

# The Effect of Positive Psychotherapy on Positive Youth Development in Adolescent Girls with Social Anxiety

Mohammad. Karimi<sup>1</sup>, Navid. Nasr Esfahani<sup>2</sup>, Afshin. Ataeiyan<sup>3\*</sup>

<sup>1</sup> Department of Clinical Psychology, Isf.C., Islamic Azad University, Isfahan, Iran

<sup>2</sup> Addiction Department, School of Behavioral Sciences and Mental Health (Tehran Institute of Psychiatry), Iran University of Medical Sciences, Tehran, Iran

<sup>3</sup> Psychiatrist, Board-Certified in Psychiatry, Isfahan University of Medical Sciences, Isfahan, Iran

\* Corresponding author email address: afshinataeian@gmail.com

## Article Info

### Article type:

Original Research

### How to cite this article:

Karimi, M., Nasr Esfahani, N., & Ataeiyan, A. (2027). The Effect of Positive Psychotherapy on Positive Youth Development in Adolescent Girls with Social Anxiety. *Journal of Adolescent and Youth Psychological Studies*, 8(3), 1-14.  
<http://dx.doi.org/10.61838/kman.jayps.6152>



© 2027 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

## ABSTRACT

**Objective:** This study aimed to determine the effectiveness of positive psychotherapy in improving positive youth development among adolescent girls with social anxiety.

**Methods and Materials:** This quasi-experimental study employed a pretest-posttest design with a control group and follow-up assessment. The statistical population consisted of adolescent girls with social anxiety living in Isfahan, Iran, during spring 2023. Using purposive sampling, 36 eligible participants were selected and randomly assigned to experimental and control groups. The experimental group received ten sessions of positive psychotherapy, whereas the control group received no psychological intervention during the study period. Data were collected using the Social Phobia Inventory developed by Connor et al. (2000) and the Positive Youth Development Scale developed by Geldhof et al. (2014). Repeated-measures analysis of variance was used to evaluate changes in positive youth development across the pretest, posttest, and follow-up assessments and to compare the trajectories of the two groups.

**Findings:** Inferential analyses demonstrated a statistically significant difference between the experimental and control groups in positive youth development across the assessment stages ( $p < .05$ ). Participants who received positive psychotherapy showed significantly greater improvement in positive youth development at posttest compared with participants in the control group. The improvement observed following the intervention was also maintained at the follow-up assessment, indicating that the therapeutic effects were not limited to the immediate post-intervention period. The pattern of repeated-measures findings therefore supported the effectiveness and relative durability of positive psychotherapy in promoting positive developmental outcomes among adolescent girls experiencing social anxiety.

**Conclusion:** Positive psychotherapy appears to be an effective intervention for enhancing positive youth development in adolescent girls with social anxiety, with beneficial effects persisting during follow-up. Accordingly, this intervention may be incorporated into psychological, counseling, and school-based programs designed to strengthen positive developmental capacities among socially anxious adolescents.

---

**Keywords:** *Positive Psychotherapy; Positive Youth Development; Social Anxiety; Adolescent Girls*

---

## 1. Introduction

Adolescence is a critical developmental period characterized by rapid biological, cognitive, emotional, and social changes that influence later psychological functioning, interpersonal relationships, and adaptation to adult roles. Contemporary developmental science increasingly regards adolescence not merely as a period of vulnerability and behavioral risk, but also as a stage marked by considerable plasticity, growth potential, identity formation, and opportunities for developing personal and interpersonal resources (Dimitrova & Wiium, 2021; Steinberg & Lerner, 2004). This shift has contributed to growing attention to strengths-based approaches that seek to identify the conditions under which young people can thrive rather than focusing exclusively on the prevention or treatment of psychological problems. Within this perspective, positive youth development has emerged as an important framework for understanding how individual strengths interact with supportive relationships and social contexts to promote healthy developmental trajectories (Benson et al., 2007; Shek et al., 2019). Promoting such developmental capacities may be particularly important for adolescents experiencing psychological difficulties such as social anxiety, because anxiety can interfere with opportunities for social participation, competence development, exploration, and the formation of supportive peer relationships.

Social anxiety is characterized by intense fear, discomfort, or apprehension in situations involving possible scrutiny, evaluation, or rejection by others. During adolescence, when peer acceptance, social comparison, interpersonal evaluation, and belonging become increasingly salient, such anxiety can substantially affect everyday functioning (Field, 2020). Adolescents with elevated social anxiety may avoid classroom participation, interpersonal communication, social gatherings, unfamiliar situations, and other experiences that are essential for normative psychosocial development. Anxiety disorders also represent a major component of the overall burden of psychological problems, and their relatively early emergence increases the possibility that difficulties may persist or become associated with additional emotional and functional impairment if they remain unaddressed (Kessler et al., 2012; Walter et al., 2020). Accordingly, the treatment of social anxiety in adolescence should not be confined

solely to reducing fear and avoidance; interventions may also need to restore developmental opportunities, positive emotional experiences, social engagement, self-confidence, and other psychological resources that anxiety may restrict.

A particularly important feature of social anxiety is its relationship with diminished positive psychological experience. Research has suggested that socially anxious individuals do not merely experience elevated negative affect; they may also demonstrate reduced positive affect, fewer rewarding interpersonal experiences, difficulties deriving pleasure from social interaction, and restricted participation in potentially meaningful activities (Kashdan, 2007). From a self-regulatory perspective, social anxiety can alter the manner in which individuals attend to, anticipate, interpret, and respond to positive experiences, thereby limiting opportunities to build psychological and social resources (Kashdan et al., 2011). Experimental evidence also indicates that attentional processing of positive social stimuli may be altered among individuals with social anxiety, suggesting that the disorder can influence not only responses to threat but also the processing of potentially rewarding information (Chen et al., 2012). These observations are particularly relevant during adolescence because repeated avoidance of positive interpersonal experiences may gradually interfere with the development of competence, confidence, connection, character, and caring, which are central components of positive youth development.

The positive youth development framework developed in response to limitations of deficit-oriented models that conceptualized healthy adolescence primarily as the absence of behavioral or psychological problems. Instead, positive youth development proposes that young people possess strengths and developmental potential that can be enhanced when their personal characteristics are aligned with supportive environmental resources (Benson et al., 2007; Zarrett & Lerner, 2008). Early conceptualizations of youth development programs emphasized the importance of sustained relationships, opportunities for skill development, meaningful participation, and environments that recognize young people as active agents in their own development (Gootman & Eccles, 2002; Roth & Brooks-Gunn, 2003). Evaluations of positive youth development programs have further shown that interventions emphasizing competencies, bonding, prosocial opportunities, self-efficacy, positive identity, and recognition of adaptive behavior can yield beneficial developmental outcomes (Catalano et al., 2004).

Thus, positive youth development represents a broader developmental objective than symptom reduction and is especially compatible with interventions seeking to cultivate strengths and psychological resources.

One of the most influential formulations of positive youth development is the Five Cs model, which conceptualizes optimal adolescent development in terms of competence, confidence, connection, character, and caring. Competence refers to positive perceptions and performance within social, academic, cognitive, and behavioral domains; confidence concerns an overall sense of self-worth and self-efficacy; connection reflects positive reciprocal relationships with family members, peers, schools, and communities; character denotes respect for social and cultural norms, integrity, and moral functioning; and caring reflects sympathy and empathy toward others (Geldhof et al., 2014). When these developmental assets are strengthened, adolescents may become more capable of contributing positively to their families and communities. Short-form measurement approaches have made it possible to assess these dimensions efficiently and have supported the empirical coherence of the Five Cs framework (Geldhof et al., 2014; Milot, 2014). More recent research has continued to expand the framework across cultural, educational, and community contexts, reinforcing the view that positive development is shaped by dynamic interactions between individual capacities and contextual opportunities (Dimitrova & Wiium, 2021; Smith, 2025).

Positive youth development may also operate as an important protective framework in relation to anxiety. Adolescents with stronger developmental assets may have greater access to self-regulatory capacities, supportive relationships, purposeful goals, and positive self-appraisals that reduce vulnerability to internalizing difficulties. Research examining the interplay between the Five Cs and anxiety has demonstrated meaningful associations between positive developmental characteristics and lower levels of anxiety, suggesting that positive youth development may function both as an outcome of healthy adaptation and as a psychological resource in the presence of emotional difficulties (Kozina et al., 2020). Likewise, self-regulation and a sense of purpose have been identified as important predictors of positive youth development in early adolescence, emphasizing the relevance of intentional goal pursuit, behavioral regulation, and meaning in strengthening developmental functioning (Linver et al., 2022). Positive youth development has also been associated with prosocial behavior across studies, further indicating that strengthening

positive developmental assets can extend beyond individual well-being to improve adolescents' constructive engagement with others (Meulenbeek et al., 2026).

The relevance of positive youth development to socially anxious adolescents is also evident in research linking developmental strengths with relational and emotional vulnerabilities. For example, positive youth development has been examined as an explanatory mechanism in the association between insecure attachment, social appearance anxiety, and problematic social media use among adolescents, highlighting its potential role in buffering maladaptive interpersonal processes (Ekinici & Akat, 2023). Youth facing unstable or challenging circumstances may likewise benefit from environments and interventions that provide opportunities for competence, social support, and meaningful connection; evidence from adolescents residing in emergency shelters demonstrates the importance of developmental supports even among populations exposed to substantial psychosocial adversity (Heinze, 2013). Together, these findings indicate that positive youth development should not be viewed exclusively as a framework for typically developing adolescents but as a potentially important intervention target among young people experiencing emotional, relational, or contextual difficulties.

Strengths-based models are theoretically compatible with research on psychological resilience and positive self-appraisal. Resilience involves the capacity to adapt constructively in the presence of stress or adversity and may depend partly on the way individuals evaluate themselves and their ability to cope with difficult circumstances. Positive coping appraisals have been proposed as central components of resilience, indicating that adaptive beliefs about one's personal capacities may reduce the psychological impact of adversity (Johnson, Gooding, Wood, Taylor, et al., 2010). Similarly, positive self-appraisals have been shown to buffer the effects of severe negative psychological states, further emphasizing the protective potential of positive beliefs about oneself (Johnson, Gooding, Wood, & Tarrier, 2010). Character strengths also appear to contribute uniquely to resilience even after accounting for positive affect, optimism, self-efficacy, social support, self-esteem, and life satisfaction (Martínez-Martí & Ruch, 2017). Although resilience and positive youth development are conceptually distinct constructs, both frameworks emphasize resources, adaptive capacities, and constructive functioning rather than defining mental health solely through the absence of symptoms. Research on the psychometric assessment of resilience in

Iranian populations also reflects growing interest in reliable measurement of positive psychological capacities within the local cultural context (Abdi et al., 2019).

Positive psychology provides a particularly relevant therapeutic framework for cultivating such resources. Rather than focusing exclusively on pathology, positive psychology interventions aim to strengthen positive emotions, character strengths, meaning, gratitude, engagement, positive relationships, self-acceptance, and constructive interpretations of personal experience. Positive psychotherapy, as systematized by Rashid and Seligman, integrates these principles into a structured clinical intervention designed to alleviate psychological distress while simultaneously strengthening well-being and positive functioning (Rashid & Seligman, 2018). The intervention typically includes identification and application of signature strengths, cultivation of gratitude, processing of positive and unresolved memories, forgiveness, practical wisdom, meaning, and purposeful engagement. This orientation may be especially useful for adolescents with social anxiety because it directly addresses domains that anxiety can erode, including positive emotional experience, confidence, interpersonal connection, adaptive self-narratives, and meaningful participation in social life.

Evidence from different populations supports the potential value of positive psychological interventions for anxiety-related outcomes. Positive thinking has been described as a potentially useful strategy for decreasing social anxiety by modifying negative cognitive tendencies and strengthening adaptive expectations (Joshi, 2013). In Iranian research, positive thinking training has reduced social anxiety and cognitive avoidance among mothers of children with specific learning disabilities, suggesting that strengths-oriented cognitive and emotional training may influence both anxious affect and avoidance-related processes (Kazemi et al., 2019). Group-based positive thinking training has similarly been reported to improve empathy and reduce social anxiety among students with learning disabilities (Pour et al., 2021). These findings are relevant because empathy, interpersonal engagement, positive cognition, and reduction of avoidance overlap conceptually with several dimensions of positive youth development.

Other psychological interventions targeting social anxiety likewise demonstrate that modifiable self-related and interpersonal processes can improve through structured treatment. Self-acceptance group therapy has shown effectiveness among students with social anxiety, supporting

the proposition that improving one's relationship with the self may reduce socially evaluative distress (Jabbari et al., 2021). More recent applications of positive psychology also suggest benefits across different forms of anxiety. Positive psychology approaches have been applied to foreign-language classroom anxiety, with processes such as self-efficacy, flow, and self-compassion providing mechanisms through which positive psychological resources may reduce anxiety and enhance adaptive engagement (Jia et al., 2026). Positive psychology training has also demonstrated beneficial effects on anxiety, social skills, and meaning in life in older adults, indicating that its influence can simultaneously encompass symptom reduction and enhancement of positive functioning (Yousefpour, 2025). In educational populations, positive psychology training has been compared with mindfulness-based cognitive therapy and shown beneficial effects on self-efficacy and teaching anxiety, further supporting the relevance of positive-resource enhancement for anxiety-related experiences (Hajizadeh Anari & Miri, 2025). Although these populations differ from socially anxious adolescent girls, collectively these studies indicate that positive psychological interventions may affect anxiety partly by strengthening competencies and resources that are also central to positive development.

This distinction is important because successful intervention with adolescents should ideally produce more than a reduction in psychopathological symptoms. Adolescents may continue to experience limitations in participation, relationships, identity development, or confidence even when symptom severity has declined. A developmental intervention should therefore aim to strengthen the qualities that enable young people to function effectively and meaningfully across social contexts. Positive youth development programs have historically emphasized this broader objective by combining prevention with the promotion of competencies, relationships, opportunities, and positive identity (Catalano et al., 2004; Gootman & Eccles, 2002). Contemporary research similarly emphasizes that positive youth development can provide a framework for policy and practice across culturally diverse settings rather than serving only as a theoretical description of adolescent adjustment (Dimitrova & Wiium, 2021; Shek et al., 2019). For adolescent girls with social anxiety, strengthening developmental assets may help counteract a cycle in which fear of evaluation leads to avoidance, avoidance reduces positive social experiences, and reduced experience further limits confidence and connection.

Gender may also be relevant to the way adolescents experience social expectations, interpersonal evaluation, and developmental opportunities. Positive youth development research has considered the relationship between conformity to gender norms, social support, and adolescent mental health, suggesting that positive developmental resources can provide a useful framework for understanding how social expectations interact with psychological adjustment (Milot, 2014). Social anxiety among adolescent girls may therefore be particularly consequential when it interferes with relationship formation, self-expression, educational participation, and the development of confidence. A therapeutic approach that systematically emphasizes positive self-description, character strengths, gratitude, constructive relationships, forgiveness, meaning, and purposeful future orientation could provide a developmentally relevant complement to interventions that focus primarily on anxiety symptoms.

Despite the theoretical convergence between positive psychotherapy and positive youth development, comparatively less attention has been devoted to examining whether a structured positive psychotherapy program can directly improve the multidimensional construct of positive youth development among adolescent girls identified with social anxiety. Much of the existing literature has examined social anxiety as an outcome, positive thinking as a brief training approach, or positive youth development as a correlational or programmatic framework (Kashdan, 2007; Kozina et al., 2020; Pour et al., 2021). At the same time, evidence concerning character strengths, resilience, self-regulation, purpose, prosocial behavior, and positive self-appraisal suggests that many of the psychological resources targeted by positive psychotherapy are closely aligned with the mechanisms through which adolescents achieve adaptive development (Johnson, Gooding, Wood, & Tarrier, 2010; Johnson, Gooding, Wood, Taylor, et al., 2010; Linver et al., 2022; Martínez-Martí & Ruch, 2017; Meulenbeek et al., 2026). Evaluating positive psychotherapy within this developmental framework may therefore provide a more comprehensive understanding of its potential benefits for socially anxious adolescents and may help inform counseling and school-based interventions aimed not only at symptom reduction but also at strengthening positive developmental capacities.

Accordingly, the aim of the present study was to determine the effect of positive psychotherapy on positive youth development among adolescent girls with social anxiety.

## 2. Methods and Materials

### 2.1. Study Design and Participants

This study was quantitative in approach and applied in purpose and was conducted to determine the effectiveness of positive psychotherapy in enhancing positive youth development among adolescent girls with social anxiety. Given the use of purposive sampling and the absence of full random sampling from the target population, a quasi-experimental pretest–posttest design with a control group and a follow-up assessment was employed. The statistical population consisted of adolescent girls with social anxiety residing in Isfahan, Iran, in spring 2023. Following an announcement distributed through social media platforms, 234 adolescents expressed willingness to participate in the study. These individuals underwent initial screening using the Social Phobia Inventory, through which 87 adolescents meeting the initial criterion for social anxiety were identified. Subsequently, an initial interview and assessment of the eligibility criteria were conducted, and 36 participants were selected through purposive sampling. The selected adolescents were then randomly allocated by simple lottery to the positive psychotherapy group and the control group, with 18 participants initially assigned to each group. The allocation of 18 participants to each condition was determined with consideration of the commonly recommended minimum sample size of approximately 15 participants per group for quasi-experimental studies and the possibility of participant attrition during the intervention. The inclusion criteria were being female, being between 12 and 16 years of age, obtaining a score of 40 or higher on the Social Phobia Inventory, not receiving concurrent psychological or psychiatric treatment, having no other identified psychological disorder, and providing full consent and willingness to participate in the intervention and research procedures. The exclusion criteria included being younger than 12 or older than 16 years, receiving concurrent psychological or psychiatric treatment during the study, and missing more than two intervention sessions. Before the intervention, both groups completed the pretest measures. The experimental group subsequently received positive psychotherapy, whereas the control group received no psychological intervention during the study period. Following completion of the ten-session intervention, both groups completed the posttest assessments, and the same instruments were administered again approximately six weeks later for the follow-up assessment. During the study, three participants in the experimental group and two

participants in the control group were lost because of excessive absence or incomplete questionnaires. Consequently, the final sample available for analysis consisted of 31 participants, including 15 participants in the positive psychotherapy group and 16 participants in the control group.

## 2.2. Measures

The Social Phobia Inventory (SPIN), developed by Connor, Davidson, Churchill, Sherwood, Foa, and colleagues in 2000, was used for the initial screening of potential participants and assessment of social anxiety. This self-report instrument consists of 17 items distributed across three dimensions: fear, comprising six items; avoidance, comprising seven items; and physiological discomfort, comprising four items. Each item is rated on a five-point Likert-type scale ranging from 0 (not at all) to 4 (extremely), with higher scores representing greater severity of social anxiety. A cutoff score of 40 has been reported to differentiate individuals with social anxiety from those without the condition with approximately 80% diagnostic accuracy, whereas a cutoff score of 50 has been associated with approximately 89% diagnostic accuracy. In the original psychometric evaluation, the two-week test-retest reliability coefficient was reported as .78 and was statistically significant at  $p < .001$ . Cronbach's alpha was .94 for the total scale and .89, .91, and .80 for the fear, avoidance, and physiological discomfort subscales, respectively, indicating satisfactory internal consistency. Psychometric investigations of the Persian version have also supported its construct validity using exploratory and confirmatory factor analyses. Factor-analytic findings have indicated an interpretable factor structure accounting for a substantial proportion of the observed variance, and high internal consistency has been reported for the overall scale and its dimensions. In the present study, the internal consistency of the Social Phobia Inventory was examined using Cronbach's alpha and yielded a coefficient of .72, indicating an acceptable level of reliability for the study sample.

The Positive Youth Development Scale was developed by Geldhof, Bowers, Boyd, Mueller, Napolitano, and colleagues in 2014 and was used as the primary outcome measure of the study. The short form contains 17 items and assesses positive youth development across five domains commonly conceptualized as competence, confidence, connection, character, and caring. The instrument incorporates items requiring adolescents to identify

statements that most closely reflect their characteristics, together with items rated on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating greater positive youth development. The 17-item version was developed to reproduce the factorial structure of the longer 80-item measure while providing a more concise assessment of the five positive developmental characteristics. Previous psychometric evidence has demonstrated significant convergent validity through positive associations with community participation, with reported coefficients ranging from .21 to .56, as well as appropriate divergent validity through negative associations with depression, with correlations ranging approximately from  $-.40$  to  $-.68$ , and risky behaviors, with correlations ranging approximately from  $-.46$  to  $-.66$ . The reliability of the overall instrument has previously been reported as .74 using Cronbach's alpha. Psychometric evaluation of the Persian version has also supported its internal consistency, with a Cronbach's alpha coefficient of .81 for the total scale and reported coefficients of .50 for competence, .86 for confidence, .52 for character, .63 for caring, and .79 for connection. In the present study, Cronbach's alpha for the total Positive Youth Development Scale was .83, demonstrating satisfactory internal consistency.

## 2.3. Intervention

The positive psychotherapy intervention was implemented in ten sessions based on the therapeutic framework developed by Rashid and Seligman in 2018. The program was designed to strengthen positive emotions, engagement, positive relationships, meaning, character strengths, gratitude, forgiveness, and other psychological resources relevant to adaptive functioning. In the first session, participants were introduced to the rationale and principles of positive psychotherapy, including the role that deficiencies in positive emotional experiences, engagement, meaningful relationships, meaning, and character strengths may play in psychological difficulties such as anxiety, depression, and feelings of emptiness; participants were also asked to prepare a positive self-introduction and describe a real-life experience in which they had effectively used their personal strengths. The second session focused on recognizing and appreciating blessings and positive experiences, reflecting on the positive self-introduction, and beginning regular gratitude exercises through recording positive events and considering the effects of gratitude on well-being. The third session emphasized gratitude toward

others and the constructive processing of positive memories; participants were asked to identify a living person who had positively influenced their lives but had not been adequately thanked, write a gratitude letter, and, where possible, read it personally to that individual. The fourth session focused on identifying individual character strengths through information obtained from different sources and developing a personal strengths profile. The fifth session introduced practical wisdom and provided training in strategies such as identifying relevant characteristics, recognizing relationships, resolving conflicts, reflecting on alternatives, and evaluating possible responses using sample situations. The sixth session constituted a mid-treatment review during which previous gratitude assignments were followed up, participants were encouraged to share and discuss their gratitude journals, and feedback regarding perceived therapeutic benefits was obtained. The seventh session addressed open or unresolved negative memories and closed or successfully resolved positive memories, with participants learning to recall, write about, process, and respond more adaptively to unresolved experiences. The eighth session focused on forgiveness as a psychological process capable of reducing anger and resentment and potentially transforming negative emotional responses into neutral or positive ones; forgiveness was practiced using the REACH framework and the preparation of a forgiveness letter. The ninth session addressed the distinction between maximizing, defined as continually attempting to make the best possible choice, and satisficing, defined as making an adequately good choice; participants identified areas of their lives characterized by excessive maximizing or appropriate satisficing and developed a plan to increase adaptive satisficing. The tenth and final session focused on identifying and pursuing meaningful goals and activities to promote greater fulfillment, reviewing the participants' positive self-narratives and psychological resources developed throughout treatment, and asking them to reflect on how they wished to be remembered in the future and the positive influence they hoped to have on others. The posttest assessment was administered following completion of the tenth session, while the control group received no corresponding intervention during this period.

#### 2.4. Data Analysis

Following data collection at the pretest, posttest, and six-week follow-up assessments, the data were analyzed using both descriptive and inferential statistical procedures. At the

descriptive level, measures of central tendency and dispersion, including the mean, standard deviation, and standard error, were calculated to summarize the distribution of positive youth development scores across the experimental and control groups at each measurement occasion. Before conducting the principal inferential analysis, the assumptions required for repeated-measures analysis of variance were examined. These included assessment of the normality of the distribution of the study variables, homogeneity of error variances between groups, independence of observations, and the relevant assumptions concerning the variance–covariance structure across repeated measurements. After establishing the adequacy of these assumptions, repeated-measures analysis of variance was used to examine changes in positive youth development across the three assessment occasions and to determine whether the pattern of change differed significantly between the positive psychotherapy and control groups. The analysis therefore evaluated both within-participant changes over time and between-group differences in the trajectories of positive youth development from pretest to posttest and follow-up. Statistical significance was evaluated at the conventional alpha level of .05.

### 3. Findings and Results

The final sample consisted of 31 adolescent girls, including 15 participants in the positive psychotherapy group and 16 participants in the control group. In the positive psychotherapy group, 13.3% of participants were 12 years old, 26.7% were 13 years old, 33.3% were 14 years old, and 26.7% were 15 years old, whereas the corresponding proportions in the control group were 12.5%, 18.8%, 31.2%, and 37.5%, respectively. With regard to maternal age, 6.7%, 33.3%, 33.3%, and 26.7% of mothers in the experimental group were aged 35–40, 40–45, 45–50, and 50–55 years, respectively, compared with 0%, 43.7%, 25.0%, and 31.3% in the control group. Regarding paternal age, the respective distributions across the age categories of 35–40, 40–45, 45–50, 50–55, and over 55 years were 13.3%, 46.7%, 13.3%, 13.3%, and 13.3% in the experimental group and 12.5%, 31.2%, 31.2%, 6.3%, and 18.8% in the control group. In terms of school grade, 26.7%, 40.0%, and 33.3% of the experimental group were in the first, second, and third grades, respectively, compared with 31.2%, 31.2%, and 37.5% of the control group. The majority of parents had a high-school diploma or lower level of education. In addition, 26.7% of participants in the experimental group and 25.0%

in the control group were only children, while 40.0% and 50.0%, respectively, belonged to two-child families. Chi-square analyses indicated no statistically significant differences between the two groups in age ( $\chi^2 = 0.511$ ,  $p = .916$ ), maternal age ( $\chi^2 = 1.525$ ,  $p = .677$ ), paternal age ( $\chi^2 =$

2.122,  $p = .713$ ), school grade ( $\chi^2 = 0.261$ ,  $p = .878$ ), maternal education ( $\chi^2 = 0.111$ ,  $p = .991$ ), paternal education ( $\chi^2 = 0.100$ ,  $p = .780$ ), or number of children in the family ( $\chi^2 = 1.789$ ,  $p = .775$ ). Thus, the experimental and control groups were demographically comparable at baseline.

**Table 1**

*Descriptive Statistics for Positive Youth Development Across the Three Measurement Stages*

| Variable                   | Assessment Stage | Positive Psychotherapy, Mean | Positive Psychotherapy, SD | Control, Mean | Control, SD |
|----------------------------|------------------|------------------------------|----------------------------|---------------|-------------|
| Positive youth development | Pretest          | 40.40                        | 5.15                       | 39.62         | 5.81        |
| Positive youth development | Posttest         | 56.60                        | 6.23                       | 39.87         | 4.22        |
| Positive youth development | Follow-up        | 52.73                        | 6.20                       | 40.87         | 4.44        |

As shown in Table 1, the mean score of positive youth development in the positive psychotherapy group increased substantially from 40.40 (SD = 5.15) at pretest to 56.60 (SD = 6.23) at posttest and remained higher than the baseline level at the follow-up assessment, with a mean of 52.73 (SD = 6.20). In contrast, the control group showed only minimal changes across the three measurement occasions, with mean scores of 39.62 (SD = 5.81) at pretest, 39.87 (SD = 4.22) at posttest, and 40.87 (SD = 4.44) at follow-up. Accordingly, the descriptive pattern suggested a marked improvement in positive youth development following positive psychotherapy, followed by a modest decline at follow-up, whereas scores in the control group remained relatively stable over time.

Before conducting the repeated-measures analysis of variance, the relevant statistical assumptions were examined. The Shapiro–Wilk test was nonsignificant for positive youth development at all three measurement stages in both groups. Specifically, in the positive psychotherapy group, the Shapiro–Wilk statistics were .958 ( $p = .666$ ), .924

( $p = .219$ ), and .955 ( $p = .601$ ) for the pretest, posttest, and follow-up assessments, respectively; in the control group, the corresponding values were .905 ( $p = .095$ ), .948 ( $p = .460$ ), and .977 ( $p = .931$ ). These findings supported the assumption of normality. Levene's test was also nonsignificant at pretest,  $F = 1.162$ ,  $p = .290$ ; posttest,  $F = 3.767$ ,  $p = .062$ ; and follow-up,  $F = 0.547$ ,  $p = .466$ , indicating homogeneity of error variances between the groups at each assessment occasion. Box's M test was nonsignificant,  $M = 13.938$ ,  $p = .055$ , supporting the assumption of equality of the variance–covariance matrices. Furthermore, Mauchly's test of sphericity was nonsignificant,  $W = .931$ ,  $p = .366$ , indicating that the sphericity assumption was satisfied. The homogeneity of regression slopes was also examined as an additional assumption and was found to be acceptable. Therefore, the required assumptions for conducting the repeated-measures analysis were adequately met, and the results based on the sphericity-assumed estimates were interpreted.

**Table 2**

*Repeated-Measures Analysis of Variance for Positive Youth Development*

| Source of Effect    | Analysis           | Sum of Squares | df   | Mean Square | F      | p      | Partial $\eta^2$ | Power |
|---------------------|--------------------|----------------|------|-------------|--------|--------|------------------|-------|
| Time                | Sphericity assumed | 1195.683       | 2.00 | 597.842     | 57.744 | < .001 | .666             | 1.00  |
| Time                | Greenhouse–Geisser | 1195.683       | 1.87 | 639.261     | 57.744 | < .001 | .666             | 1.00  |
| Time                | Huynh–Feldt        | 1195.683       | 2.00 | 597.842     | 57.744 | < .001 | .666             | 1.00  |
| Time                | Lower bound        | 1195.683       | 1.00 | 1195.683    | 57.744 | < .001 | .666             | 1.00  |
| Time $\times$ Group | Sphericity assumed | 1034.651       | 2.00 | 517.325     | 49.967 | < .001 | .633             | 1.00  |
| Time $\times$ Group | Greenhouse–Geisser | 1034.651       | 1.87 | 553.166     | 49.967 | < .001 | .633             | 1.00  |
| Time $\times$ Group | Huynh–Feldt        | 1034.651       | 2.00 | 517.325     | 49.967 | < .001 | .633             | 1.00  |
| Time $\times$ Group | Lower bound        | 1034.651       | 1.00 | 1034.651    | 49.967 | < .001 | .633             | 1.00  |

As presented in Table 2, because the assumption of sphericity was satisfied, the sphericity-assumed results were used for interpretation. The main effect of time on positive

youth development was statistically significant,  $F(2) = 57.744$ ,  $p < .001$ , partial  $\eta^2 = .666$ , with an observed statistical power of 1.00. This finding indicates that positive

youth development scores differed significantly across the pretest, posttest, and follow-up assessments. The partial eta-squared value of .666 represents a large effect, indicating that a substantial proportion of the within-subject variation in positive youth development was associated with changes across measurement occasions. More importantly, the time  $\times$  group interaction was also statistically significant,  $F(2) = 49.967$ ,  $p < .001$ , partial  $\eta^2 = .633$ , with an observed power of 1.00. The significant interaction demonstrates that the

pattern of change over time differed substantially between the positive psychotherapy and control groups. In other words, the increase in positive youth development observed from pretest to posttest and maintained at follow-up was significantly greater in the positive psychotherapy group than in the control group. The large interaction effect further supports the effectiveness of positive psychotherapy in producing meaningful changes in positive youth development among adolescent girls with social anxiety.

**Table 3**

*Bonferroni Post-Hoc Pairwise Comparisons of Positive Youth Development Across Measurement Stages*

| Variable                   | Assessment Stage | Comparison Stage | Mean Difference | Standard Error | p    |
|----------------------------|------------------|------------------|-----------------|----------------|------|
| Positive youth development | Pretest          | Posttest         | 16.272          | 1.552          | .001 |
| Positive youth development | Pretest          | Follow-up        | 11.305          | 1.309          | .001 |
| Positive youth development | Posttest         | Pretest          | -16.272         | 1.522          | .001 |
| Positive youth development | Posttest         | Follow-up        | 2.105           | 3.075          | .499 |

The Bonferroni-adjusted pairwise comparisons presented in Table 3 showed that positive youth development differed significantly between the pretest and posttest assessments (mean difference = 16.272,  $p = .001$ ) and between the pretest and follow-up assessments (mean difference = 11.305,  $p = .001$ ). These results indicate that the improvement observed immediately after positive psychotherapy remained statistically significant at the follow-up assessment relative to baseline. In contrast, the difference between the posttest and follow-up assessments was not statistically significant (mean difference = 2.105,  $p = .499$ ), demonstrating that there was no significant loss of the treatment effect during the follow-up period. Taken together with the significant time  $\times$  group interaction, these findings indicate that positive psychotherapy significantly enhanced positive youth development among adolescent girls with social anxiety compared with the control condition and that the beneficial effect was maintained approximately six weeks after completion of the intervention.

#### 4. Discussion

The present study examined the effect of positive psychotherapy on positive youth development among adolescent girls with social anxiety. The findings showed that positive psychotherapy produced a significant improvement in positive youth development compared with the control condition. The repeated-measures analysis indicated a significant main effect of time and, more importantly, a significant time  $\times$  group interaction, demonstrating that the pattern of change across pretest,

posttest, and follow-up differed between the experimental and control groups. The large partial eta-squared values for both the time effect and the time  $\times$  group interaction further indicated that the intervention was associated with substantial changes in positive youth development. Bonferroni post-hoc comparisons showed that positive youth development scores increased significantly from pretest to posttest and remained significantly higher than baseline at the follow-up assessment, whereas there was no statistically significant difference between posttest and follow-up. This pattern indicates that positive psychotherapy not only improved positive youth development immediately after the intervention but that the observed benefit was also maintained approximately six weeks after treatment. These findings support the proposition that a strengths-oriented psychological intervention can enhance developmental resources among adolescent girls whose social anxiety may otherwise restrict participation, confidence, social connection, and positive engagement.

The findings are consistent with the broader positive youth development literature, which emphasizes that adolescence should be understood not only in terms of problems and vulnerabilities but also in terms of competencies, strengths, and developmental resources that can be deliberately cultivated (Benson et al., 2007; Shek et al., 2019). Positive youth development models propose that adolescents flourish when their personal assets are supported by developmental contexts that provide opportunities for competence, belonging, meaningful participation, and constructive identity formation (Gootman & Eccles, 2002;

Roth & Brooks-Gunn, 2003). The improvement observed in the present study can therefore be interpreted as evidence that positive psychotherapy may function as a structured developmental context in which socially anxious adolescents are repeatedly encouraged to identify strengths, reinterpret experiences, engage with others, clarify values, and construct more adaptive views of themselves. Such processes are closely aligned with the central principles of positive youth development, according to which healthy development emerges through mutually reinforcing interactions between individual strengths and supportive experiences (Dimitrova & Wiium, 2021; Zarrett & Lerner, 2008).

The results are also compatible with the Five Cs framework of positive youth development. This framework conceptualizes positive development through competence, confidence, connection, character, and caring (Geldhof et al., 2014). Positive psychotherapy directly addresses several of these dimensions. Exercises involving positive self-introduction and identification of character strengths can strengthen confidence and competence by helping adolescents recognize abilities and personal qualities that may have been overshadowed by negative self-evaluation. Gratitude exercises and interpersonal appreciation may strengthen connection and caring by directing attention toward supportive relationships and positive exchanges. Forgiveness, practical wisdom, and reflection on meaningful future goals may contribute to character development by encouraging thoughtful, value-consistent behavior. Thus, the improvement in the overall positive youth development score is theoretically coherent with the content of the intervention. The psychometric and conceptual work underlying the Five Cs model has shown that these dimensions can be meaningfully represented in a concise measure and collectively reflect adaptive adolescent development (Geldhof et al., 2014; Milot, 2014).

The effect of positive psychotherapy may be particularly important in socially anxious adolescents because social anxiety can diminish positive experience in addition to increasing negative affect. Socially anxious individuals may have fewer rewarding interpersonal encounters, less positive affect, reduced willingness to enter social situations, and diminished opportunities to reinforce positive beliefs about themselves (Kashdan, 2007). Social anxiety may also influence how individuals anticipate, notice, and respond to positive experiences, such that even potentially rewarding situations fail to generate their expected developmental benefits (Kashdan et al., 2011). Research on attentional

processes has similarly suggested altered processing of positive social stimuli among individuals with social anxiety (Chen et al., 2012). From this perspective, the effectiveness of positive psychotherapy in the present study may partly reflect its capacity to redirect attention toward strengths, positive memories, meaningful relationships, gratitude, and constructive future possibilities. By repeatedly increasing exposure to positive self-relevant and interpersonal information, the intervention may weaken the dominance of threat-focused processing and create more opportunities for positive developmental experiences.

The findings are also in line with earlier studies showing that positive psychology and positive thinking interventions can reduce anxiety-related difficulties and improve adaptive functioning. Positive thinking has been reported as a useful approach for reducing social anxiety, presumably by changing maladaptive interpretations and increasing more constructive cognitive orientations (Joshi, 2013). Positive thinking training has also been associated with reductions in social anxiety and cognitive avoidance in Iranian samples (Kazemi et al., 2019), while group-based positive thinking interventions have been found to reduce social anxiety and improve empathy among students with learning disabilities (Pour et al., 2021). Although these studies focused primarily on anxiety-related outcomes rather than positive youth development, they support the broader proposition that strengthening positive cognitive and emotional processes can produce meaningful psychological change in socially vulnerable populations. The current findings extend this body of evidence by indicating that such benefits may also be reflected in a multidimensional developmental construct rather than only in symptom reduction.

The present results can also be explained through changes in self-appraisal and resilience-related processes. Adolescents with social anxiety often experience negative self-evaluation and may interpret social situations through expectations of inadequacy, embarrassment, or rejection. Positive psychotherapy deliberately challenges this narrow negative self-schema by asking participants to identify strengths, describe successful experiences, recognize valued qualities, and construct a more balanced and positive personal narrative. Research has shown that positive coping appraisals are closely related to resilience and can reduce the psychological impact of adversity (Johnson, Gooding, Wood, Taylor, et al., 2010). Positive self-appraisals may similarly buffer the effects of severe negative psychological states and contribute to more adaptive emotional functioning (Johnson, Gooding, Wood, & Tarrier, 2010). In the present

study, repeated attention to personal capabilities and strengths may have strengthened adolescents' confidence in their ability to function socially and psychologically, thereby contributing to broader improvements in positive youth development.

Character strengths may represent another important mechanism. Positive psychotherapy places considerable emphasis on identifying and using personal strengths, and these strengths are closely related to resilience and adaptive functioning. Character strengths have been shown to predict resilience beyond the effects of several established protective factors, including positive affect, optimism, self-efficacy, social support, self-esteem, and life satisfaction (Martínez-Martí & Ruch, 2017). By encouraging adolescents to identify their own strengths and apply them in daily life, the intervention may have increased their perceived competence and strengthened their sense of identity. This is particularly relevant during adolescence, a developmental period in which self-concept is still consolidating and social feedback has considerable influence. The improvement observed in the present study may therefore reflect not only short-term emotional benefits but also a strengthening of internal resources that support adaptive development over time.

Another possible explanation concerns the role of self-regulation and purpose. Positive youth development has been shown to be predicted by self-regulation and a sense of purpose in early adolescence (Linver et al., 2022). Several components of the positive psychotherapy protocol used in the present study are consistent with these processes. Practical wisdom requires adolescents to reflect on alternatives, regulate immediate reactions, evaluate consequences, and make more adaptive decisions. The session addressing maximizing versus satisficing encourages realistic decision-making rather than excessive striving for an ideal option. The final session's focus on meaningful goals and how participants wished to be remembered in the future directly targets purpose and future orientation. These processes may help socially anxious adolescents shift from avoidance-driven behavior toward more intentional and value-consistent action. As a result, improved self-regulation and greater clarity of purpose may have contributed to gains in competence, confidence, and character.

The significant maintenance of intervention effects at follow-up is also noteworthy. Post-hoc findings showed that positive youth development remained significantly higher at follow-up than at pretest, while the posttest-to-follow-up

difference was nonsignificant. This suggests that the gains were relatively stable during the follow-up period rather than disappearing soon after the intervention ended. Positive psychotherapy may promote durability because many of its techniques are designed for continued application outside treatment sessions. Gratitude journaling, identifying and using strengths, reframing personal memories, practicing forgiveness, engaging in meaningful activities, and reflecting on future goals can all become repeated behavioral and cognitive habits. The continued use of these skills after treatment may help maintain developmental gains. This interpretation is consistent with the clinical model of positive psychotherapy, which emphasizes building enduring psychological resources rather than producing temporary mood improvement (Rashid & Seligman, 2018).

The observed findings can also be situated within research demonstrating that positive psychological interventions are relevant across different anxiety-related contexts. Positive psychology approaches have been used to reduce foreign-language classroom anxiety through mechanisms related to self-efficacy, flow, and self-compassion (Jia et al., 2026). Positive psychology training has also been associated with improvements in anxiety, social skills, and meaning in life in older adults (Yousefpour, 2025), and positive psychology-based approaches have shown beneficial effects on self-efficacy and anxiety in educational settings (Hajizadeh Anari & Miri, 2025). While these populations differ from adolescent girls with social anxiety, the common pattern is that positive psychology interventions may work through strengthening adaptive capacities rather than through direct symptom confrontation alone. The present findings reinforce this interpretation by showing significant improvement in a broad developmental outcome.

The results also correspond with evidence that positive youth development can serve as a protective factor in relation to anxiety and interpersonal vulnerability. The Five Cs have been associated with anxiety-related functioning, with stronger positive youth development generally corresponding to more favorable emotional outcomes (Kozina et al., 2020). In addition, positive youth development has been implicated in the relationship between anxious attachment and social appearance anxiety in adolescents, suggesting that developmental strengths may partially buffer the consequences of interpersonal insecurity (Ekinci & Akat, 2023). Socially anxious adolescents may be especially vulnerable to impaired connection and confidence because they tend to withdraw from situations in which these

qualities would normally be practiced and reinforced. Positive psychotherapy may compensate for this developmental restriction by creating structured opportunities to discuss relationships, practice gratitude, identify social resources, and reinterpret interpersonal experiences more positively.

The improvement in positive youth development may further have implications for prosocial functioning. Recent evidence indicates a positive association between positive youth development and prosocial behavior across multiple studies (Meulenbeek et al., 2026). The caring and connection components of positive youth development are especially relevant in this regard. Interventions that increase gratitude, forgiveness, empathy, and recognition of supportive relationships may not only strengthen individual well-being but also enhance adolescents' willingness and capacity to engage constructively with others. This may be important for socially anxious adolescents because avoidance can limit both receiving and providing social support. By increasing positive engagement with others, positive psychotherapy may help interrupt this reciprocal cycle of social withdrawal and reduced developmental opportunity.

The results are also congruent with developmental research emphasizing that positive outcomes can be fostered even among young people facing significant psychosocial difficulties. Supportive programs that provide opportunities for skill development, belonging, and personal growth have been associated with beneficial outcomes across diverse populations, including adolescents exposed to unstable or adverse circumstances (Heinze, 2013). The broader positive youth development literature has consistently argued that the goal of intervention should not simply be the prevention of problems but the active promotion of thriving, contribution, and adaptive functioning (Catalano et al., 2004; Shek et al., 2019). The current findings provide additional support for this position. Socially anxious adolescent girls may benefit from interventions that do not define them primarily by anxiety symptoms but instead emphasize their capacities, positive relationships, strengths, and future potential.

## 5. Conclusion

Finally, the findings support the conceptual relevance of positive psychotherapy as a complementary intervention for adolescent social anxiety. Standard approaches to anxiety understandably emphasize symptom assessment and evidence-based reduction of fear and avoidance (Field, 2020; Walter et al., 2020). However, the present findings

suggest that addressing positive functioning may provide an additional therapeutic target. Self-acceptance-based interventions have already shown benefits among individuals with social anxiety (Jabbari et al., 2021), and positive psychology approaches may extend these benefits by strengthening multiple developmental resources simultaneously. Rather than conceptualizing treatment success only as reduced anxiety, the current study suggests that improvement can also be understood as greater competence, confidence, connection, character, and caring. This broader developmental perspective is especially appropriate in adolescence, when psychological interventions have the potential to influence developmental trajectories beyond the immediate treatment period.

## 6. Limitations & Suggestions

The present study had several limitations that should be considered when interpreting the findings. First, the sample was relatively small and was limited to adolescent girls with social anxiety in Isfahan, which restricts the generalizability of the results to boys, adolescents in other age groups, and populations from different geographical or cultural contexts. Second, purposive sampling was used to recruit participants, and although participants were randomly assigned to the experimental and control groups, they were not randomly selected from the broader population. Third, the primary outcome was assessed using a self-report questionnaire, which may be affected by response bias, social desirability, or participants' subjective interpretation of items. Fourth, the control group did not receive an active comparison intervention, making it difficult to determine whether some observed effects were attributable to nonspecific factors such as therapist attention, group participation, expectancy, or social interaction. Fifth, the follow-up period was limited to approximately six weeks, and the longer-term stability of the treatment effects therefore remains unknown. Finally, the study focused on overall positive youth development and did not separately analyze changes in each of its individual dimensions, which may have concealed differential intervention effects across competence, confidence, connection, character, and caring.

Future studies should replicate these findings with larger and more diverse samples and include both male and female adolescents from different socioeconomic, educational, and cultural backgrounds. Multi-site studies would be useful for determining whether the effects of positive psychotherapy are consistent across different regions and service settings.

Future research should also employ active control groups and compare positive psychotherapy with other established interventions for social anxiety in order to identify the specific contribution of positive psychology components. Longer follow-up periods of six months or one year would provide stronger evidence regarding maintenance of developmental gains. Researchers may also examine each component of positive youth development separately to determine whether positive psychotherapy has stronger effects on particular dimensions such as confidence or connection. The inclusion of clinician-rated measures, parent or teacher reports, behavioral indicators of social participation, and objective indices of school or interpersonal functioning could complement self-report data. Future studies could additionally test possible mediators and moderators, including resilience, self-esteem, self-efficacy, emotion regulation, gratitude, character strengths, social support, and baseline severity of social anxiety, to clarify how and for whom positive psychotherapy produces its effects.

From a practical perspective, the findings suggest that positive psychotherapy may be incorporated into school counseling, adolescent mental health, and community-based psychological services for girls experiencing social anxiety. School counselors and psychologists may use structured exercises involving strengths identification, gratitude, forgiveness, positive self-narratives, meaningful goal setting, and practical wisdom to complement symptom-focused anxiety interventions. Group delivery may be particularly useful because it can provide adolescents with opportunities for interpersonal practice, mutual support, and normalization of difficulties while simultaneously reducing service costs. Practitioners should adapt exercises to adolescents' developmental level and cultural context and monitor participation closely to ensure that socially anxious individuals are not overwhelmed by group demands. Parent and teacher involvement may also be considered when appropriate, particularly to reinforce opportunities for autonomy, competence, and positive social engagement outside treatment sessions. Because the gains in the present study persisted during follow-up, encouraging adolescents to continue gratitude practices, strengths-based activities, meaningful goal pursuit, and constructive social engagement after treatment may help consolidate and extend intervention effects.

## Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

## Declaration of Interest

The authors of this article declared no conflict of interest.

## Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

## Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

## Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

## Authors' Contributions

All authors equally contributed to this article.

## References

- Abdi, F., Jamali, S. A. B., Ahadi, H., & Koushki, S. (2019). Psychometric Properties of the Connor-Davidson Resilience Scale in Women with Breast Cancer. *Journal of Research in Psychological Health*, 13(2).
- Benson, P. L., Scales, P. C., Hamilton, S. F., & Sesma Jr, A. (2007). Positive Youth Development: Theory, Research, and Applications. In (Vol. 1). <https://doi.org/10.1002/9780470147658.chpsy0116>
- Catalano, R. F., Berglund, M. L., Ryan, J. A., Lonczak, H. S., & Hawkins, J. D. (2004). Positive Youth Development in the United States: Research Findings on Evaluations of Positive Youth Development Programs. *The Annals of the American Academy of Political and Social Science*, 591(1), 98-124. <https://doi.org/10.1177/0002716203260102>
- Chen, N. T., Clarke, P. J., MacLeod, C., & Guastella, A. J. (2012). Biased Attentional Processing of Positive Stimuli in Social Anxiety Disorder: An Eye Movement Study. *Cognitive behaviour therapy*, 41(2), 96-107. <https://doi.org/10.1080/16506073.2012.666562>
- Dimitrova, R., & Wiium, N. (2021). Handbook of Positive Youth Development: Advancing the Next Generation of Research, Policy and Practice in Global Contexts. In (pp. 3-16). Springer. <https://doi.org/10.1007/978-3-030-70262-5>
- Ekinci, N., & Akat, M. (2023). The Relationship between Anxious-Ambivalent Attachment and Social Appearance Anxiety in Adolescents: The Serial Mediation of Positive Youth Development and Instagram Addiction. *Psychological*

- Reports, 126(5), 2465-2488.  
<https://doi.org/10.1177/00332941231159600>
- Field, T. (2020). Social Anxiety in Adolescents: A Narrative Review. *Journal of anxiety disorders*, 3(2), 127.  
<https://doi.org/10.46527/2582-3264.127>
- Geldhof, G. J., Bowers, E. P., Boyd, M. J., Mueller, M. K., Napolitano, C. M., Schmid, K. L., & Lerner, R. M. (2014). The Creation and Validation of Short and Very Short Measures of PYD. *Journal of Research on Adolescence*, 24(1), 163-176. <https://doi.org/10.1111/jora.12039>
- Gootman, J. A., & Eccles, J. (2002). *Community Programs to Promote Youth Development*. National Academies Press.
- Hajizadeh Anari, M., & Miri, M. N. (2025). Comparing the Effectiveness of Positive Psychology Training and Mindfulness-Based Cognitive Therapy on Self-Efficacy and Teaching Anxiety of Physics Student-Teachers. *Psychological Sciences*, 24(152), 81-100.
- Heinze, H. J. (2013). Beyond a Bed: Support for Positive Development for Youth Residing in Emergency Shelters. *Children and Youth Services Review*, 35(2), 278-286. <https://doi.org/10.1016/j.childyouth.2012.10.018>
- Jabbari, S., Basharpour, S., & Narimani, M. (2021). The Effect of Self-Acceptance Group Therapy on Students with Social Anxiety. *Health and Development Journal*, 10(1), 39-45.
- Jia, F., Li, Y., Yang, Z., Wang, S., & Mao, Y. (2026). Positive psychology approaches to alleviating foreign language classroom anxiety among university students: Insights from self-efficacy, flow, and self-compassion. *BMC psychology*. <https://doi.org/10.1186/s40359-026-02145-9>
- Johnson, J., Gooding, P. A., Wood, A. M., & Tarrier, N. (2010). Resilience as Positive Coping Appraisals: Testing the Schematic Appraisals Model of Suicide (SAMS). *Behaviour Research and Therapy*, 48(3), 179-186. <https://doi.org/10.1016/j.brat.2009.10.007>
- Johnson, J., Gooding, P. A., Wood, A. M., Taylor, P. J., Pratt, D., & Tarrier, N. (2010). Resilience to Suicidal Ideation in Psychosis: Positive Self-Appraisals Buffer the Impact of Hopelessness. *Behaviour Research and Therapy*, 48(9), 883-889. <https://doi.org/10.1016/j.brat.2010.05.013>
- Joshi, C. (2013). Positive Thinking: A Powerful Tool to Reduce Social Anxiety of Undergraduate Students. *Indian Journal Research*, 2(8), 62-64.
- Kashdan, T. B. (2007). Social Anxiety Spectrum and Diminished Positive Experiences: Theoretical Synthesis and Meta-Analysis. *Clinical psychology review*, 27(3), 348-365. <https://doi.org/10.1016/j.cpr.2006.12.003>
- Kashdan, T. B., Weeks, J. W., & Savostyanova, A. A. (2011). Whether, How, and When Social Anxiety Shapes Positive Experiences and Events: A Self-Regulatory Framework and Treatment Implications. *Clinical psychology review*, 31(5), 786-799. <https://doi.org/10.1016/j.cpr.2011.03.012>
- Kazemi, N., Zadeh, R., Vahid, M., & Taghi, S. (2019). The Effect of Positive Thinking Training on Social Anxiety and Cognitive Avoidance in Mothers of Children with Specific Learning Disabilities. *Child Mental Health Quarterly*, 5(4), 148-158.
- Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H. U. (2012). Twelve-Month and Lifetime Prevalence and Lifetime Morbid Risk of Anxiety and Mood Disorders in the United States. *International Journal of Methods in Psychiatric Research*, 21(3), 169-184. <https://doi.org/10.1002/mpr.1359>
- Kozina, A., Wiium, N., & Pivec, T. (2020). Positive Youth Development Perspective: The Interplay between the 5Cs and Anxiety. In (pp. 173-182). <https://doi.org/10.36315/2021pad16>
- Linver, M. R., Urban, J. B., Chen, W. L., Gama, L., & Swomley, V. I. (2022). Predicting Positive Youth Development from Self-Regulation and Purpose in Early Adolescence. *Journal of Research on Adolescence*, 32(4), 1312-1327. <https://doi.org/10.1111/jora.12621>
- Martínez-Martí, M. L., & Ruch, W. (2017). Character Strengths Predict Resilience over and above Positive Affect, Self-Efficacy, Optimism, Social Support, Self-Esteem, and Life Satisfaction. *The Journal of Positive Psychology*, 12(2), 110-119. <https://doi.org/10.1080/17439760.2016.1163403>
- Meulenbeek, K., Loheide-Niesmann, L., Spagnuolo, F., & Cima, M. J. (2026). Positive youth development and prosocial behavior: A systematic review and multilevel meta-analysis. *Journal of adolescence*, 98(1), 7-35. <https://doi.org/10.1002/jad.70040>
- Milot, A. S. (2014). *Positive Youth Development as a Framework for Examining the Relationships between Conformity to Gender Norms, Social Support, and Adolescent Mental Health* Boston College].
- Pour, G., Goudarzi, G., Far, D., Padarvand, & Hafez. (2021). Effectiveness of Group-Based Positive Thinking Training on Improving Empathy and Reducing Social Anxiety in Male Students with Learning Disabilities. *Learning Disabilities*, 10(3), 366-379.
- Rashid, T., & Seligman, M. P. (2018). *Positive Psychotherapy: Clinician Manual*. Oxford University Press. <https://doi.org/10.1093/med-psych/9780195325386.001.0001>
- Roth, J. L., & Brooks-Gunn, J. (2003). What Is a Youth Development Program? Identification of Defining Principles. In (pp. 197-224). SAGE Publications, Inc. <https://doi.org/10.4135/9781452233642.n29>
- Shek, D. T., Dou, D., Zhu, X., & Chai, W. (2019). Positive Youth Development: Current Perspectives. *Adolescent Health, Medicine and Therapeutics*, 131-141. <https://doi.org/10.2147/AHMT.S179946>
- Smith, K. M. (2025). Critical Positive Youth Development in Non-Traditional Sport Spaces. *Youth*, 5(2), 55. <https://doi.org/10.3390/youth5020055>
- Steinberg, L., & Lerner, R. M. (2004). The Scientific Study of Adolescence: A Brief History. *The Journal of Early Adolescence*, 24(1), 45-54. <https://doi.org/10.1177/0272431603260879>
- Walter, H. J., Bukstein, O. G., Abright, A. R., Keable, H., Ramtekkar, U., Ripperger-Suhler, J., & Rockhill, C. (2020). Clinical Practice Guideline for the Assessment and Treatment of Children and Adolescents with Anxiety Disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59(10), 1107-1124. <https://doi.org/10.1016/j.jaac.2020.05.005>
- Yousefpour, N. (2025). The effectiveness of positive psychology training on anxiety, social skills, and meaning in life among older adults. *Aging Psychology*, 11(4).
- Zarrett, N., & Lerner, R. M. (2008). *Ways to Promote the Positive Development of Children and Youth*. <https://doi.org/10.1037/e456902008-001>