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Psychosocial factors related to adolescent depressive symptom: systematic literature review

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ABSTRACT

Depressive disorder is currently ranked fourth in the world in the prevalence of mental disorders affecting adolescents**.** This position encourages the author to explore depression risk and protective factors of the particular population. This study aimed to present factors of risk or protection to the symptom development of adolescent depression. We conducted a systematic review of the literature searching in Science Direct and Springerlink to inquire about relevant articles. There were 21 studies published from 2016 to 2020 included in this study. As a result, 37 factors were categorized as psychological (personality trait, cognitive, emotion, behavior, and coping strategy) and social factors (social support, factors related to parents, and negative life events). Some factors are positively correlated with depression, while others negatively correlate with depression. The study results aspire to be the intervention target for minimizing the emergence symptoms of adolescent depression by developing positive personality traits, positive thinking, practical coping strategies skills to find social support and development of positive parenting practice.

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1. INTRODUCTION

Depression is one of the leading causes of illness and disability in adolescents. According to a World Health Organization (WHO) survey, globally, the prevalence of adolescents with major depressive disorder experience demonstrates a surge in trend, in 2019 equal to slightly above 0.8% for 10-14 years old, and approximately 2.1% for 15-19 years old. A meta-analysis by [1] suggests that depression placed fourth in the world after anxiety disorder, disruptive disorder and Attention Deficit Hiperactivity Disorder (ADHD), including 2.6% of children and adolescents.

Symptoms of depression may endure, diminish, or even thrive as someone ages. Research on 964 adolescents aged 12-17 shows that 46.1% experience recurrence eight years later, and 30.5% sustain episodic replay in 12 months [2]. This implies that depression symptom that occurs in adolescent have a higher probability of recurring. A longitudinal study over six years demonstrates depressed mood is relatively permanent in adolescents. Specifically, the stable component ("traits") of depressive mood increased with age [3].

Depression disorder in adolescence affects life function in the following age stage. Research suggests a correlation between depression in childhood and adolescence with high anxiety levels in adulthood, drug disorders, health problems, criminality, and trouble with social functioning. It is also established that the onset of depression in adolescence has a worse prognosis than in childhood [4]. A 15-

year longitudinal study also found that adult females who experienced depression as teenagers were more likely to have abortions, experience miscarriages, be abused by their partners, and experience divorce than adult subjects who did not experience depression as teenagers [5].

Considering the significance of depression in adolescents, it is imperative to carry out preventive ways to suppress the growing rate of depressive disorder, which is inclined to rise. In the suggested methods, it is essential to understand the etiology of depression disorder and discover the probabilities for prevention whilst constructing an intervention targeted to psychological and social scope [6].

Several studies examined risk factors for depression, but these studies only examined one country, namely the United States [7], [8], Uganda [9], Canada [10], and Ireland [11]. One study conducted a systematic review of several articles examining risk factors for depression in adolescents, but this review also only focused on one country, Iran [12]. The review conducted by Sajjadi *et al*. [12] covered studies up to 2013, so many new studies are not included in the review. At the same time, risk factors for depression have proliferated in recent years. Based on these findings, the researcher intends to summarize research findings from various countries from 2016 to 2020.

This review aimed to present factors related with depression in adolescents. Suggested factors are divided into psychological and social factors. Psychological factors comprise an individual's process and perception, which influence their mental condition. In contrast, social factor includes a general factor in society related to structure and social process forced on an individual [6].

2. RESEARCH METHOD

This literature study applied preferred reporting items for systematic reviews and meta-analyses (PRISMA). The author utilized two electronic databases (sciencedirect and springerlink) to examine relevant articles published from 2016-2020, with keywords: ("adolescent depression" OR "adolescence depression") AND "risk factor". This literature study mainly selected research articles instead of other categories. the inclusion criterion consists of: i) adolescent participants, ii) reporting correlation with depression symptoms of a minimum of one psychosocial factor, and iii) is a cross-sectional study. exclusion criteria consist of i) depression variable as independent, moderator or mediator variable, ii) uses unique population, iii) non-adolescent population, iv) not restricted to psychological and/or social factor, v) applies longitudinal research design or literature study, vi) no full explanation provided, vii) grade quality below 70%.

Completed quality testing considers ten criteria, including validity score report, reliability, participant characteristics, effect size, bias selection, data collection method, data loss, control of confounding variable, statistic result accuracy and analysis accuracy. Deriving out of quality review, 22 studies obtaining marks of 72-89% (range from 0%-100%) admitted and 1 article with 56% mark excluded. After selecting 21 studies, data extraction was executed. Information extracted were writer, year of publication, sample size, age of the sample, research location, and study design.

3. RESULTS AND DISCUSSION

The search process from two databases identified 461 studies, with 277 studies from Science Direct, and 164 from Springerlink. Amongst 461 studies, there were 20 studies inaccessible by the author, resulting in 441 remaining for screening. After screening, there were 21 studies included in this review see Figure 1. This study originated from cross-sectional studies. This means it favors examining the correlation between variables at that time and could not predict the long-term consequences of existing factors towards the development of depression symptoms.

The sum of the research sample was 23.507 with each study varying between 99 to 6019. Participants involved were 10-19 years old, research was mainly published in 2020 (38%), and the majority of the study was performed in China (47%); others are Pennsylvania, Scotland, Texas, Croatia, Oman, United Kingdom, Malaysia, Spain, Turkey, Minnesota, EU-countries (Austria, Germany, Slovenia, and Spain), and one study each, or approximately 4.7%. Details are as in Table 1 (see in Appendix) [13]-[33].

This review examined psychological and social factors likely to be protective or risk factors for developing depressive symptoms in adolescents. From 21 studies identified, there were 37 risk/protective factors toward depression, categorized into psychological factors, comprised of personality, cognitive, emotion and behavior, coping strategy, resilience, and social factor consisting of parents, negative life events, cyber-victimization, and perceived social support summarized in Figure 2. Overall factors showed a significant correlation to depression in adolescents. Details are presented in Table 2.

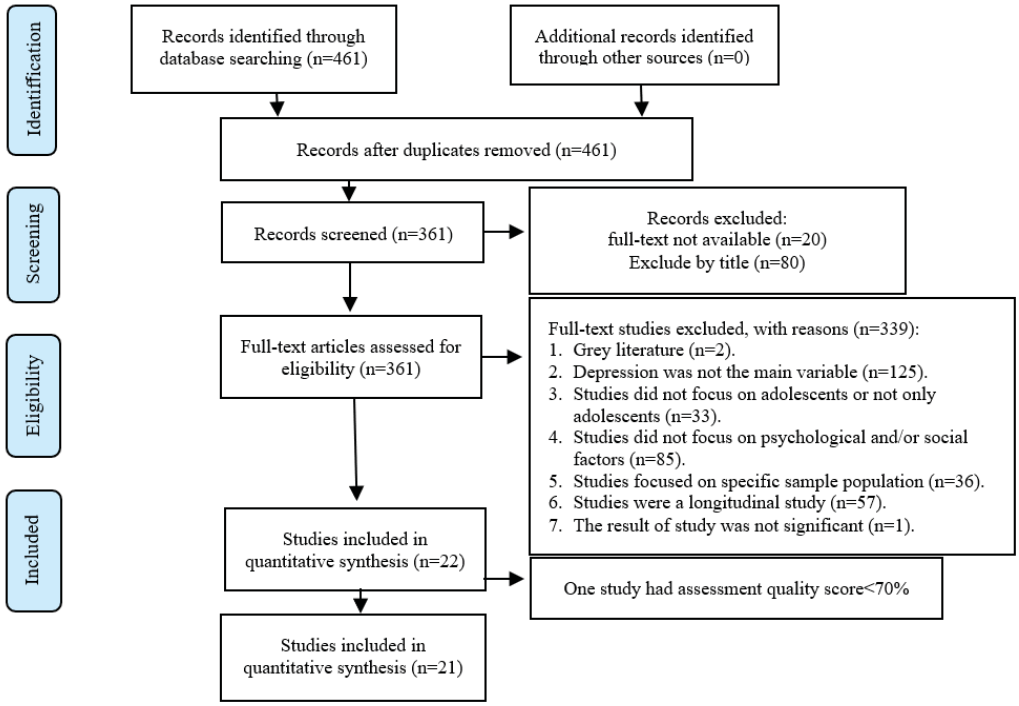

Figure 1. PRISMA diagram

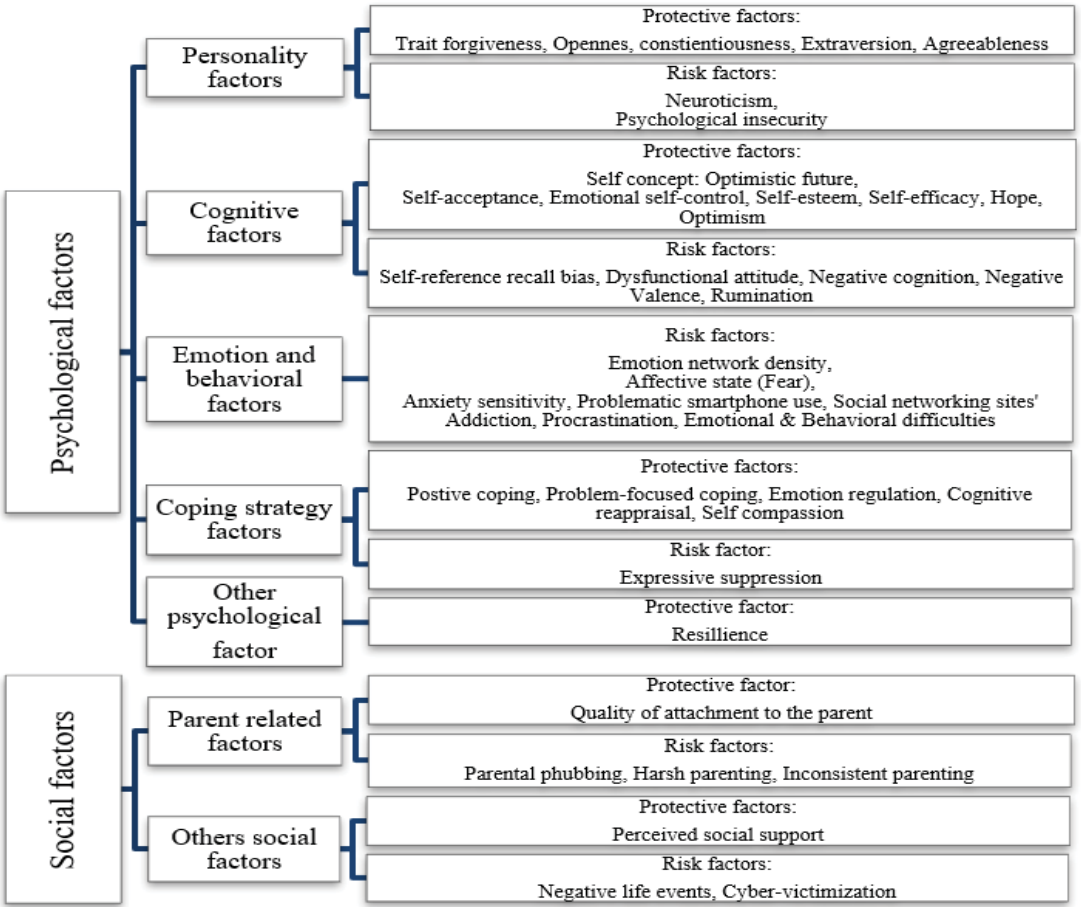

Figure 2. Risk and protective factors of depression (Summary)

Table 2. Factors associated with depression

Risk/Protective factors	Support references	Number investigated
Psychological factors		
Personality factors	(5 studies)	
Trait forgiveness	Zhang *et al*. [17]	1/21
Openness	Keresteš *et al*. [19], Gong *et al.* [24]	2/21
Conscientiousness	Keresteš *et al*. [19], Gong *et al.* [24]	2/21
Extraversion	Keresteš *et al*. [19], Gong *et al.* [24]	2/21
Agreeableness	Keresteš *et al*. [19], Gong *et al.* [24]	2/21
Neuroticism	Keresteš *et al*. [19], Gong *et al.* [24], Smith *et al*. [14]	3/21
Psychological insecurity	Li *et al*. [15]	1/21
Cognitive factors	(9 studies)	
Self-reference recall bias	Smith *et al*. [14]	1/21
Dysfunctional attitude	Smith *et al*. [14]	1/21
Negative cognition (View of world, View of future)	Emam *et al*. [21]	1/21
Self-concept (Negative valence)	Hards *et al*. [22]	1/21
Self-concept (Optimistic future, Self-acceptance, Emotional self control)	Kassis et al. [32]	1/21
Rumination	Smith *et al*. [14], P. Wang *et al*. [30]	2/21
Self-esteem	X. Wang *et al*. [23], P. Wang *et al*. [30], Bang *et al*. [28], Cong *et al*. [25]	4/21
Self-efficacy	Song and Song [31]	1/21
Hope	Song and Song [31]	1/21
Optimism	Song and Song [31]	1/21
Emotion and behavioral factors	(6 studies)	
Emotion network density	Lydon-Staley *et al*. [13]	1/21
Affective state (Fear)	Montoya-Castilla *et al*. [26]	1/21
Anxiety sensitivity	Epkins [16]	1/21
Emotional & behavioral difficulties	Emam *et al*. [21]	1/21
Problematic smartphone use	P. Wang *et al*. [18]	1/21
Social networking sites' addiction	P. Wang *et al*. [30]	1/21
Procrastination	P. Wang *et al*. [18]	1/21
Coping strategy factors	(5 studies)	
Positive coping	Song and Song [31]	1/21
Problem focused coping	Cong *et al*. [25]	1/21
Emotion regulation	Bozanoğlu *et al*. [27]	1/21
Cognitive reappraisal	Zhang *et al*. (2020) [17]	1/21
Expressive suppression	Zhang *et al*. (2020) [17]	1/21
Self-compassion	Liu and Hu, [29]	1/21
Others psychological factors	(3 studies)	
Resilience	Liu and Hu [29], Gong *et al.* [24], Song and Song [31]	3/21
Social factors	(10 studies)	
Parent related factors		6/21
Parental phubbing	Xie and Xie [33], X. Wang *et al*. [23]	
Harsh parenting	Liu and Hu [29]	
Inconsistent parenting	Kassis et al. [32]	
Quality of attachment to the parent	Bozanoğlu *et al*. [27], Keresteš *et al*. [19]	
Negative life events, Cyber-victimization	Emam *et al*. [21], Liu and Hu [29], Li *et al*. [15]	3/21
Perceived social support	Li *et al*. [15], P. Wang *et al*. [30], X. Wang *et al*. [23], Song and Song, [31]	4/21

3.1. Psychological factors

3.1.2. Personality factor

Five studies analyzed the correlation between personality and depression symptoms in adolescents. Personality factors include forgiveness, openness, conscientiousness, extraversion, agreeableness,

neuroticism, and psychological insecurity. All studies showed a significant correlation between personality factors and depression symptoms. Forgiveness [17], openness, conscientiousness, extraversion, and agreeableness [19], [24] allows for lowering the risk of depression symptom. An extrovert adolescent has a better interpersonal relationship within his circle, positive emotions, and an effective coping strategy in dealing with adversity. He shows positive mental health, including in lower depression score. Conversely, neuroticism and psychological insecurity caused adolescents a higher risk of developing depression [34], [35]. Neuroticism is a view of a world full of suffering and threats [36]. With this perspective, individuals become more sensitive to negative stimuli, associated with susceptibility to depression [37].

3.1.3. Cognitive factor

Nine studies examine the correlation between cognitive factors and depression symptoms. Cognitive factors such as self-reference recall bias, dysfunctional attitude, negative cognition (view of the world, view of future), and rumination are identified as risk factors for depression [14], [21], [30]. These particular factors are the maladaptive cognitive pattern that potentially enhances the risk of depression [38]. Contrarily, self-efficacy, hope, and optimism correlate negatively to depression symptoms or may be called as protective factors to depressive symptoms [31]. Ensuing negative thinking possibly exacerbates and prolongs negative mood. On the other hand, positive attribution to accomplishment, self-confidence, and hope for success shows a low risk for depression. The following factors are self-concept and self-esteem. Both potentially are either a risk or protective factor. A positive self-concept may protect adolescents from issuing depression, whereas in contrast, a negative self-concept exacerbates depressive symptoms [22], [32]. Adolescents with low self-esteem tend to be powerless in responding to life events because they perceive themselves as inadequate [39]. This poor judgement of self causes a depressed mood [40], [41]. In a particular study, self-esteem was represented not solely as a mediator, but also as a moderator. As a moderator, self-esteem may weaken the correlation between some risk factors and psychological conditions [42]. Out of all risk factors, rumination and self-esteem are the most studied cognitive factors, and also possess a large size effect.

3.1.4. Emotion and behavior factors

Six studies tested emotion and behavior factors correlated to depression symptoms. These factors include emotion network density, affective state (fear), anxiety sensitivity [13], [26], problematic smartphone use, social networking site's addiction, and procrastination [18]; and emotional and behavior difficulties including emotional problems, conduct problems, hyperactivity, peer problems and prosocial behavior [21]. The aforementioned factors have a positive correlation to depression symptoms. This means all emotion and behavior factors found were risk factors for depression symptoms. Problematic smartphone use, social networking site's addiction, and procrastination were maladaptive behaviors potentially causing emotional problems, which will lead to the emergence of depressive symptoms. Emotion network density, affective state (fear), anxiety sensitivity and emotional and behavior difficulties may cause emerging depression symptoms, for instance rigid emotional function, strong fear, heightened sensitivity to anxiety, and risk of increasing depression symptoms. On the contrary, positive emotions like happiness may decrease possibility of depression significantly.

3.1.5. Coping strategy

Five studies examined coping strategy and depression symptoms. There were four factors negatively correlated to depression symptoms, including positive coping, problem focused coping, cognitive reappraisal, self-compassion; and two factors positively correlated to depression symptoms, including expressive suppression and emotion regulation difficulties. Adolescents with significant depression symptom has lower problem focused coping score [25]. Adolescents with high positive coping and high self-compassion shows low depression symptoms [29], [31]. Other studies suggested the higher cognitive reappraisal means lower depression symptom eventually, in contrast to the higher expressive suppression shows higher depression symptom [17]. As emotional regulation difficulty increase (awareness subscale excluded), depression symptoms shown also increase [27]. Coping strategy such as positive coping and problem focused coping may protect adolescents from emerging depression symptoms, due to their classification as approach coping, characterized as active, able to minimalize negative consequences, boost the possibility of solving problems and allow to produce positive behavior and emotion [43], [44]. In the same manner, self-compassion is suspected as resource to cope when someone experience negative life events [45]. Self-compassion also known as adaptive emotion regulation strategy which help adolescents conquer harmful situation and minimalize affection problems like stress symptoms, rumination [46], [47], and depression [48]. The following factor is emotion regulation. In this study, emotional regulation originates from two different approaches, although both has significant correlation to depression symptoms. Adolescents who practice cognitive reappraisal view stressful life events from a different perspective, thus able to minimalize their

negative, whereas adolescents who perform expressive suppression try to control emotional response in order to conceal felt emotions [49]. Other emotion regulation concept which is emotional regulation difficulties has positive correlation to depression symptoms [27]. The more difficult an adolescent identify their emotion clearly, reject emotion they feel, limited access to aim themselves for effective strategy, and have difficulties to control and seeking behavior toward an objective when experiencing negative affect, the more possibility for the emergence of depressive symptoms.

3.1.6. Another psychological factor

Three studies examined resilience as a protective factor against depression. In this study, resilience was identified as a mediator and moderator. Resilience is a process for individuals to adapt and lift themselves from stressful experiences [50]. Resilience may decrease the depression risk of individuals with traumatic experiences because resilient people can look at difficulties and the past in the hope that it will enable them to survive well [51]. A high resilience shows low depression symptoms [24], [29], [31]. Resilience was identified as a factor in increasing emotional stability and lessening negative emotions. Therefore, adolescents may adapt well and recuperate from a stressful experience.

3.2. Social factors

Ten studies examine social factors and their correlation to depression symptoms. Among ten studies, there are factors in correlation to parents [19], [23], [27], [29], [32], [33], negative events factor [15], [21], [29], and perceived social support factor [15], [23], [30], [31]. Parents are likely to become risk factors, including parental phubbing, harsh parenting, and inconsistent parenting, and likely to become protective factors with the condition that attachment quality is categorized as secure. Other factors are negative life events experienced by adolescents, including cyber-victimization. Furthermore, there were other social factors, possibly a protective factor: perceived social support. Four studies examined perceived social support and placed it as a moderator, minimizing the consequences of other variables influencing depression symptoms.

Social factors are predominantly found in family settings, particularly parents. Parents who do not attend to their child, are physically and verbally abusive, have inconsistent parenting, and parent-child low attachment quality is the identified risk factors in this study. Attachment quality among parents and children allows for immense significance to the quality of children's social and emotional development [52]. Therefore, parents were the primary factor influencing children's physical and mental development. Similarly, parenting styles are one of the leading predictors of depression in adolescents [53]. Another social factor categorized as a risk factor for depression is negative life events. Negative life events constitute the source of stress and impact the development of adolescent depression [54]. Adolescents need social support when dealing with negative life events. Perceived social support may protect adolescents from risk factor exposure due to high social support accounts for better resources to resolve stress and avoid depression [55].

4. CONCLUSION

This study has provided risk and protective factors for depression symptom development in adolescents. Through acknowledging psychological factors, including personality, cognitive, emotional, behavior, and coping strategy correlated to depression, it is expected for intervention to target said factors by developing positive resources in adolescents' life and coping as well as anticipate risk factors to appear. Regarding social factors, notably family identified as a risk factor, intervention is expected to focus on shaping a positive parenting practice and increasing the parent's role as social support for adolescents.

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REFERENCES

[1] G. V. Polanczyk, G. A. Salum, L. S. Sugaya, A. Caye, and L. A. Rohde, "Annual research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents," *Journal of Child Psychology and Psychiatry and Allied Disciplines*, vol. 56, no. 3, pp. 345–365, Mar. 2015, doi: 10.1111/jcpp.12381.

[2] C. Benjet *et al.*, "Incidence and recurrence of depression from adolescence to early adulthood: A longitudinal follow-up of the Mexican adolescent mental health survey," *Journal of Affective Disorders*, vol. 263, pp. 540–546, Feb. 2020, doi: 10.1016/j.jad.2019.11.010.

[3] I. Holsen, P. Kraft, and J. Vittersø, "Stability in depressed mood in adolescence: Results from a 6-year longitudinal panel study," *Journal of Youth and Adolescence*, vol. 29, no. 1, pp. 61–78, Feb. 2000, doi: 10.1023/A:1005121121721.

[4] W. E. Copeland, I. Alaie, U. Jonsson, and L. Shanahan, "Associations of Childhood and Adolescent Depression With Adult Psychiatric and Functional Outcomes," *Journal of the American Academy of Child & Adolescent Psychiatry*, 2020, doi: 10.1016/j.jaac.2020.07.895.
[5] U. Jonsson *et al.*, "Intimate relationships and childbearing after adolescent depression: A population-based 15 year follow-up study," *Social Psychiatry and Psychiatric Epidemiology*, vol. 46, no. 8, pp. 711–721, Aug. 2011, doi: 10.1007/s00127-010-0238-7.
[6] S. Stansfeld and F. Rasul, "Psychosocial factors, depression and illness," *Depression and Physical Illness*. pp. 19–52, 2006, doi: 10.1017/CBO9780511544293.003.
[7] G. Saluja, R. Iachan, P. C. Scheidt, M. D. Overpeck, W. Sun, and J. N. Giedd, "Prevalence of and risk factors for depressive symptoms among young adolescents," *Archives of Pediatrics and Adolescent Medicine*, vol. 158, no. 8, pp. 760–765, Aug. 2004, doi: 10.1001/archpedi.158.8.760.
[8] S. Moreh and H. O'Lawrence, "Common risk factors associated with adolescent and young adult depression," Journal of Health and Human Services Administration, vol. 39, no. 2, pp. 283–310, 2016.
[9] E. Kinyanda, R. Kizza, C. Abbo, S. Ndyanabangi, and J. Levin, "Prevalence and risk factors of depression in childhood and adolescence as seen in 4 districts of north-eastern Uganda," *BMC International Health and Human Rights*, vol. 13, no. 1, p. 19, Dec. 2013, doi: 10.1186/1472-698X-13-19.
[10] N. L. Galambos, B. J. Leadbeater, and E. T. Barker, "Gender differences in and risk factors for depression in adolescence: A 4-year longitudinal study," *International Journal of Behavioral Development*, vol. 28, no. 1, pp. 16–25, Jan. 2004, doi: 10.1080/01650250344000235.
[11] B. Dooley, A. Fitzgerald, and N. Mac Giollabhui, "The risk and protective factors associated with depression and anxiety in a national sample of Irish adolescents," *Irish Journal of Psychological Medicine*, vol. 32, no. 1, pp. 93–105, Mar. 2015, doi: 10.1017/ipm.2014.83.
[12] H. Sajjadi, S. H. Mohaqeqi Kamal, H. Rafiey, M. Vameghi, A. S. Forouzan, and M. Rezaei, "A systematic review of the prevalence and risk factors of depression among iranian adolescents," *Global journal of health science*, vol. 5, no. 3, pp. 16–27, Jan. 2013, doi: 10.5539/gjhs.v5n3p16.
[13] D. M. Lydon-Staley, M. Xia, H. W. Mak, and G. M. Fosco, "Adolescent emotion network dynamics in daily life and implications for depression," *Journal of Abnormal Child Psychology*, vol. 47, no. 4, pp. 717–729, Apr. 2019, doi: 10.1007/s10802-018-0474-y.
[14] E. M. Smith, S. Reynolds, F. Orchard, H. C. Whalley, and S. W. Chan, "Cognitive biases predict symptoms of depression, anxiety and wellbeing above and beyond neuroticism in adolescence," *Journal of Affective Disorders*, vol. 241, pp. 446–453, Dec. 2018, doi: 10.1016/j.jad.2018.08.051.
[15] Y. Li *et al.*, "Cyber victimization and adolescent depression: The mediating role of psychological insecurity and the moderating role of perceived social support," *Children and Youth Services Review*, vol. 94, pp. 10–19, Nov. 2018, doi: 10.1016/j.childyouth.2018.09.027.
[16] C. C. Epkins, "Experiential avoidance and anxiety sensitivity: Independent and specific associations with children's depression, anxiety, and social anxiety symptoms," *Journal of Psychopathology and Behavioral Assessment*, vol. 38, no. 1, pp. 124–135, Mar. 2016, doi: 10.1007/s10862-015-9502-1.
[17] L. Zhang, J. Lu, B. Li, X. Wang, and C. Shangguan, "Gender differences in the mediating effects of emotion-regulation strategies: Forgiveness and depression among adolescents," *Personality and Individual Differences*, vol. 163, p. 110094, Sep. 2020, doi: 10.1016/j.paid.2020.110094.
[18] P. Wang *et al.*, "How is problematic smartphone use related to adolescent depression? A moderated mediation analysis," *Children and Youth Services Review*, vol. 104, p. 104384, Sep. 2019, doi: 10.1016/j.childyouth.2019.104384.
[19] G. Keresteš, I. Rezo, and M. Ajduković, "Links between attachment to parents and internalizing problems in adolescence: The mediating role of adolescents' personality," *Current Psychology*, Mar. 2019, doi: 10.1007/s12144-019-00210-3.
[20] W. J. Liu, L. Zhou, X. Q. Wang, B. X. Yang, Y. Wang, and J. F. Jiang, "Mediating role of resilience in relationship between negative life events and depression among Chinese adolescents," *Archives of Psychiatric Nursing*, vol. 33, no. 6, pp. 116–122, Dec. 2019, doi: 10.1016/j.apnu.2019.10.004.
[21] M. M. Emam, N. S. G. Abdelrasheed, and E. Omara, "Negative Cognition, Emotional and Behavioural Difficulties, Negative Life Events and Depressive Symptoms among Adolescents in Oman," *Current Psychology*, vol. 40, no. 10, pp. 5156–5165, Oct. 2021, doi: 10.1007/s12144-019-00471-y.
[22] E. Hards, J. Ellis, J. Fisk, and S. Reynolds, "Negative view of the self and symptoms of depression in adolescents," *Journal of Affective Disorders*, vol. 262, pp. 143–148, Feb. 2020, doi: 10.1016/j.jad.2019.11.012.
[23] X. Wang, L. Gao, J. Yang, F. Zhao, and P. Wang, "Parental phubbing and adolescents' depressive symptoms: Self-esteem and perceived social support as moderators," *Journal of Youth and Adolescence*, vol. 49, no. 2, pp. 427–437, Feb. 2020, doi: 10.1007/s10964-019-01185-x.
[24] Y. Gong *et al.*, "Personality traits and depressive symptoms: The moderating and mediating effects of resilience in Chinese adolescents," *Journal of Affective Disorders*, vol. 265, pp. 611–617, Mar. 2020, doi: 10.1016/j.jad.2019.11.102.
[25] C. W. Cong, W. S. Ling, and T. S. Aun, "Problem-focused coping and depression among adolescents: Mediating effect of self-esteem," *Current Psychology*, vol. 40, no. 11, pp. 5587–5594, Nov. 2021, doi: 10.1007/s12144-019-00522-4.
[26] I. Montoya-Castilla, S. Postigo, V. Prado-Gascó, and M. Pérez-Marín, "Relationships between affective states and childhood internalizing disorders," *Archives of Psychiatric Nursing*, vol. 32, no. 4, pp. 591–598, Aug. 2018, doi: 10.1016/j.apnu.2018.03.013.
[27] İ. Bozanoğlu, Ö. F. Şimşek, E. Altıntaş, and E. Kocayörük, "Revisiting attachment to parents and depression link in adolescence: The importance of language use and emotion regulation," *Current Psychology*, vol. 38, no. 3, pp. 599–607, Jun. 2019, doi: 10.1007/s12144-017-9714-5.
[28] H. Bang, D. Won, and S. Park, "School engagement, self-esteem, and depression of adolescents: The role of sport participation and volunteering activity and gender differences," *Children and Youth Services Review*, vol. 113, p. 105012, Jun. 2020, doi: 10.1016/j.childyouth.2020.105012.
[29] Q. Q. Liu and Y. T. Hu, "Self-compassion mediates and moderates the association between harsh parenting and depressive symptoms in Chinese adolescent," *Current Psychology*, Aug. 2020, doi: 10.1007/s12144-020-01034-2.
[30] P. Wang *et al.*, "Social networking sites addiction and adolescent depression: A moderated mediation model of rumination and self-esteem," *Personality and Individual Differences*, vol. 127, pp. 162–167, Jun. 2018, doi: 10.1016/j.paid.2018.02.008.
[31] R. Song and L. Song, "The dampen effect of psychological capital on adolescent depression: a moderated mediation model," *Current Psychology*, vol. 40, no. 1, pp. 56–64, Jan. 2021, doi: 10.1007/s12144-020-00626-2.
[32] W. Kassis, S. Artz, and J. White, "Understanding depression in adolescents: A dynamic psychosocial web of risk and protective factors," *Child and Youth Care Forum*, vol. 46, no. 5, pp. 721–743, Oct. 2017, doi: 10.1007/s10566-017-9404-3.

[33] X. Xie and J. Xie, "Parental phubbing accelerates depression in late childhood and adolescence:A two-path model," *Journal of Adolescence*, vol. 78, no. 1, pp. 43–52, Jan. 2020, doi: 10.1016/j.adolescence.2019.12.004.
[34] J. L. Hamilton, J. P. Stange, B. G. Shapero, S. L. Connolly, L. Y. Abramson, and L. B. Alloy, "Cognitive vulnerabilities as predictors of stress generation in early adolescence: Pathway to depressive symptoms," *Journal of Abnormal Child Psychology*, vol. 41, no. 7, pp. 1027–1039, Oct. 2013, doi: 10.1007/s10802-013-9742-z.
[35] L. B. Navrady *et al.*, "Intelligence and neuroticism in relation to depression and psychological distress: Evidence from two large population cohorts," *European Psychiatry*, vol. 43, pp. 58–65, Jun. 2017, doi: 10.1016/j.eurpsy.2016.12.012.
[36] D. Watson, L. A. Clark, and A. R. Harkness, "Structures of personality and their relevance to psychopathology," *Journal of Abnormal Psychology*, vol. 103, no. 1, pp. 18–31, 1994, doi: 10.1037//0021-843x.103.1.18.
[37] L. A. Clark, D. Watson, and S. Mineka, "Temperament, personality, and the mood and anxiety disorders," *Journal of Abnormal Psychology*, vol. 103, no. 1, pp. 103–116, Feb. 1994, doi: 10.1037/0021-843X.103.1.103.
[38] L. B. Alloy, L. Y. Abramson, J. M. Smith, B. E. Gibb, and A. M. Neeren, "Role of parenting and maltreatment histories in unipolar and bipolar mood disorders: Mediation by cognitive vulnerability to depression," *Clinical Child and Family Psychology Review*, vol. 9, no. 1, pp. 23–64, Mar. 2006, doi: 10.1007/s10567-006-0002-4.
[39] W. R. Avison and M. Rosenberg, "Conceiving the Self," *Canadian Journal of Sociology / Cahiers canadiens de sociologie*, vol. 6, no. 2. New York, p. 212, 1981, doi: 10.2307/3340091.
[40] L. Y. A. and G. I. Metalsky, "Hopeless Depression," *Psychological Review*, vol. 96, no. 2, pp. 358–372, 1989.
[41] P. M. Lewinsohn, P. Rohde, and J. R. Seeley, "Major depressive disorder in older adolescents: Prevalence, risk factors, and clinical implications," *Clinical Psychology Review*, vol. 18, no. 7, pp. 765–794, Nov. 1998, doi: 10.1016/S0272-7358(98)00010-5.
[42] S. S. Luthar, E. J. Crossman, and P. J. Small, "Resilience and Adversity," in *Handbook of Child Psychology and Developmental Science*, Hoboken, NJ, USA: John Wiley & Sons, Inc., 2015, pp. 1–40.
[43] D. E. Szwedo, J. M. Chango, and J. P. Allen, "Adolescent romance and depressive symptoms: The moderating effects of positive coping and perceived friendship competence," *Journal of Clinical Child and Adolescent Psychology*, vol. 44, no. 4, pp. 538–550, Jul. 2015, doi: 10.1080/15374416.2014.881290.
[44] Y. Ding *et al.*, "The mediating role of coping style in the relationship between psychological capital and burnout among Chinese nurses," *PLoS ONE*, vol. 10, no. 4, p. e0122128, Apr. 2015, doi: 10.1371/journal.pone.0122128.
[45] A. B. Allen and M. R. Leary, "Self-compassion, stress, and coping," *Social and Personality Psychology Compass*, vol. 4, no. 2, pp. 107–118, Feb. 2010, doi: 10.1111/j.1751-9004.2009.00246.x.
[46] A. L. Finlay-Jones, C. S. Rees, and R. T. Kane, "Self-Compassion, emotion regulation and stress among australian psychologists: Testing an emotion regulation model of self-compassion using structural equation modeling," *PLoS ONE*, vol. 10, no. 7, p. e0133481, Jul. 2015, doi: 10.1371/journal.pone.0133481.
[47] Q. Wu, P. Chi, X. Zeng, X. Lin, and H. Du, "Roles of anger and rumination in the relationship between self-compassion and forgiveness," *Mindfulness*, vol. 10, no. 2, pp. 272–278, Feb. 2019, doi: 10.1007/s12671-018-0971-7.
[48] K. D. Neff *et al.*, "Development and validation of the self-compassion scale for youth," *Journal of Personality Assessment*, vol. 103, no. 1, pp. 92–105, Jan. 2021, doi: 10.1080/00223891.2020.1729774.
[49] J. J. Gross and O. P. John, "Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being," *Journal of Personality and Social Psychology*, vol. 85, no. 2, pp. 348–362, 2003, doi: 10.1037/0022-3514.85.2.348.
[50] K. M. Connor and J. R. T. Davidson, "Development of a new resilience scale: The connor-davidson resilience scale (CD-RISC)," *Depression and Anxiety*, vol. 18, no. 2, pp. 76–82, Sep. 2003, doi: 10.1002/da.10113.
[51] D. M. Carbonell *et al.*, "Promoting Resilience in Young Adults at Risk for Depression," *Child and Adolescent Social Work Journal*, vol. 19, no. 5, pp. 393–413, 2002.
[52] J. Bowlby, "*Attachment and loss volume 1: attachment*," The Hogarth Press and Institute of Psycho-Analysis, Basic Books, New York, 1969.
[53] L. K. McGinn, D. Cukor, and W. C. Sanderson, "The relationship between parenting style, cognitive style, and anxiety and depression: Does increased early adversity influence symptom severity through the mediating role of cognitive style?," *Cognitive Therapy and Research*, vol. 29, no. 2, pp. 219–242, Apr. 2005, doi: 10.1007/s10608-005-3166-1.
[54] T. A. Murberg and E. Bru, "The relationships between negative life events, perceived support in the school environment and depressive symptoms among Norwegian senior high school students: A prospective study," *Social Psychology of Education*, vol. 12, no. 3, pp. 361–370, Sep. 2009, doi: 10.1007/s11218-008-9083-x.
[55] S. Cohen and T. A. Wills, "Stress, social support, and the buffering hypothesis," *Psychological Bulletin*, vol. 98, no. 2, pp. 310–357, Sep. 1985, doi: 10.1037/0033-2909.98.2.310.

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APPENDIX

Table 1. Results summary

Authors	Sample size	Sample characteristics	Country	Study design	Factors of depression	
[13]	151	13-16	Pennsyl-vania.	Cross-sectional	Emotion network density	r=0.22**
[14]	99	12-18 Mage=14.9; SD=1.52	Scottland	Cross-sectional	Dysfunctional attitudes Reference recall bias Rumination Neuroticism	r=-0.51*** r=0.42*** r=0.58*** r=0.63***
[15]	793	11-19 Mage=14.41; SD=1.70	Shanxi province, China	Cross-sectional	Psychological insecurity Cyber victimization Perceived social support	r=0.58*** r=0.21*** r=-0.39***
[16]	124	10-12 Mage=10.75; SD=0.93	Texas	Cross-sectional	Anxiety sensitivity	b=0.45, sr^2=0,06
[17]	1127	12-16 Mage=15.42; SD 0.703	China	Cross-sectional	Forgiveness Cognitive reappraisal Expression suppression	r=-0.352*** r=-0.301*** r=0.287***
[18]	772	14-19	China	Cross-sectional	Procrastination Perceived social support	r=0.34*** r=-0.38***
[19]	968	15 Mage: 15.16; SD=0.48	Croatia	Cross-sectional	Neuroticism Extraversion Openness Agreeableness Conscientiousness Quality attachment to mother Quality attachment to father	r=0.62** r=-0.31** r=-0.11** r=-0.33** r=-0.28** r=-0.35*** r=-0.36***
[20]	278	12-18	Wuhan, China	Cross-sectional	Resilience Total negative life event	r=-0.512** r=0.332***
[21]	486	13-16	Oman	Cross-sectional	View of world Negative life events	r=-0.22*** r=0.11*
[22]	769	13-18	U.K	Cross-sectional	Self concept: Self valence index	r=-0.54***
[23]	2407	11-16 Mage=13.15, SD=0.64)	China	Cross-sectional	Self esteem Parental phubbing Perceived social support	r=-0.21*** r=0.20*** r=-0.16***
[24]	6019	10-17	Wuhan China	Cross-sectional	Openness Conscientiousness Extraversion Agreeableness Neuroticism Resilience	r=-0.15*** r=-0.43*** r=-0.40*** r=-0.32*** r=0.59*** r=-0.38***
[25]	852	Sec School M age=14.8	Malaysia	Cross-sectional	Self-esteem Problem-focused coping	r=-0.487*** r=-0.19***
[26]	367	10-12	Valencia (Spain)	Cross-sectional	Affective state fear	r=0.47**
[27]	220	15-17 Mage=16.08	Turkey	Cross-sectional	Emotion regulation: Clarity Impulse Non-acceptance Goals Strategy Mother attachment Father attachment	r=-0.31 s.d-0.38** r=0.50 s.d 0.52** r=0.39 s.d 0,42** r=0.47 s.d 0.53** r=0.62 s.d 0.63** r=-0.27 s.d-0.33** r=-0.26 s.d-0.32**
[28]	273	11-18	St. Paul, Minnesota	Cross-sectional	Self-steem and Low Depression	r=0.666***

Table 1. Results summary

Authors	Sample size	Sample characteristics	Country	Study design	Factors of depression	
[29]	1020	15-19 Mage=16.82; SD=0.86	China	Cross-sectional	Self-compassion Harsh parenting	r=-0.52** r=0.32**
[30]	365	14-18 Mage=15.96; SD=0.69	China	Cross-sectional	Rumination Self esteem Social networking sites addiction	r=0.70*** r=-0.56*** r=0.18***
[31]	209	12-17 patient diagnosed MDD Mage=13.28, SD=4.19	North China	Cross-sectional	Psychology capital: Self efficacy Optimism Hope Resiliency Positive coping Social support	r=-0.48** r=-0.28** r=-0.52** r=-0.43** r=-0.19** r=-0.40** r=-0.31**
[32]	5149	Mage=14.4, SD=0.93 8th grade	EU countries (Austria, Germany, Slovenia, and Spain)	Cross-sectional	Self concept: Self-acceptance Emotional self-control An optimistic future view Inconsistent parenting	η^2=16-22% η^2=25-30% η^2=8-17% η^2=12-18%
[33]	530	10-18 Mage=15.15	China	Cross-sectional	Parental phubbing	r=0.41***

*p<0.05; **p<0.01; ***p<0.001


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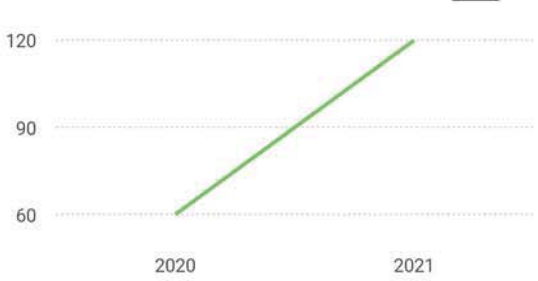

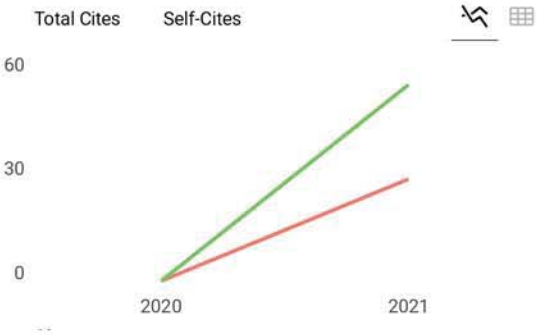

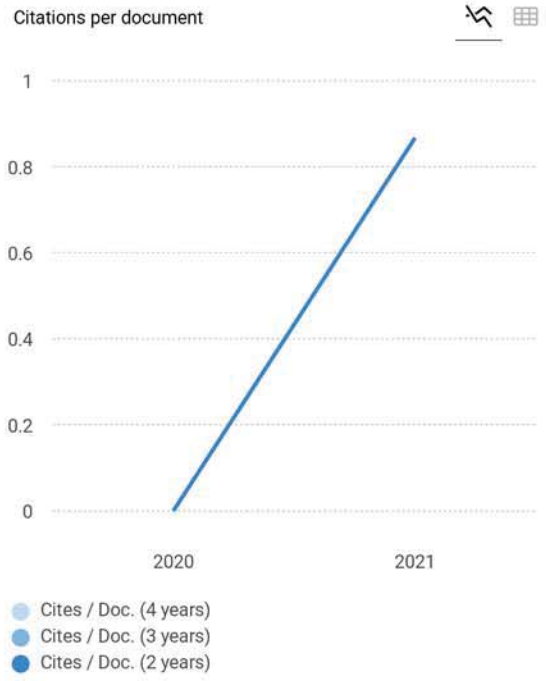

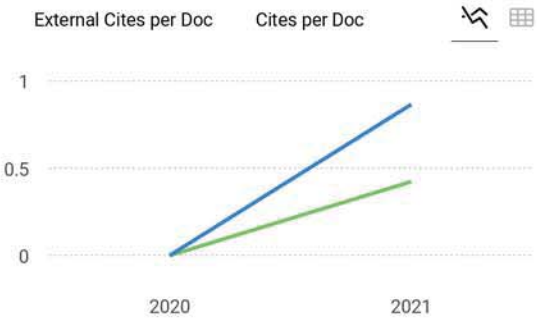

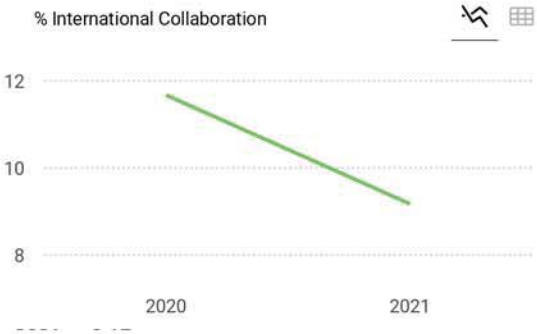

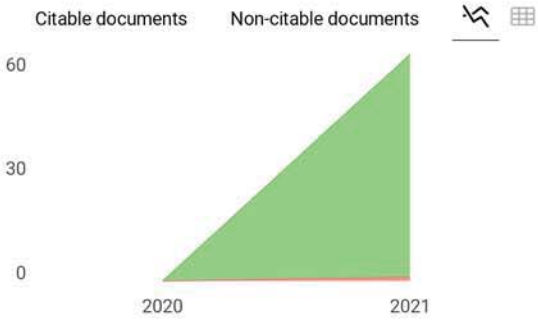

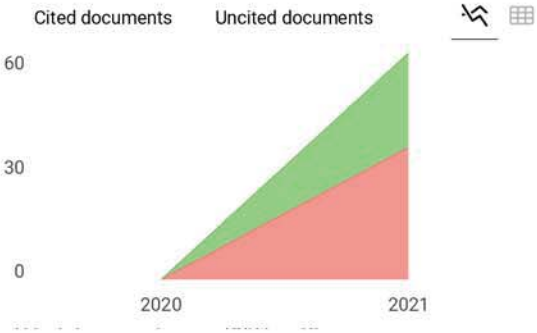

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