



Family Function and Loneliness Among Adolescents and Young Adulthood: Systematic Review

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ABSTRACT

Loneliness can occur at any age but typically increases during adolescence and early adulthood, causing risks to mental health and overall well-being. External factors, such as family functioning (including family cohesion, flexibility, and communication), can significantly influence loneliness. This systematic literature review aims to analyze 13 studies on family functioning and loneliness among adolescents and young adults. The review utilized databases including Google Scholar, Scopus, and PubMed, identifying 1518 articles, of which 13 met the inclusion criteria. The analysis identified three main themes: (a) dimensions of family function related to loneliness; (b) the impact of family function on loneliness, and (c)

the role of family function and loneliness as mediators or moderators. The synthesis of these articles reveals a consistent negative association between family functioning and loneliness across diverse cultures and age groups among adolescents and young adults. The findings underscore the potential effectiveness of enhancing family functioning as a strategy to mitigate and prevent loneliness issues in individuals.

Keywords: *Adolescence, Early adulthood, family function, loneliness, systematic review*

INTRODUCTION

Loneliness, prevalent across all ages, typically intensifies during adolescence and early adulthood (von Soest et al., 2020). It constitutes a significant risk factor for mental health and overall well-being during these developmental stages (Goodfellow et al., 2022; Lyyra et al., 2021). Adolescents experience loneliness as a distressing emotional state resulting from inadequate quantity and quality of social relationships (Russell, 2014). Defined as both social isolation, where individuals lack a supportive network of social connections, and emotional isolation, marked by deficient emotional attachments (Maes et al., 2019). Loneliness exerts diverse impacts on physical health (e.g., asthma, migraine, hypertension) and mental health (e.g., depression, anxiety) (Christiansen et al., 2021). Studies further link loneliness with social anxiety (Maes et al., 2019), suicidal ideation, diminished life satisfaction (Zhu et al., 2019), poor sleep quality, self-harm (Matthews et al., 2023), decreased self-esteem, and negative emotional states (Sundqvist & Hemberg, 2021). In young adulthood, loneliness may meet diagnostic criteria for conditions like conduct disorder, alcohol and cannabis dependence, and suicidal behavior (Matthews et al., 2019).

Factors contributing to loneliness can originate from both within and outside the individual (Perlman & Peplau, 1998). Individual factors such as age (Hysing et al., 2020), gender (Maes et al., 2019), ethnicity and migration background (Madsen et al., 2016),

education (Kung et al., 2022), mental health (Beutel et al., 2017), genetics (Matthews et al., 2023), trait anger and emotional regulation (Karababa, 2020), shame (Ang et al., 2018; Zhao et al., 2019), self-esteem (van Tonder et al., 2023), low self-control (Stavrova et al., 2021), and lack of social competence (Vanhalst et al., 2014) contribute to loneliness. External factors from the environment include social support, friendship quality, and attachment (Katmer et al., 2019), family violence, parenting styles (Antunes et al., 2022), family functioning (Pan et al., 2021), parent-child relationships (Cheng et al., 2021), social interactions, and social media use (Twenge et al., 2019) as well as media and technology use (van Tonder et al., 2023).

One influential factor affecting loneliness is family functioning (Qian et al., 2022; Zhang et al., 2023). Research indicates that improved family functioning can reduce individual experiences of loneliness (Liu & Zeng, 2019). Loneliness correlates with family characteristics during youth, including family cohesion, parental control, partner choices, and decisions regarding having children (Chiao et al., 2019). Family functioning refers to effective emotional bonds among family members, utilization of family rules, family communication, and management of external events. The Circumplex Model depicts three primary dimensions of family functioning: cohesion, flexibility, and communication (Olson et al., 2019). Family cohesion denotes emotional bonds among family members, evidenced by emotional ties, boundaries, time coalitions, space, friends, decision-making, interests, and recreation (Olson et al., 2019). Family flexibility encompasses changes in leadership, role relationships, and relationship rules such as disciplinary control, negotiation style, role relationships, and relationship rules (Olson et al., 2019). Lastly, family communication facilitates couples and families in adjusting their cohesion and flexibility levels to better handle developmental or situational demands (Olson et al., 2019).

Previous studies demonstrate a relationship between family functioning and loneliness (Costa et al., 2019). Family functioning also plays a role in its association with loneliness and

declining mental health (Gong et al., 2024). To the best of our knowledge, there has been no systematic review investigating family functioning (cohesion, flexibility, and communication) and loneliness experienced by adolescents and young adults. Therefore, researchers are interested in conducting a systematic review on this topic. This study aims to conduct a systematic review of family functioning and loneliness in adolescents and young adults.

MATERIALS AND METHODS

Eligibility Criteria

This systematic review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (PRISMA) (Page et al., 2021). The study selected relevant articles from previous research focusing on family functioning and loneliness among adolescents and early adults. Screening criteria applied to databases narrowed the search to include only English language articles employing quantitative research methodologies. Articles were excluded if they did not meet specific criteria, such as not addressing family functioning and loneliness or involving participants outside the adolescent and early adult age range. Additionally, books, conference proceedings, systematic reviews, and meta-analyses were excluded to maintain focus on primary research. The review aims to synthesize findings on the relationships between family functioning and loneliness in adolescents and early adults.

Search Strategy

Articles were identified using databases including Publish and Perish, Google Scholar, Scopus, and PubMed. The search period spanned from 2014 to 2024 to ensure relevance and contemporary data. Keywords used in the search strategy included ("family function" or "family cohesion" or "family flexibility" or "family communication") and

(loneliness or "social isolation" or "emotional isolation") and (adolescent or adolescence or youth) and ("early adult*" or "young adult").

Selection Process

The authors conducted a systematic review, assessing the suitability of identified studies based on predefined criteria. Articles were translated into Indonesian to facilitate the review process. Titles and abstracts were screened for relevance using the search strategy outlined above. Duplicate and irrelevant articles, as well as those not meeting selection criteria, were excluded. Full-text articles selected from the initial screening were evaluated based on title, abstract, and publication date for inclusion in the systematic review

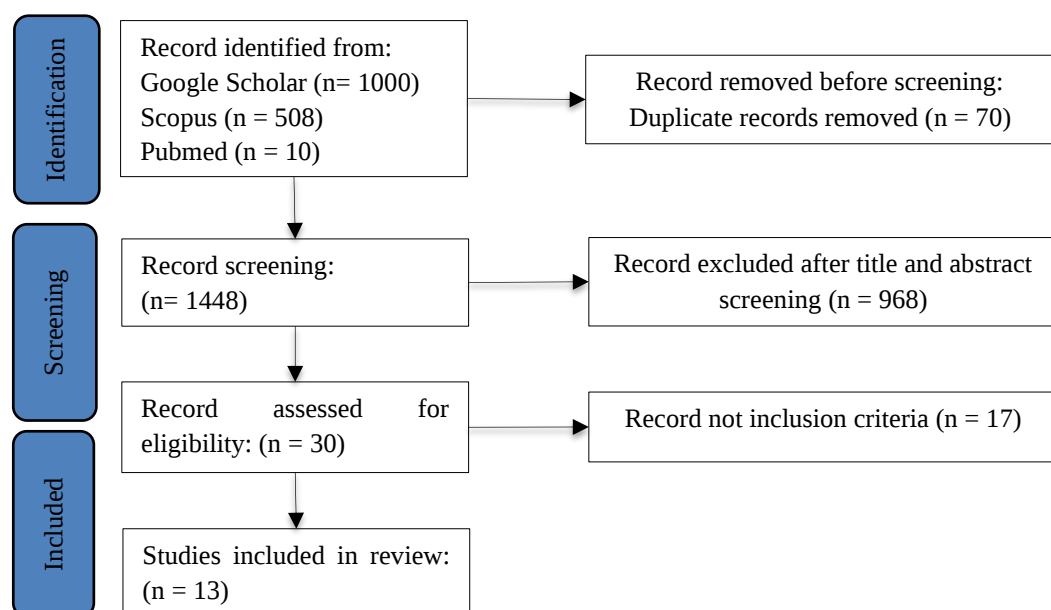


Figure 1.

PRISMA flow diagram for the systematic review

STUDY RESULTS

Study Objectives

Based on the articles found, they can be divided into 3 categories: (1) dimensions of family function and loneliness of adolescents and early adults; (2) the effect of family function on loneliness of adolescents and early adults; and (3) family function or loneliness as mediation or moderation.

Dimensions of family functioning and loneliness

Research on family functioning and loneliness in adolescence and early adulthood is quite diverse. The family function is divided into three main dimensions, namely cohesion, flexibility, and communication. (Olson et al., 2019). Four studies discuss the dimensions of family functioning, namely family cohesion and loneliness (Chiao et al., 2019; Dołęga, 2015) and family communication and loneliness (Favotto et al., 2019; Gong et al., 2024). However, from the research articles found, no research has addressed family flexibility and loneliness.

The impact of family function on loneliness

Six studies aim to analyze the impact of family function on loneliness, with family function as the independent variable and loneliness as the dependent. (Fujimori et al., 2017; Ghosjavand, 2023; Padial-Ruz et al., 2020; Pan et al., 2021; Qian et al., 2022; Rahayu et al., 2021; Yun et al., 2021). One study found a reciprocal relationship between family functioning and loneliness (Padial-Ruz et al., 2020). Two of these studies did not aim to examine the relationship of family functioning to loneliness primarily but investigated broadly and involved other variables besides family functioning. The research identified a relationship between family functioning and loneliness, with expectations playing a role as a mediator and

emotional regulation as a moderator (Yun et al., 2021). Another study analyzed the relationship of family function to loneliness and the role of core self-evaluation and problematic mobile phone use as mediators (Qian et al., 2022).

Family function or loneliness as mediation or moderation

Five studies show that family functioning or loneliness can act as mediators and moderators (Favotto et al., 2019; Gong et al., 2024; Li et al., 2023; Pan et al., 2021; Skeens et al., 2023). Two studies on family communication moderated the relationship between computer mediated communication use and loneliness (Favotto et al., 2019) as well as being a mediator in the relationship of *problematic Internet use* (PIU) with loneliness in adolescents (Gong et al., 2024). Another study analyzed the function of family as a mediator in the relationship between the impact of COVID-19 and the loneliness experienced by children. (Skeens et al., 2023). Two other studies found family functioning to be correlated with loneliness but also examined loneliness as a mediator of the relationship between family functioning and another variable, cell phone addiction (Li et al., 2023) and loneliness as a mediator of the relationship between family functioning and mental health (Pan et al., 2021).

Study Characteristics

The authors found 1518 articles identified from Google Scholar (n = 1000), Scopus (n = 508), Pubmed (n = 10). 70 duplicates were eliminated from the review. After selection, 13 articles related to the research objectives of family functioning and loneliness in adolescents and early adults were identified. Based on the characteristics of the study, the size of the research subjects varied and was in the age range of adolescence to early adulthood. A total of 8 research articles discuss family functioning and loneliness in adolescents (Dołęga, 2015; Favotto et al., 2019; Gong et al., 2024; Padial-Ruz et al., 2020; Pan et al., 2021; Rahayu et al.,

2021; Skeens et al., 2023; Yun et al., 2021). Then 5 research articles discuss family function and loneliness in early adulthood (Chiao et al., 2019; Fujimori et al., 2017; Ghosjavand, 2023; Li et al., 2023; Qian et al., 2022). The studies were conducted in various countries, such as Indonesia, China, the United States, Japan, Spain, Canada, and Iran. Table 1 presents the study characteristics of each article reviewed, including location, subject characteristics, research measurement tools, and the research design used by each article.

Instruments for Measuring Main Constructs

Family Function Measurement

Family function employs various measures to assess family cohesion, flexibility, and communication. The evaluation of family function utilizes 10 measures from 12 articles. The most commonly used instrument FACES III: Family Adaptability and Cohesion Evaluation Scales (Fujimori et al., 2017; Yun et al., 2021) ($n = 2$). The FACES III Family Adaptability and Cohesion Evaluation Scales by Olson (Olson, 2000) have been adapted into several versions. These include the Chinese version (Yun et al., 2021), comprising 30 items divided into adaptability and cohesion dimensions, and the Japanese version (Fujimori et al., 2017), comprising 20 items divided into cohesion and adaptability factors. Additionally, the FACES II-CV: Family Adaptability and Cohesion Scales (Olson et al., 1982) were utilized (Li et al., 2023; Pan et al., 2021) ($n = 2$). The FACES II-CV, adapted into a Chinese version (Pan et al., 2021), comprises 60 items measuring cohesion and adaptability dimensions, and another Chinese version (Li et al., 2023) with 30 items measuring the same dimensions. Family communication was assessed using The Family Communication Scale (FCS-10) (Gong et al., 2024) ($n = 1$), which measures communication levels in adolescents based on Olson's theory. The quality of family communication was measured using the Family Dynamics Measure II, consisting of 4 items (Favotto et al., 2019) ($n = 1$). Another study utilized the experimental

instrument Questionnaire for the Survey of Family Cohesion (KRS), based on Olson's Circumplex Model of Marital and Family Systems, comprising 62 items (Dołęga, 2015) (n = 1). One of the articles utilized the APGAR (Adaptation, Partnership, Growth, Affection, and Resolve) instrument (Padial-Ruz et al., 2020) (n = 1), which is the original version by Smilkstein et al. (Smilkstein et al., 1982) adapted into Spanish. Another instrument discussed is the PROMIS® short form Family Relationship instrument, comprising four items (Skeens et al., 2023) (n = 1), designed under the patient-reported outcomes measurement information system to assess family relationships. The Family Function Scale Revised, measuring family function in students with a single dimension and six items (Qian et al., 2022) (n = 1). The Family Function Test (FAD), consisting of 53 questions to assess family function based on the McMaster model (Ghojavand, 2023)(n = 1). Rahayu et al. (2021) utilized the Family Functioning Scale to measure family function (n = 1). Family cohesion was measured using a scale comprising four statements: "In our family, we have a discussion when making decisions; Every family member participates in family-related activities; I can always receive comfort from my family when I feel frustrated; I can rely on my family when I need help or advice" (Chiao et al., 2019) (n = 1).

Loneliness Measurement

Loneliness encompasses various components, such as emotional and social isolation. Measurement of loneliness utilized 7 instruments across 10 articles. The most frequently employed instrument was the UCLA Loneliness Scale (Fujimori et al., 2017; Li et al., 2023; Padial-Ruz et al., 2020; Pan et al., 2021; Yun et al., 2021) (n = 4), originally developed by Russell et al. (Russell et al., 1982). The UCLA Loneliness Scale comprises 20 items and exists in several versions, including the Japanese version (Fujimori et al., 2017), Spanish version (Padial-Ruz et al., 2020), and Chinese versions (Li et al., 2023; Pan et al., 2021; Yun et al.,

2021). One study applied the UCLA Loneliness Scale to measure loneliness levels in students, assessing dimensions such as loneliness, emotional isolation, and subjective evaluation of social networks (Padial-Ruz et al., 2020). Additionally, the NIH Toolbox Loneliness was utilized, consisting of seven items (Skeens et al., 2023) (n = 1). Another instrument used to measure loneliness was the SBS Global Scale (SBS), which examines global factors including social, emotional, and existential dimensions (Dołęga, 2015) (n = 1). The revised Loneliness Questionnaire, comprising 21 items across four dimensions: "pure loneliness, perception of one's own social ability, evaluation of the current peer relationship, perception of the unsatisfied degree of important relationships" (Qian et al., 2022) (n = 1). The instrument to measure loneliness used the Chalabi and Kafi Social Isolation Questionnaire which consists of 19 questions with four components social loneliness, helplessness, social despair, reduced social tolerance (Ghojavand, 2023) (n = 1). Loneliness was measured using the 6-item de Jong-Gierveld short scale which consists of two dimensions of emotional and social loneliness (Chiao et al., 2019) (n = 1). The Loneliness Scale (T-ILS) to measure feelings of loneliness in adolescents where the scale was developed based on the dimensions of loneliness by Russell (Gong et al., 2024) (n = 1). Another loneliness instrument used is the Loneliness Scale (Rahayu et al., 2021) (n = 1). The instrument used to measure loneliness is part of the Multidimensional Scale of Perceived Social Support which has been used in previous studies to assess feelings of loneliness in Canada (Favotto et al., 2019) (n = 1).

Table 1

Characteristic Study

	Study	Location	Characteristic			Measurement		Research Design
			Subject	Sample size	Age	Family function	Loneliness	
1	(Yun et al., 2021)	China	Secondary vocational school	5138 secondary vocational school students	-	FACES III: Family Adaptability and Cohesion Evaluation Scales	UCLA Loneliness Scale	Quantitative <i>Cross-sectional analysis</i>
2	(Skeens et al., 2023)	Columbus, Ohio, United States	Children	461 parents/child dyads (Child: 236 males & 223 females) (Parents: 23 males & 435 females)	8 - 17 years (M age = 11.83) (SD= 2.72)	PROMIS® short form Family Relationship (four items)	NIH Toolbox Loneliness (seven items)	Quantitative <i>Cross-sectional analysis</i>

3	(Padial-Ruz et al., 2020)	Andalusia, Spanish Cities	Adolescents	2388 adolescents (1036 males & 1352 females)	11 – 17 years (M age = 13.85; SD = 1.26)	APGAR <i>(Adaptation, Partnership, Growth, Affection, and Resolve)</i>	UCLA Loneliness Scale	Quantitative <i>Cross-sectional analysis</i>
4	(Pan et al., 2021)	China	Secondary vocational school students	5783 students (3513 males & 2270 females)	-	FACES II-CV: Family Adaptability and Cohesion Scales	UCLA Loneliness Scale	Quantitative <i>Cross-sectional analysis</i>
5	(Fujimori et al., 2017)	Okayama, Japan	University students	284 siswa (130 males & 154 females)	18 - 29 years (SD = 1.2)	FACES III: Family Adaptability and Cohesion Evaluation Scales	UCLA Loneliness Scale	Quantitative <i>Cross-sectional analysis</i>
6	(Qian et al., 2022)	Zhejiang and	University students	8524 students (3577 boys & 4947 girls)	18 - 20 years (M age = 19.06)	The family function scale revised by (Cheng and Zou, 2011) (6 items)	Loneliness was tested with the loneliness questionnaire revised	Quantitative

		Anhui province			SD = 1.03)		by Zou (2003) (21 items)	<i>Cross- sectional analysis</i>
7	(Li et al., 2023)	Guangzh ou, China	University students	1580 students (790 males & 790 females)	18-27 years M age = 20.38 SD = 1.98	FACES II-CV: Family Adaptability and Cohesion Scales	UCLA Loneliness Scale	Quantitative <i>Cross- sectional analysis</i>
8	(Ghojava nd, 2023)	Isfahan City, Iran	Young girls	140 young girls	18 - 30 years	Family Assessment Device (FAD)	The Chalabi and Kafi Social Isolation Questionnaire (2003)	Quantitative <i>Cross- sectional analysis</i>
9	(Chiao et al., 2019)	Northern Taiwan	Young adults	2748 young adults (1464 males & 1284 females)	27 - 32 years (M age = 28.32) (SD =1.14)	Family Cohesion Scale	de Jong-Gierveld Short Scale	Quantitative <i>Cross- sectional analysis</i>

10	(Gong et al., 2024)	Tiongkok	Adolescents	2483 adolescents	12 – 17 years	The Family Communication Scale (FCS-10)	The Loneliness Scale (T-ILS)	Quantitative <i>Cross-sectional analysis</i>
11	(Favotto et al., 2019)	Kanada	Adolescents	30.117 adolescents (14.784 males & 15.178 females)	11 – 15 years	Family Dynamics Measure II	Multidimensional Scale of Perceived Social Support	Quantitative <i>Cross-sectional analysis</i>
12	(Dołęga, 2015)	Upper Silesia, Europe	Adolescents	257 adolescents (124 males & 133 females)	12 – 17 years (M age = 15.4) (SD = 1.6)	The Questionnaire for The Survey of Family Cohesion (KRS)	The Loneliness Scale (SBS)	Quantitative <i>Cross-sectional analysis</i>
13	(Rahayu et al., 2021)	Samarina, Indonesia	Adolescents with working mothers	106 adolescents (28 males & 78 females)	15 - 20 years (M age = 19.1)	Family Functioning Scale	Loneliness Scale	Quantitative

					(SD = 1.3)			Cross-sectional analysis
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Table 2*Summary*

	Study	Design Analysis	Predictor	Outcome	Main Finding
1	(Yun et al., 2021)	Pearson's correlation, SPSS PROCESS Macro for validating the moderated mediation model	- Family function - Hope (mediator) - Emotion regulation (moderator)	- Loneliness	- There is a significant positive relationship between family functioning and loneliness ($r = 0.176, p < 0.001$); greater dissatisfaction with family functioning can increase the risk of loneliness. - Loneliness showed a significant negative correlation with hope ($r = -0.249, p < 0.001$), whereas hope exhibited a significant negative correlation with family function ($r = -0.043, p < 0.01$). - Emotion regulation plays a moderating role in the relationship between family functioning (as an influencing factor) and loneliness levels, with specific

					dimensions of emotion regulation contributing differently to the experience of loneliness.
2	(Skeens et al., 2023)	<i>Multivariate models, Pearson correlation, moderated mediation model using ordinary least squares regression in four separate models</i>	- Family function (moderator & mediator)	- Children's quality of life - Loneliness	- Family functioning acts as a mediator in the relationship between the impact of COVID-19 on children's loneliness ($R = -0.49, p < 0.0001$) - There is a significant relationship between COVID-19 exposure and children's loneliness ($p < 0.0001$) - Peer communication does not have a significant effect on influencing the relationship between the impact of COVID-19 on children's quality of life or loneliness.
3	(Padial-Ruz et al., 2020)	<i>Structural equation analysis</i>	- Family function - Physical Self-concept (AF) (mediator)	- Emotional isolation - Family function	- Loneliness (emotional isolation) was measured through dimensions of emotional isolation and subjective evaluation of social networks, both of which can be influenced by the quality of family functioning.

				- Physical self-concept	- Loneliness serves as the dependent variable in its relationship with family functioning, wherein loneliness can be influenced by the level of family functioning ($r = -0.224$, $p < 0.001$). - Family functioning exhibits a positive and direct relationship with physical self-concept ($r = 0.207$; $p < 0.001$), as well as a negative and indirect relationship with emotional isolation ($r = -0.224$; $p < 0.001$).
4	(Pan et al., 2021)	<i>Pearson's correlation, SPSS PROCESS Macro for validating the moderated mediation model</i>	- Family function - Hope (moderator)	- Loneliness - Mental health	- The correlation analysis revealed that lower levels of family functioning were positively associated with loneliness ($r = 0.162$, $p < 0.01$) and mental health issues ($r = 0.219$, $p < 0.01$), and negatively correlated with hope ($r = -0.032$, $p < 0.05$). These results indicate that loneliness was positively correlated with mental health problems ($r = 0.578$, $p < 0.01$). Additionally, hope showed a negative correlation with both loneliness ($r = -0.240$, $p < 0.01$) and mental health issues ($r = -0.137$, $p < 0.01$).
5	(Fujimori et al., 2017)	<i>Pearson's correlation,</i>	- Attachment style	- Loneliness	- The relationship between family functioning and loneliness shows a strong negative correlation ($r = -0.36$, $p < 0.01$).

		<i>Multiple regression analyses</i>	- Family function - Gender		- Secure attachment style demonstrates a strong negative correlation with loneliness ($r = -0.56$, $p < 0.01$), whereas avoidant attachment style and ambivalent attachment style demonstrate significant positive correlations with loneliness ($r = 0.45$, $p < 0.01$ and $r = 0.26$, $p < 0.01$). - Secure attachment style and family cohesion have a significant negative influence on loneliness ($r = 0.11$, $p < 0.05$). - Family adaptability does not exert a significant influence on loneliness ($p > 0.05$), whereas family cohesion exerts a strong negative influence on loneliness ($r = -0.36$, $p < 0.01$).
6	Qian et al., 2022	<i>Path analysis</i>	- Family function - Core self-evaluation (mediator)	- Loneliness	- The first finding of this study is that family functioning negatively predicts loneliness directly ($\beta = -0.21$, $p < 0.001$). - Second, family functioning positively predicts core self-evaluation ($\beta = 0.43$, $p < 0.001$) and negatively predicts loneliness ($\beta = -0.21$, $p < 0.001$). - Third, family functioning negatively predicts problematic mobile phone use ($\beta = -0.01$, $p < 0.001$) and positively predicts loneliness ($\beta = 0.05$, $p < 0.001$).

			- Problematic mobile phone use (mediator)		- Fourth, family functioning positively predicts core self-evaluation, negatively predicts problematic mobile phone use ($\beta = -0.34$, $p < 0.001$), and significantly predicts loneliness with a positive impact.
7	(Li et al., 2023)	<i>Independent t-test, one-way ANOVA, Pearson's correlation analysis, SPSS PROCESS Macro for validating moderated mediation model</i>	- Family function - Loneliness (mediator) - Capacity to be alone (moderator)	- Loneliness - Mobile phone addiction	- The research findings indicate that family functioning has a significant negative correlation with loneliness ($r = -0.087$, $p < 0.01$), indicating that lower family functioning predicts higher levels of loneliness. Additionally, family functioning is also a significant negative predictor of mobile phone addiction ($r = -0.220$, $p < 0.01$). - Capacity to be alone has a negative relationship with loneliness ($r = -0.087$, $p < 0.01$), and loneliness shows a positive correlation with mobile phone addiction ($r = 0.190$, $p < 0.01$).
8	(Ghojavand, 2023)	<i>Pearson's correlation coefficient and</i>	- Family function - Religiosity	- Internet dependence - Virtual networks	- The dimensions contributing to social isolation include social loneliness, powerlessness, social despair, and reduced social tolerance.

		<i>multivariate regression</i>		- Social isolation	- The results reveal a positive relationship between family functioning and social isolation ($r = 0.792$, $p = 0.002$). Similarly, religiosity shows a relationship with social isolation ($r = 0.877$, $p = 0.010$). This suggests that both family functioning and religiosity influence the level of social isolation experienced by individuals.
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9	(Chiao et al., 2019)	<i>Latent class cluster analysis (LCA), Multinomial regression techniques.</i>	- Family cohesion - Parental guan (parental control)	- Loneliness	- The analysis results indicate that increased family cohesion during adolescence may decrease loneliness, both emotionally and socially. Based on the Relative Risk Ratio (RRR) of 0.51 with a 95% Confidence Interval (CI) of 0.25–1.03, stronger family cohesion during adolescence may act as a protective factor against loneliness in early adulthood. - The relationship between family functioning and loneliness differs by gender. For males, strong family cohesion during adolescence is associated with a reduced likelihood of loneliness, whereas for females, this relationship is not significant. This suggests gender differences in how family functioning impacts loneliness.
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10	(Gong et al., 2024)	<i>Structural equation modelling</i>	- Problematic Internet Use - Family communication (mediator) - Social support	- Loneliness	- Problematic Internet Use (PIU) negatively influences adolescents' perception of social support ($\beta = -0.109$, $P < 0.001$), positively influences family communication ($\beta = 0.501$, $P < 0.001$), and then negatively affects adolescent loneliness ($\beta = -0.122$, $P < 0.001$). - Good family communication provides emotional support and understanding, which can directly or indirectly reduce levels of adolescent loneliness.
11	(Favotto et al., 2019)	<i>Rao-Scott Chi-square Test, Rao-Scott Chi-square Test, Multilevel Poisson Regression</i>	- Computer-mediated communication - Family communication (moderator)	- Loneliness	- The prevalence of loneliness among adolescent girls (29.9%) is higher than among boys (19.0%). - Decreased levels of family communication quality were linked to higher levels of reported loneliness ($p < .0001$) - Family communication quality can modify the relationship between computer-mediated communication use and loneliness. The poor quality of family communication is a strong predictor of loneliness in adolescence.
12	(Dołęga, 2015)	<i>Kolmogorov-Smirnov, Anova</i>	- Family function	- Loneliness	- Research results indicate that adolescents from families disrupted due to economic migration experience lower family coherence and higher levels of loneliness, particularly existential loneliness.

			- TDF / <i>temporarily disconnected families</i>		- Older male children from disrupted families tend to be at a higher risk of experiencing significant loneliness.
1 3	(Rahayu et al., 2021)	<i>Descriptive and inferential statistic</i>	- Attachment - Family function	- Loneliness	- The influence of attachment style and family function on loneliness ($R = 0.438$ with a p value of 0.000. - The family function on loneliness shows that the t-score is less than the t-table value, indicating that there is no significant effect with a beta value of 0.048, t-score of 0.629, and p-value of 0.531 ($p > 0.05$).

The purpose of this systematic review is to examine family function and adolescent and early adult loneliness. 13 studies discuss family function and loneliness. The focus of this research is on quantitative research with *cross-sectional analysis*. In general, the research shows a relationship between family function and adolescent and early adult loneliness. The results of the review will be discussed in the following sections, namely the dimensions of family function and loneliness and the relationship between family function and loneliness.

Dimensions of Family Functioning with Loneliness

Two of the three dimensions of family functioning found in the review were cohesion and communication (Olson et al., 2019). Three studies address the dimensions of family functioning, namely family cohesion and loneliness (Chiao et al., 2019) and family communication and loneliness (Favotto et al., 2019; Gong et al., 2024). The first dimension is family cohesion, where there is one study that discusses family cohesion and loneliness in early adults in Northern Taiwan (Chiao et al., 2019). The results show that increasing family cohesion in adolescence has the opportunity to reduce loneliness both emotionally and socially in adulthood, and individuals who have strong family cohesion in early adolescence will experience less serious emotional loneliness or severe emotional or social loneliness (Chiao et al., 2019). The second dimension is communication, where two findings discuss family communication and loneliness in adolescents (Favotto et al., 2019; Gong et al., 2024). The results show that family communication negatively affects loneliness in adolescents, meaning that poor communication within the family can be a predictor of increased loneliness experienced by adolescents (Favotto et al., 2019; Gong et al., 2024).

Influence of Family Function and Loneliness

Six studies discuss the relationship between family function and loneliness (Fujimori et al., 2017; Ghojavand, 2023; Padial-Ruz et al., 2020; Pan et al., 2021; Qian et al., 2022; Rahayu et al., 2021; Yun et al., 2021). However, there are differences in the research results described in the study. The first result is that three studies show a negative influence between family function and loneliness, which means that the better the family functions, the lower the level of loneliness experienced by the individual (Fujimori et al., 2017; Padial-Ruz et al., 2020; Qian et al., 2022). The results of research conducted on adolescents show that families that function well tend to have a positive impact on loneliness, and vice versa, great loneliness is dominated by students who come from families that do not function well (Padial-Ruz et al., 2020). Well-functioning families tend to have low feelings of loneliness, so being in a good family environment can help reduce the level of loneliness experienced (Padial-Ruz et al., 2020; Qian et al., 2022).

The second result is that four studies show the opposite result, where family function has a positive influence on loneliness (Ghojavand, 2023; Pan et al., 2021; Rahayu et al., 2021; Yun et al., 2021). One of the studies that showed a positive effect between family function and loneliness was because adolescents with working mothers tended to be accustomed to their mother's activities, so family functioning did not affect the loneliness experienced by adolescents who had working mothers (Rahayu et al., 2021). Family function has a positive effect on loneliness in the sense that high family function is not enough to reduce feelings of loneliness (Pan et al., 2021; Yun et al., 2021). Therefore, other factors affect the relationship between family function and loneliness. Other factors in question can be moderation and mediation. The study found a moderating role that affects the relationship

between family function and loneliness, namely the capacity to be alone. The capacity to be alone is a psychological, emotional, and behavioral factor that can effectively reduce the adverse effects of low family function on loneliness and mobile phone addiction in college students (Li et al., 2023). Findings from vocational high school students show a relationship between family function and loneliness that can be improved by hope. A high level of hope can weaken the effect of family function on loneliness (Pan et al., 2021).

Family Function or Loneliness as Mediation or Moderation

Family functioning and loneliness are often associated with problematic use of social media communication, problematic internet use, and mobile phone addiction (Favotto et al., 2019; Gong et al., 2024; Li et al., 2023). However, family function or loneliness plays a mediating or moderating role related to these problems. Loneliness plays a mediating role in the relationship between family function and cell phone addiction in college students. When the family environment functions well, it reduces loneliness, which can also reduce the occurrence of mobile phone addiction. (Li et al., 2023). Family communication can mediate the relationship between problematic internet use and loneliness so that its role can help reduce the impact of problematic internet use on adolescent loneliness (Gong et al., 2024). The quality of family communication moderates the relationship between the use of social media communication and feelings of loneliness. That is, high-quality family communication can protect adolescents from feelings of loneliness caused by high use of social media communication (Favotto et al., 2019). Likewise, the relationship between family function and mental health can indirectly affect the level of mental health through feelings of loneliness (Yun et al., 2021). This illustrates that good family function can help students

actively communicate with their families to support and encourage each other so that feelings of loneliness are reduced and their mental health becomes better (Yun et al., 2021).

DISCUSSION

Based on a systematic review of family function and loneliness in adolescence and early adulthood, it was found that family functioning can influence loneliness. Several studies have indicated a significant relationship between family function and adolescent loneliness (Gong et al., 2024; Padial-Ruz et al., 2020; Pan et al., 2021; Rahayu et al., 2021; Skeens et al., 2023; Yun et al., 2021) as well as in early adulthood (Chiao et al., 2019; Fujimori et al., 2017; Ghjavand, 2023; Li et al., 2023; Qian et al., 2022). This suggests that family functioning is a critical factor influencing loneliness across both adolescence and early adulthood. Poor family functioning may lead to interpersonal difficulties, communication challenges, and emotional issues among family members (Li et al., 2023).

Family functioning consists of several dimensions, namely cohesion, flexibility, and communication. Several studies have shown that these family dimensions are associated with loneliness experienced by adolescents and young adults. Increased family cohesion during adolescence can reduce loneliness both emotionally and socially. This suggests that adolescents with strong family relationships tend to experience less loneliness as young adults (Chiao et al., 2019). Additionally, poorer quality of family communication correlates with higher levels of loneliness among individuals (Favotto et al., 2019). This underscores the critical role of family in fostering a stable and emotionally supportive environment for individuals, thereby enhancing their sense of connection and reducing loneliness (Skeens et al., 2023). A harmonious family environment with low tension can create a safer atmosphere

and support individuals in their daily lives. Conversely, conflicts and tensions within the family can increase feelings of loneliness (Skeens et al., 2023).

Family communication and stable support for adolescents are considered important factors in overcoming the challenges they face. Families that function well tend to have lower levels of loneliness among adolescents (Padial-Ruz et al., 2020). This pattern also holds true in early adulthood, where a supportive family environment can help reduce feelings of loneliness (Qian et al., 2022). However, the positive relationship between family functioning and loneliness may be reversed in cases of low family functioning, characterized by a lack of emotional intimacy and ineffective communication, which can contribute to feelings of loneliness in individuals (Pan et al., 2021). Conversely, a positive family environment and strong family cohesion can mitigate feelings of loneliness (Pan et al., 2021).

The role of family function on loneliness can also increase or weaken due to factors such as capacity to be alone (Li et al., 2023), emotion regulation (Yun et al., 2021) and hope (Pan et al., 2021). The results indicate that not only is family functioning important, but also how individuals manage feelings of loneliness and their ability to cope with it (capacity to be alone), which also plays a role in influencing the level of cell phone addiction among college students (Li et al., 2023). Furthermore, an individual's ability to regulate emotions can affect the strength of the relationship between family functioning and perceived loneliness; individuals who excel at regulating their emotions are better able to mitigate the negative impact of low family functioning on feelings of loneliness (Yun et al., 2021). Hope can also serve as a factor that reduces feelings of loneliness in individuals, even in the context of low family functioning (Pan et al., 2021).

Family functioning or loneliness levels can serve as mediators or moderators in the relationship between variables or other factors (Favotto et al., 2019; Gong et al., 2024; Li et al., 2023). Family communication mediates the negative impact of problematic internet use on adolescent loneliness levels by improving family interactions (Gong et al., 2024). Furthermore, adolescents with high-quality communication skills are better equipped to combat feelings of loneliness stemming from social media use (Favotto et al., 2019). Loneliness mediates the link between poor family functioning and cell phone addiction among college students. Specifically, students experiencing poor family functioning tend to feel more lonely, which correlates with increased cell phone addiction (Li et al., 2023). Effective family functioning can mitigate problematic cell phone usage and enhance core self-evaluation, thereby reducing loneliness levels among college students (Qian et al., 2022). This underscores the critical role of a supportive family environment in mitigating the negative impacts of communication technologies on adolescents' emotional well-being (Favotto et al., 2019).

Several factors influence adolescents' levels of loneliness, including the interplay of problematic internet use, social support, and family communication (Gong et al., 2024). Additionally, religiosity and family functioning contribute significantly to feelings of loneliness or social isolation (Ghojavand, 2023). Research also indicates that attachment style, particularly secure attachment, can impact loneliness (Fujimori et al., 2017). The influence of family functioning on loneliness may vary based on gender (Chiao et al., 2019; Favotto et al., 2019). Strong family cohesion is associated with reduced loneliness in men, but this relationship is not as pronounced in women (Chiao et al., 2019; Fujimori et al., 2017). Other factors contributing to differences in loneliness levels between genders include social

factors, tendencies in forming and maintaining interpersonal relationships, coping strategies for stress, and approaches to personal issues (Favotto et al., 2019).

CONCLUSION

The present review included studies that investigated family function and loneliness during adolescence and early adulthood. The reviewed studies discuss three main points: the dimensions of family function and loneliness in adolescents and young adults; the influence of family function on loneliness during adolescence and early adulthood; and family function or loneliness as moderator or mediator variables. Research explains that good family function plays a role in reducing loneliness experienced by individuals during different stages (adolescence and early adulthood). Good family function, including family cohesion or attachment and open family communication, can assist individuals in coping with feelings of loneliness. Therefore, efforts to enhance family functioning can be an effective strategy in addressing and preventing issues of loneliness in individuals.

REFERENCES

- Ang, C. S., Chan, N. N., & Lee, C. S. (2018). Shyness, loneliness avoidance, and internet addiction: What are the relationships? *Journal of Psychology: Interdisciplinary and Applied*, 152(1), 25–35. <https://doi.org/10.1080/00223980.2017.1399854>
- Antunes, J. T., Machado, Í. E., & Malta, D. C. (2022). Loneliness and associated factors among Brazilian adolescents: Results of national adolescent school-based health survey 2015. *Jornal de Pediatria*, 98(1), 92–98. <https://doi.org/10.1016/j.jped.2021.04.004>
- Beutel, M. E., Klein, E. M., Brähler, E., Reiner, I., Jünger, C., Michal, M., Wiltink, J., Wild, P. S., Münzel, T., Lackner, K. J., & Tibubos, A. N. (2017). Loneliness in the general population: Prevalence, determinants and relations to mental health. *BMC Psychiatry*, 17(97), 1–7. <https://doi.org/10.1186/s12888-017-1262-x>
- Cheng, Y. C., Yang, T. A., & Lee, J. C. (2021). The relationship between smartphone addiction, parent-child relationship, loneliness and self-efficacy among senior high school students in Taiwan. *Sustainability (Switzerland)*, 13(16), 1–16. <https://doi.org/10.3390/su13169475>
- Chiao, C., Chen, Y. H., & Yi, C. C. (2019). Loneliness in young adulthood: Its intersecting forms and its association with psychological well-being and family characteristics in Northern Taiwan. *PLoS ONE*, 14(5), 1–13. <https://doi.org/10.1371/journal.pone.0217777>
- Christiansen, J., Qualter, P., Friis, K., Pedersen, S. S., Lund, R., Andersen, C. M., Bekker-Jeppesen, M., & Lasgaard, M. (2021). Associations of loneliness and social isolation with physical and mental health among adolescents and young adults. *Perspectives in Public Health*, 141(4), 226–236. <https://doi.org/10.1177/17579139211016077>

- Costa, R. M., Patrão, I., & Machado, M. (2019). Problematic internet use and feelings of loneliness. *International Journal of Psychiatry in Clinical Practice*, 23(2), 160–162. <https://doi.org/10.1080/13651501.2018.1539180>
- Dołęga, Z. (2015). Family cohesion and the loneliness of adolescents from temporarily disconnected families due to economic migration. *Polish Psychological Bulletin*, 46(1), 45–52. <https://doi.org/10.1515/ppb-2015-0005>
- Favotto, L., Michaelson, V., Pickett, W., & Davison, C. (2019). The role of family and computer-mediated communication in adolescent loneliness. *PLoS ONE*, 14(6), 1–13. <https://doi.org/10.1371/journal.pone.0214617>
- Fujimori, A., Hayashi, H., Fujiwara, Y., & Matsusaka, T. (2017). Influences of attachment style, family functions and gender differences on loneliness in Japanese university students. *Psychology*, 8, 654–662. <https://doi.org/10.4236/psych.2017.84042>
- Ghojavand, K. (2023). Prediction of internet dependence, virtual networks and social isolation based on family functioning and religiosity among young girls in Isfahan. *Sociological Studies of Youth*, 14(49), 9–24. <https://doi.org/10.22034/SSYJ.2023.1983572.1281>
- Gong, F., Gong, Z., Liu, H., Yi, P., Jia, Y., Zhuang, J., Shu, J., Huang, X., & Wu, Y. (2024). The impact of problematic internet use on adolescent loneliness-chain mediation effects of social support and family communication. *Psychology Research and Behavior Management*, 17, 1903–1916. <https://doi.org/10.2147/PRBM.S443349>
- Goodfellow, C., Hardoon, D., Inchley, J., Leyland, A. H., Qualter, P., Simpson, S. A., & Long, E. (2022). Loneliness and personal well-being in young people: Moderating effects of individual, interpersonal, and community factors. *Journal of Adolescence*, 94, 554–568. <https://doi.org/10.1002/jad.12046>

- Hysing, M., Petrie, K. J., Bøe, T., Lønning, K. J., & Sivertsen, B. (2020). Only the lonely: A study of loneliness among university students in Norway. *Clinical Psychology in Europe*, 2(1), 1–16. <https://doi.org/10.32872/cpe.v2i1.2781>
- Karababa, A. (2020). The relationship between trait anger and loneliness among early adolescents: The moderating role of emotion regulation. *Personality and Individual Differences*, 159, 1–7. <https://doi.org/10.1016/j.paid.2020.109856>
- Katmer, A. N., Buga, A., & Kaya, I. (2019). An investigation of friendship quality, attachment to friends and perceived social support from friends as predictors of loneliness in adolescents. *International Online Journal of Educational Sciences*, 11(4), 211–227. <https://doi.org/10.15345/iojes.2019.04.015>
- Kung, C. S. J., Pudney, S. E., & Shields, M. A. (2022). Economic gradients in loneliness, social isolation and social support: Evidence from the UK Biobank. *Social Science and Medicine*, 306, 1–14. <https://doi.org/10.1016/j.socscimed.2022.115122>
- Li, G. R., Sun, J., Ye, J. N., Hou, X. H., & Xiang, M. Q. (2023). Family functioning and mobile phone addiction in university students: Mediating effect of loneliness and moderating effect of capacity to be alone. *Frontiers in Psychology*, 14, 1–10. <https://doi.org/10.3389/fpsyg.2023.1076852>
- Lyyra, N., Thorsteinsson, E. B., Eriksson, C., Madsen, K. R., Tolvanen, A., Löfstedt, P., & Välimaa, R. (2021). The Association between loneliness, mental well-being, and self-esteem among adolescents in four Nordic Countries. *International Journal Of Environmental Research and Public Health*, 18(7405), 1–12. <https://doi.org/10.3390/ijerph18147405>

- Madsen, K. R., Damsgaard, M. T., Rubin, M., Jervelund, S. S., Lasgaard, M., Walsh, S., Stevens, G. G. W. J. M., & Holstein, B. E. (2016). Loneliness and ethnic composition of the school class: A nationally random sample of adolescents. *Journal of Youth and Adolescence*, 45(7), 1350–1365. <https://doi.org/10.1007/s10964-016-0432-3>
- Maes, M., Nelemans, S. A., Danneel, S., Fernández-Castilla, B., Van den Noortgate, W., Goossens, L., & Vanhalst, J. (2019). Loneliness and social anxiety across childhood and adolescence: Multilevel meta-analyses of cross-sectional and longitudinal associations. *Developmental Psychology*, 55, 1548–1565. <https://doi.org/10.1037/dev0000719>
- Maes, M., Qualter, P., Vanhalst, J., Van den Noortgate, W., & Goossens, L. (2019). Gender differences in loneliness across the lifespan: A meta-analysis. *European Journal of Personality*, 33(6), 642–654. <https://doi.org/10.1002/per.2220>
- Matthews, T., Danese, A., Caspi, A., Fisher, H. L., Goldman-Mellor, S., Kopa, A., Moffitt, T. E., Odgers, C. L., & Arseneault, L. (2019). Lonely young adults in modern Britain: Findings from an epidemiological cohort study. *Psychological Medicine*, 49(2), 268–277. <https://doi.org/10.1017/S0033291718000788>
- Matthews, T., Qualter, P., Bryan, B. T., Caspi, A., Danese, A., Moffitt, T. E., Odgers, C. L., Strange, L., & Arseneault, L. (2023). The developmental course of loneliness in adolescence: Implications for mental health, educational attainment, and psychosocial functioning. *Development and Psychopathology*, 35, 537–546. <https://doi.org/10.1017/S0954579421001632>
- Olson, D. (2000). Circumplex model of marital and family systems. *Journal of Family Therapy*, 22(2), 144–167. <https://doi.org/10.1111/1467-6427.00144>
- Olson, D., McCubbin, H., Barnes, H., Larsen, A., Muxen, M., & Wilson, M. (1982). *Family*

inventories: Inventories used in a national survey of families across the family life cycle.

Family Social Science, University of Minnesota.

Olson, D., Waldvogel, L., & Schlieff, M. (2019). Circumplex model of marital and family systems: An update. *Journal of Family Theory and Review*, 11(2), 199–211.
<https://doi.org/10.1111/jftr.12331>

Padial-Ruz, R., Pérez-Turpin, J. A., Cepero-González, M., & Zurita-Ortega, F. (2020). Effects of physical self-concept, emotional isolation, and family functioning on attitudes towards physical education in adolescents: Structural equation analysis. *International Journal of Environmental Research and Public Health*, 17(94), 1–16.
<https://doi.org/10.3390/ijerph17010094>

Pan, Y., Yang, Z., Han, X., & Qi, S. (2021). Family functioning and mental health among secondary vocational students during the COVID-19 epidemic: A moderated mediation model. *Personality and Individual Differences*, 171, 1–8.
<https://doi.org/10.1016/j.paid.2020.110490>

Qian, L., Wang, D., Jiang, M., Wu, W., & Ni, C. (2022). The impact of family functioning on college students' loneliness: Chain-mediating effects of core self-evaluation and problematic mobile phone use. *Frontiers in Psychology*, 13, 1–7.
<https://doi.org/10.3389/fpsyg.2022.915697>

Rahayu, D., Puspitasari, M., Safitri, J., & Alkatiri, Z. A. (2021). Attachment and family functioning against loneliness. *Russian Journal of Agricultural and Socio-Economic Sciences*, 6(114), 157–162. <https://doi.org/10.18551/rjoas.2021-06.17>

Russell, D. W. (2014). Loneliness and social neuroscience. *World Psychiatry*, 13(2), 150–151.
<https://doi.org/10.1002/wps.20126>

- Russell, D. W., Peplau, L. A., & Cutrona, C. E. (1982). The revised UCLA loneliness scale: Concurrent and discriminant validity evidence. *J Pers Soc Psychol*, 39, 472–480.
<https://doi.org/10.1037/0022-3514.39.3.472>
- Skeens, M. A., Hill, K., Olsavsky, A., Ralph, J. E., Udaipuria, S., Akard, T. F., & Gerhardt, C. A. (2023). Family functioning buffers the consequences of the COVID-19 pandemic for children's quality of life and loneliness. *Frontiers in Psychology*, 13, 1–11.
<https://doi.org/10.3389/fpsyg.2022.1079848>
- Smilkstein, G., Ashworth, C., & Montano, D. (1982). Validity and reliability of the Family APGAR as a test of family function. *J. Fam. Pract*, 15(2), 303–311.
- Stavrova, O., Ren, D., & Pronk, T. (2021). Low self-control: A hidden cause of loneliness? *Personality and Social Psychology Bulletin*, 48(3), 1–16.
<https://doi.org/10.1177/01461672211007228>
- Sundqvist, A., & Hemberg, J. (2021). Adolescents' and young adults' experiences of loneliness and their thoughts about its alleviation. *International Journal of Adolescence and Youth*, 26(1), 238–255. <https://doi.org/10.1080/02673843.2021.1908903>
- Twenge, J. M., Spitzberg, B. H., & Campbell, W. K. (2019). Less in-person social interaction with peers among U.S. adolescents in the 21st century and links to loneliness. *Journal of Social and Personal Relationships*, XX(X), 1–22.
<https://doi.org/10.1177/0265407519836170>
- van Tonder, J. I., Jordaan, J., & Esterhuyse, K. (2023). Self-esteem, interpersonal communication competence, and media and technology usage as predictors of loneliness among university students. *SAGE Open*, 13(1), 1–13.
<https://doi.org/10.1177/21582440221148379>

- Vanhalst, J., Luyckx, K., & Goossens, L. (2014). Experiencing loneliness in adolescence: A matter of individual characteristics, negative peer experiences, or both? *Social Development*, 23(1), 100–118. <https://doi.org/10.1111/sode.12019>
- von Soest, T., Luhmann, M., & Gerstorf, D. (2020). The development of loneliness through adolescence and young adulthood: Its nature, correlates, and midlife outcomes. *Developmental Psychology*, 56(10), 1919–1934. <https://doi.org/10.1037/dev0001102>
- Yun, P., Xiaohong, H., Zhongping, Y., & Zhujun, Z. (2021). Family function, loneliness, emotion regulation, and hope in secondary vocational school students: A moderated mediation model. *Frontiers in Public Health*, 9, 1–11. <https://doi.org/10.3389/fpubh.2021.722276>
- Zhang, Y., Li, X., Bi, Y., Kan, Y., Liu, H., Liu, L., Zou, Y., Zhang, N., Fang, L., & Gong, W. (2023). Effects of family function, depression, and self-perceived burden on loneliness in patients with type 2 diabetes mellitus: A serial multiple mediation model. *BMC Psychiatry*, 23(636), 1–9. <https://doi.org/10.1186/s12888-023-05122-y>
- Zhao, J., Tan, M., Gao, L., & Wang, Y. (2019). Shyness and loneliness: Contributions of emotional intelligence and social support. *Current Psychology*, 38(2), 556–562. <https://doi.org/10.1007/s12144-017-9640-6>
- Zhu, X., Huebner, E. S., & Tian, L. (2019). A person-centered longitudinal analysis of adolescents' loneliness and social anxiety: Clusters, predictors, and outcomes. *School Psychology*, 34(5), 576–589. <https://doi.org/10.1037/spq0000328>