-validation and confidence from my beloved friends and teachers, and their love have always been a lifesaving boat in the times when I really question myself worth. Just knowing that you matter to at least someone can be very uplifting."

Another person said school and social connectedness is beneficial for overall happiness:

"I grew up in a nice suburban neighbourhood, my parents and teachers loved me and still do. I enjoy my school life, and I get good grades and they are happy whether they are A's or C's (maybe not below that lol)..."

Express authentic self

Some individuals with high self-esteem typically present their true selves to the world, embracing both their strengths and weaknesses, and are genuinely content with themselves. One student, whose remarks were quite defensive, provided the following justification for not assisting another student in his geometry class:

"...I didn't see any benefit for myself. Even if that sounds selfish, it was really justified, because I was a better student, and he was not...I felt comfortable about refusing to assist him."

Another defensive student interpreted the inquiries as threats to their inflated self-esteem and life satisfaction, and as a result, they made efforts to counteract them. Another student calmly mentioned a time when she had broken the regulations:

"I honestly have never done anything bad that cause low self-esteem. The worst thing I ever do is burn CDs...I've never drink anything. The only time I have drank anything was in Mexico, when I was 18, so it was legal...I've never broken a rule in my life."

3.2.2. Low Self-esteem

Susceptibility to depression

Low self-esteem implies lacking a positive perception of oneself and not valuing oneself highly [8]. According to a number of participants, persistently low self-esteem can contribute to depression, school disengagement, and risky behaviour, which can impact social interactions, focus, emotional regulation, and overall life satisfaction.

Some individuals mentioned a significant relationship between mental health disorders and low self-esteem. Researchers also discovered that a negative self-perception increases the risk of developing depression [10]. Low self-esteem, as stated by one individual, contributes to melancholy:

“I believe I am a person who has good potential, but as my anxiety developed into low self-esteem, then developed into depression.”

According to another individual, school disconnection breeds fragile self-esteem, making it difficult to achieve a fulfilling life.

“One of things I find in common with depressed individuals or people with substance abuse issues is that they didn’t have close parents and supported teachers in their childhood, and i got bullied in school, and i can’t take negative comments at all and i feel insecure, i don’t have friends that much..”

Risk Behaviours

As one participant discussed their negative experience with social disconnectedness issues, some felt that anxiety and fragile self-esteem increased the likelihood of engaging in risky health behaviours, particularly among adolescents:

“My childhood gave me a shit ton of anxiety, neuroticism and self-esteem issues to deal with. and it made me obsessed with validation from other people. money. sex. status. external approval.”

Another participant who has low self-worth and school disconnectedness noted they were more inclined to abuse drugs and alcohol, dangerous decisions that could have negative effects on their health and well-being:

“I don’t want to go to school because whenever I do someone says something negative to me and my whole day is ruined and I feel bad, I can’t reply either... I end up abusing drug and alcohol to destroy my life.....”

Furthermore, low self-esteem sometimes can damage a person’s mental state, leading to increased suicide risk, as one teenager described:

“I’ve hit the level of depression and low self-esteem where I think the absolute worst of myself that I possibly could, I always expect the worst possible outcomes, and I want to die every minute of my life. I’ve isolated myself so much the only one that would hear the gun shot is my dog. But I can’t do him like that he needs me.”

Integration

Meta-inferences derived from merging quantitative and qualitative data are displayed in Table 4.

Table 4: Joint Display Demonstrating quantitative, qualitative and integrated analysis.

Dimension	Quantitative Finding	Qualitative Finding	Mixed Methods interpretation
High Self-esteem	Higher levels of self-esteem predicted increased satisfaction with life ($\beta=0.54$, $p<0.001$) Self-esteem was the strongest predictor of life satisfaction ($sr^2=0.26$)	Teenagers with higher self-esteem were felt comfortable and confident when expressing their opinions, due to the positive school connection and relationship: <i>“...I didn’t see any benefit for myself. Even if that sounds selfish, it was really justified, because I was a better student, and he was not...I felt comfortable about refusing to assist him.”</i> <i>“I enjoy the current school life because I never care about what others said...I’m willing to set boundaries with people who don’t value and respect you...”</i>	Qualitative finding explains and expands quantitative findings, reporting that high level of life satisfaction is associated with higher self-esteem in youth.
Low Self-esteem	Higher levels of self-esteem predicted increased satisfaction with life ($\beta=0.54$, $p<0.001$) Self-esteem was the strongest predictor of life satisfaction ($sr^2=0.26$)	Having low self-esteem tend to develop increased mental conditions and risk behaviours: <i>“At age 17 I was in the worst moments of my life because of low self-esteem, constantly depressed and anxious, every day I would wake up feeling a hole in my gut, and I would drag myself to high school feeling like life was hell”</i> <i>“it made me obsessed with validation from other people. money. sex. status. external approval”</i>	Qualitative findings expand the quantitative findings, reporting that Qualitative findings expand the quantitative findings, reporting that teenagers’ school and social connectedness have been associated with prolonged low self-esteem, leading to psychological disorders and risk behaviours.

Table 4: (continued).

Boots overall well-being	Higher levels of self-esteem predicted increased satisfaction with life ($\beta=0.54$, $p<0.001$) Self-esteem was the strongest predictor of life satisfaction ($sr^2=0.26$)	Teenagers who possess a lower level of self-esteem tend to experience worse academic achievements, social and school disconnections, negatively impacted on well-being: “I have so many goals ... and to have one thing that I’m proud of is key. I’m proud of; my academic achievements, my relationship with my family and my fitness level. Those elements all contributed to my well-being”. “Today I feel like a success. Im not the fittest, Im not the most attractive, but I feel like I achieved my goal in life and well-being, i have lovely friends and parents with unconditional support, I love everything around me.”	Qualitative findings confirm and expand quantitative findings, reporting that Comparing to high self-esteem, fragile self-esteem decrease teenagers’ overall well-being and satisfaction in their academic and personal lives. The potential reason for school disconnectedness.
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4. Discussion

The primary objective of this research is to show how survey data and social media comments may be combined to examine adolescent quality of life in relation to social connection and self-esteem using a case series mixed-methods display. According to the data, self-esteem, social engagement, and social support are all related to SWLS ($R^2 = .34$, $F(3,755) = 127.66$, $p = .001$), with self-esteem being the most important factor (explaining 26% of the variance) and social support and social engagement explaining 1% of the variance each. This finding is supported by prior literature, which found that most adolescents with high self-esteem are linked to happiness, whereas low self-esteem is linked to anxiety and depression [10, 11, 12] and that a lack of social connection can result in worse mental health [13].

When presented together, the qualitative and quantitative findings shed fresh light on the potential causes of adolescent disengagement from school and the detrimental impact of efforts to boost extremely low self-esteem. This includes not feeling connected to family and friends and not realising the importance of school connectedness to mental health.

Risk factors for low self-esteem and depression or anxiety include not having a strong support system, having trouble expressing one's identity, and being bullied. Adolescents who have a strong sense of belonging at school have lower rates of depression, social anxiety, and suicidal ideation [14], as well as higher rates of self-esteem, as reported by Foster [15]. For this reason, it is essential for schools to prioritise and track students' connectivity as a means to boost students' confidence.

Students' sense of belonging and confidence in themselves can be boosted by creating a supportive and accepting atmosphere at school. Teachers' encouragement, strong social networks, and a welcoming atmosphere are all important factors in creating a sense of belonging at school [16]. At-risk kids can benefit from early intervention that focuses on education and social connectivity in order to reduce the start of mental health problems [17, 18].

5. Limitations

Several study limitations must be enumerated. First, the current study uses self-reported data, which may have been affected by subjective biases. Using alternative assessment techniques, such as obtaining feedback from teachers or peer groups, may reduce subjectivity and strengthen the results. Second, the sample size was restricted to young adults residing primarily in the United Kingdom and the United States, which may limit the generalisability of the results. Future research should consider incorporating more diverse samples to produce more representative results. Lastly, because the qualitative data was not sufficiently detailed, it was impossible to determine a causal relationship between those predictors; conducting semi-structured follow-up interviews would allow for deeper insights into adolescents' experiences with self-esteem and social connection.

6. Conclusions and Implications

Overall, the study highlights the importance of determining the function of self-esteem as a mediator in life satisfaction. Initial evidence suggests that subjective evaluations of life quality may have a greater impact on an individual's well-being when they increase self-esteem, school connectedness, and social support. Conversely, an individual's positive assessments of their life may exert a less influential impact on their self-perception if they experience feelings of incompetence or insecurity. School connectedness and social connection, which are two important dimensions of self-belonging, serve as psychological mechanisms that explain the direct correlation between life satisfaction and self-esteem.

Moreover, this study yields significant implications worth noting. Firstly, the current meta-analysis offers strong evidence concerning the reciprocal nature of the relationship between life satisfaction and self-esteem. It explores the extent to which teenagers' levels of self-esteem impact the quality of their life satisfaction. Secondly, the implication pertains to the role of self-esteem as a mediator. Considering that school connectedness and social connection reflect students' authentic perception of themselves and their sense of belonging [19], it becomes crucial to acknowledge their influence on the assessment of overall life satisfaction and overall self-esteem.

References

- [1] Putnam R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster. https://doi.org/10.1007/978-3-658-13213-2_95
- [2] Turk, F., Aykut, K. & Kiliç, E. Depression-anxiety and coping strategies of adolescents during the Covid-19 pandemic. *Turk. J. Educ.* 10, 58–75 (2021). <https://doi.org/10.19128/turje.814621>
- [3] Diener E, Diener M. Cross-cultural correlates of life satisfaction and self-esteem. *J Pers Soc Psychol.* 1995;68(4):653–663. <https://doi.org/10.1037/0022-3514.68.4.653>
- [4] Brown JD, Dutton KA, Cook KE. From the top down: self-esteem and self-evaluation. *Cogn Emot.* 2001;15(5):615–631. <https://doi.org/10.1080/02699930126063>
- [5] Hanson, W. E., Plano Clark, V. L., Petska, K. S., Creswell, J. W., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of counseling psychology*, 52(2), 224–235. <https://doi.org/10.1037/0022-0167.52.2.224>
- [6] University of London, Institute of Education, Centre for Longitudinal Studies. (2022). *Millennium Cohort Study: Age 17, Sweep 7, 2018*. [data collection]. 2nd Edition. UK Data Service. SN: 8682, DOI: <http://doi.org/10.5255/UKDA-SN-8682-2>
- [7] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- [8] Smith, E. R.; Mackie, D. M. (2007). *Social Psychology (3rd ed.)*. Hove: Psychology Press. ISBN 978-1841694085.
- [9] Afolabi, O. A. (2014). Do Self Esteem and Family Relations Predict Prosocial Behaviour and Social Adjustment of Fresh Students?. *Higher Education of Social Science*, 7 (1), 26-34. <http://dx.doi.org/10.3968/5127>
- [10] Kiwoong Park & Tse-Chuan Yang (2017) The Long-term Effects of Self-Esteem on Depression: The Roles of Alcohol and Substance Use During Young Adulthood, *The Sociological Quarterly*, 58:3, 429-446, <https://doi.org/10.1080/00380253.2017.1331718>
- [11] Nguyen, D. T., Wright, E. P., Dedding, C., Pham, T. T., & Bunders, J. (2019). Low Self-Esteem and Its Association With Anxiety, Depression, and Suicidal Ideation in Vietnamese Secondary School Students: A Cross-Sectional Study. *Frontiers in psychiatry*, 10, 698. <https://doi.org/10.3389/fpsyt.2019.00698>
- [12] Keane, L. & Loades, M.E. (2017). Low self-esteem and internalizing disorders in young people: A systematic review. *Child and Adolescent Mental Health*, 22, 4-15. <https://doi.org/10.1111/camh.12204>
- [13] Weziak-Bialowolska, D., Bialowolski, P., Lee, M. T., Chen, Y., VanderWeele, T. J., & McNeely, E. (2022). Prospective Associations Between Social Connectedness and Mental Health. Evidence From a Longitudinal Survey and Health Insurance Claims Data. *International journal of public health*, 67, 1604710.
- [14] Steiner, R. J., Sheremenko, G., Lesesne, C., Dittus, P. J., Sieving, R. E., & Ethier, K. A. (2019). Adolescent Connectedness and Adult Health Outcomes. *Pediatrics*, 144(1), e20183766. <https://doi.org/10.1542/peds.2018-3766>
- [15] Foster, C. E., Horwitz, A., Thomas, A., Opperman, K., Gipson, P., Burnside, A., Stone, D. M., & King, C. A. (2017). Connectedness to family, school, peers, and community in socially vulnerable adolescents. *Children and youth services review*, 81, 321–331. <https://doi.org/10.1016/j.chilyouth.2017.08.011>
- [16] Allen, Kelly-Ann & Slaten, Christopher & Arslan, Gökmen & Roffey, Sue & Craig, Heather & Vella-Brodrick, Dianne. (2021). *School Belonging: The Importance of Student and Teacher Relationships*. https://doi.org/10.1007/978-3-030-64537-3_21
- [17] Kim, H., Carney, J., & Hazler, R. J. (2022). Promoting school connectedness: A critical review of definitions and theoretical models for school-based interventions. *Preventing School Failure*. <https://doi.org/10.1080/1045988X.2022.2119359>
- [18] Raniti, M., Rakesh, D., Patton, G.C. et al. The role of school connectedness in the prevention of youth depression and anxiety: a systematic review with youth consultation. *BMC Public Health* 22, 2152 (2022). <https://doi.org/10.1186/s12889-022-14364-6>
- [19] Eugene D. R. (2021). Connectedness to Family, School, and Neighborhood and Adolescents' Internalizing Symptoms. *International journal of environmental research and public health*, 18(23), 12602. <https://doi.org/10.3390/ijerph182312602>

Appendix A

Code for factor analysis of SWLS

FACTOR

```

/VARIABLES GCWWOP00_R GCWWUS00_R GCWWRE00_R GCWWDE00_R
GCWWTH00_R GCWWCL00_R GCWWMN00_R
/MISSING LISTWISE
/ANALYSIS GCWWOP00_R GCWWUS00_R GCWWRE00_R GCWWDE00_R
GCWWTH00_R GCWWCL00_R GCWWMN00_R
/PRINT INITIAL CORRELATION DET KMO REPR EXTRACTION ROTATION
/FORMAT SORT BLANK (.3)
/PLOT EIGEN
/CRITERIA MINEIGEN (1) ITERATE (25)
/EXTRACTION PAF
/CRITERIA ITERATE (25) DELTA (0)
/ROTATION OBLIMIN
/METHOD=CORRELATION.
    
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Factor Matrix ^a

	Factor	
	1	2
Whether been feeling unhappy or depressed	.814	
Whether been losing confidence in self	.789	
Whether couldn't overcome difficulties	.767	
Whether been thinking of self as a worthless person	.736	
Whether been feeling reasonably happy	.689	
Whether felt constantly under strain	.664	-.310
Whether been able to concentrate	.625	
Whether lost much sleep over worry	.619	
Whether felt capable of making decisions about things	.593	.341
Whether felt that playing a useful part in things	.563	.313
Whether been able to face up to problems	.528	
Whether been able to enjoy normal day to day activities	-.316	

Extraction Method: Principal Axis Factoring.
 a. 2 factors extracted. 6 iterations required.

Pattern Matrix ^a

	Factor	
	1	2
Whether felt constantly under strain	.826	
Whether couldn't overcome difficulties	.753	
Whether been feeling unhappy or depressed	.715	
Whether been losing confidence in self	.654	
Whether lost much sleep over worry	.627	
Whether been thinking of self as a worthless person	.503	
Whether felt capable of making decisions about things		.735
Whether felt that playing a useful part in things		.683
Whether been able to face up to problems		.537
Whether been feeling reasonably happy		.515
Whether been able to concentrate		.461
Whether been able to enjoy normal day to day activities		

Extraction Method: Principal Axis Factoring.
 Rotation Method: Oblimin with Kaiser Normalization.^a
 a. Rotation converged in 12 iterations.

Code for factor analysis of Social-provision Scale

FACTOR

```

/VARIABLES SECURITY_R TRUST_R INSECURITY_R /MISSING LISTWISE

/ANALYSIS SECURITY_R TRUST_R INSECURITY_R

/PRINT UNIVARIATE INITIAL CORRELATION SIG DET KMO REPR EXTRACTION
ROTATION

/FORMAT BLANK (.10)

/PLOT ROTATION /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PAF

/CRITERIA ITERATE(25) DELTA(0) /ROTATION OBLIMIN /METHOD=CORRELATION.
  
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Factor Matrix^a

	Factor 1
I have family and friends who make me feel safe, secure and happy	.729
I have someone I trust, who I would turn to for advice if having625
There is no one I feel close to	.560

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 13 iterations required.

Code for factor analysis of Self-esteem Scale

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FACTOR
/VARIABLES GCSATI00_R GCGDQL00_R GCDOWL00_R GCVALU00_R GCGDSF00_R
/MISSING LISTWISE
/ANALYSIS GCSATI00_R GCGDQL00_R GCDOWL00_R GCVALU00_R GCGDSF00_R
/PRINT INITIAL CORRELATION DET KMO REPR EXTRACTION ROTATION
/FORMAT SORT BLANK (.3)
/PLOT EIGEN
/CRITERIA MINEIGEN (1) ITERATE (25)
/EXTRACTION PAF
/CRITERIA ITERATE (25) DELTA (0)
/ROTATION OBLIMIN
/METHOD=CORRELATION.
  
```

Factor Matrix^a

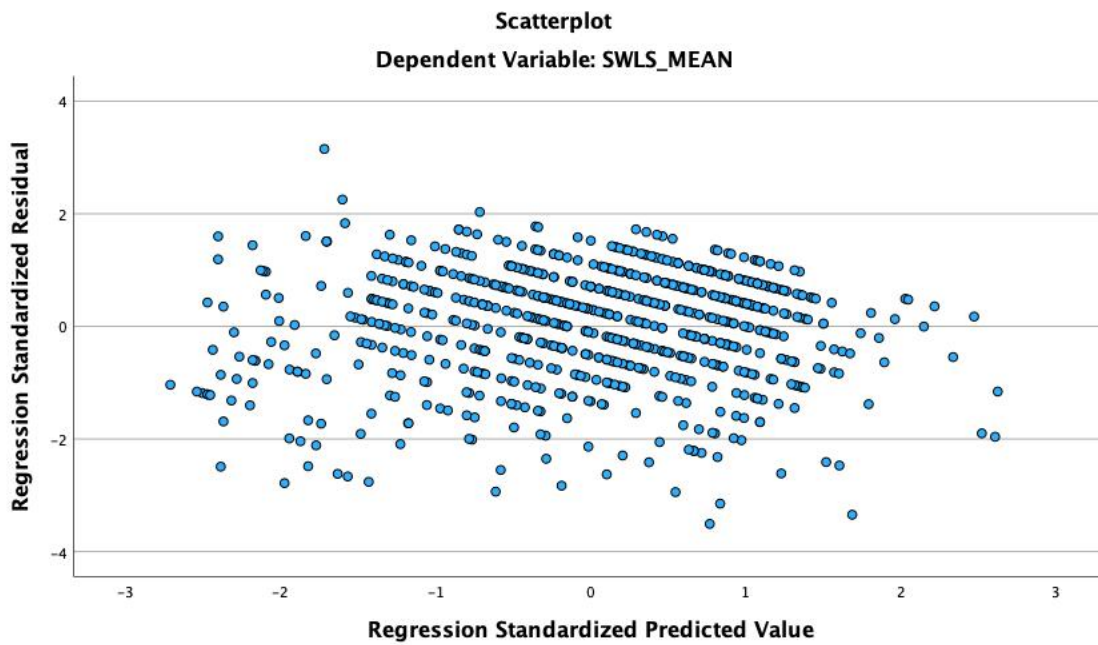
	Factor 1
On the whole, I am satisfied with myself :	.857
I feel I have a number of good qualities :	.841
I am able to do things as well as most other people	.834
I am a person of value :	.813
I feel good about myself :	.771

Extraction Method: Principal Axis Factoring.

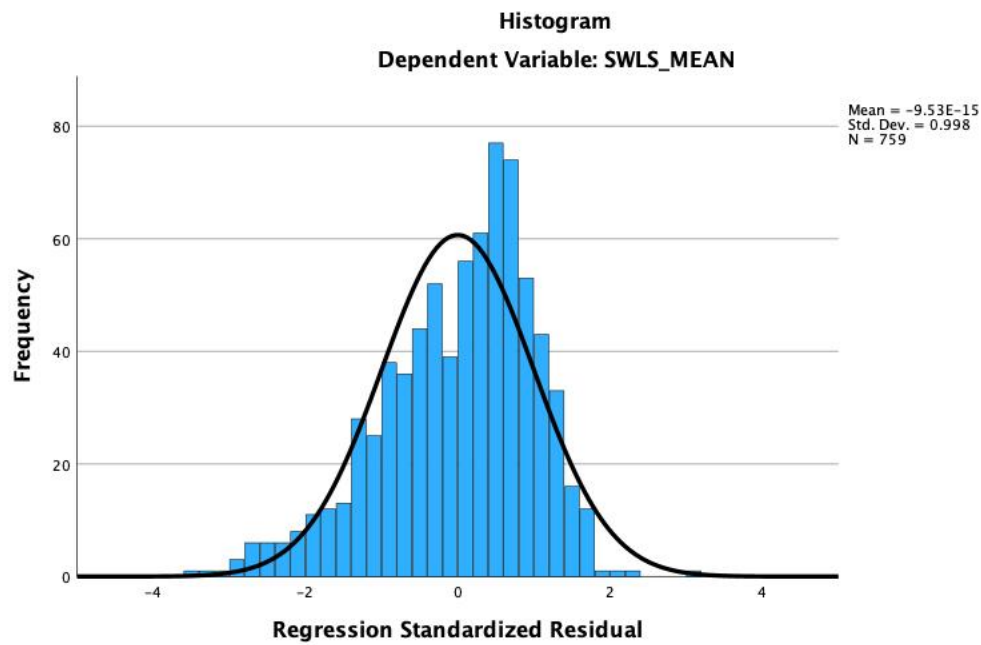
a. 1 factors extracted. 5 iterations required.

Appendix B

Standardised Residual Plot



Histogram of Standardized Residuals



REGRESSION

/DESCRIPTIVES MEAN STDDEV CORR SIG N

/MISSING LISTWISE

/STATISTICS COEFF OUTS CI (95) R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN
(.05) POUT (.10)

/NOORIGIN

/DEPENDENT SWLS_MEAN

/METHOD=ENTER FREQUENCY_SA SELF_ESTEEM SP_SCALE

W8AUDIT_SUM_A VG /SCATTERPLOT= (*ZRESID, *ZPRED) /RESIDUALS
HISTOGRAM(ZRESID) /SAVE MAHAL COOK ZRESID.

Appendix C

Multiple Regression Analysis Coefficients table

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.223	.086		14.207	<.001	1.054	1.392					
	Frequency_Social Activities	.004	.002	.075	2.522	.012	.001	.008	.089	.091	.075	.995	1.005
	Social Provision_Scale	.030	.009	.100	3.196	.001	.012	.048	.269	.116	.095	.901	1.110
	Self_Esteem_Scale	.076	.004	.535	17.168	<.001	.068	.085	.567	.530	.509	.905	1.105

a. Dependent Variable: SWLS_MEAN

Appendix D

Example of coding thematic analysis on NVivo with the theme Low Self-Esteem

The screenshot displays the NVivo software interface. On the left, a 'Name' list shows several codes: 'Low Self-esteem' (checked), 'Susceptibility to Depre...', 'School connectedness', 'Risk Behaviour', 'High Self-esteem', 'school and scoial conn...', 'Handle Adversity', 'Express authentic self', 'Boost Overall Well-Being', 'Seek Support', 'Coping strategies', and 'Accept Compliments'. The main window shows the 'Reference' view for the 'Low Self-esteem' code. It displays a summary: 'Files\coding' with '18 references coded, 23.95% coverage'. Below this, six individual references are shown with their respective coverage percentages: Reference 1-2 (3.69%), Reference 3 (1.07%), Reference 4 (1.31%), Reference 5 (1.38%), and Reference 6 (0.73%). Each reference includes a text excerpt related to self-esteem.