



COGNITIVE DISTORTION AND SOCIAL SUPPORT AS PREDICTORS OF DEPRESSIVE SYMPTOMS AMONG SECONDARY SCHOOL STUDENTS IN IBADAN.

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ABSTRACT

The study explored the predictive impact of cognitive distortions and social support on depression among secondary school students in Oyo State. Employing a correlational research design, it examined the relationships among these variables. A total of 410 participants were selected using a multi-stage random sampling technique. Data were collected through three validated instruments: the Cognitive Distortion Scale (CDS), the Social Support Scale (SSS), and the Beck Depression Inventory (BDI). Analysis was conducted using Pearson's Product-Moment Correlation and Multiple Regression Analysis.

Results indicated a significant positive correlation between cognitive distortions and depression ($r = 0.270$, $p < .01$). In contrast, social support showed significant negative correlations with both depression ($r = -0.361$, $p < .01$) and cognitive distortions ($r = -0.287$, $p < .01$). The regression model significantly predicted depression scores ($p < .001$), accounting for 16.1% of the variance. These findings suggest that higher levels of distorted thinking are linked to increased depressive symptoms, while stronger social support networks are associated with lower levels of depression.

The study concluded that cognitive distortions and social support exert critical yet opposing influences on psychological well-being. It recommends that counseling interventions integrate cognitive restructuring techniques and strategies to enhance social support in order to reduce depression among adolescents. Additionally, school-based mental health programs should raise awareness about maladaptive thought patterns and reinforce interpersonal support systems to promote resilience and emotional stability.

Keywords: Cognitive distortion, social support, depression, psychological well-being, secondary school students.

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INTRODUCTION

Depression is a major contributor to the global burden of disease and affects people across the world. It is a pressing public health concern for both adults and younger generations. Depressive disorders often begin early in life, reducing individuals' functioning and frequently recurring over time. The World Mental Health Survey (2012) reported that, on average, about one in twenty people experienced an episode of depression within a year. Adolescence represents a critical stage of development and is a period of heightened risk for depression. Global statistics estimate the prevalence of depression among adolescents to be between 13–20% (World Health Organisation, 2025). Common symptoms include loss of interest, frustration, hopelessness, and feelings of helplessness.

Depression among adolescents has increasingly become a subject of public concern, with recent reports highlighting its alarming rise within this demographic (Chiedozie, 2019). According to the World Health Organisation (2017), as of 2015, 3.9% of Nigerians were affected by depression. Although official statistics specific to adolescents remain unavailable, depression is widely acknowledged as one of the most pressing mental health challenges confronting young people. For

instance, Oderinde, Dada, Ogun, Awunor, Kundi et al. (2018) documented prevalence rates ranging from 12% to 21% across states in South-Western Nigeria. The chronic and recurrent nature of depression compounds this challenge, as adolescents who experience depressive episodes are more likely to remain susceptible to the disorder in later stages of life.

Extensive research has documented both the medical and non-medical consequences associated with adolescence (Danielsson, et al., 2025; Patel, 2013). Beyond financial constraints, depression has been consistently identified as the most significant factor contributing to school dropout rates among adolescents (Askeland et al., 2022).. Recent evidence reveals a disturbing escalation in substance use, violent conduct, and alcoholism within secondary school environments. Njoku and Obogo (2017) observed that a considerable proportion of Nigerian secondary school students engage in drug abuse as a direct response to depressive symptoms. Collectively, these findings underscore a critical public health concern: the deterioration of psychological well-being, heightened suicidal ideation, and the alarming incidence of premature mortality among secondary school students.

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Among many psychological factors, contributing to adolescent depression, cognitive distortion and low social support stands out as particularly critical given the direct and compounding impact on how young adolescents perceive themselves and their environment (Bandura, 1986; Wang et al., 2023; Zhang & Tian, 2025).

Cognitive distortions are systematically biased patterns of thought that distort reality (Beck 1967; Pittard & Pössel, 2016). In adolescents, distortions such as catastrophizing, overgeneralization, all-or-nothing thinking, and personalization undermine psychological well-being. Together, these distorted thought patterns reinforce internalized negativity, impair self-esteem, and contribute significantly to depressive symptoms.

Another important factor is the level of social support. Social support is described as the presence and size of a social network, the extent of a person's connectedness within that network, including the number of social ties, and the nature of the social exchanges between individuals (Drageset, 2021). Low social support has been consistently linked to depression, and its impact is particularly pronounced among vulnerable populations, including adolescents (Zhao et al. 2022).

Several studies, such as those by Shanmugapriya & Neelakandan (2025) and

Beshai, Dobson, Adel, & Hanna (2016), have questioned the robustness of conclusions regarding the relationship between cognitive distortions and depression. A key limitation is that much of this research has been conducted within Western populations, highlighting the need for further investigation in non-Western contexts to capture cultural variations in emotional regulation and depression.

In a similar vein, studies by Edet et al. (2023) and Alshammari, Pikó, & Fitzpatrick (2019) highlight persistent gaps in understanding how social support predicts depressive symptoms—particularly during adolescence, a stage characterized by autonomy-seeking behaviors that often weaken traditional family dynamics. This perspective resonates strongly with the Nigerian context, where the social system is deeply rooted in family structures and communal ties.

Against this backdrop, the study examined the predictive effects of cognitive distortions and social support on depression among adolescents in Oyo State, Nigeria. By identifying the most salient predictors, the research provided insights that can inform mental health professionals, educators, and policymakers in developing targeted interventions for improving

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psychological wellbeing of in-school adolescents. interpret, navigate, and are shaped by their social environments, particularly in relation to mental health outcomes.

Research Questions:

1. Examine the relationship between cognitive distortion and depressive symptoms among secondary school students in Oyo State;
2. Assess the joint predictive influence of cognitive distortion and social support after depressive symptoms among secondary school students in Oyo State.
3. Determine the relative contribution of cognitive distortion and social support on depressive symptoms among secondary school students in Oyo State.

Literature review

Theoretical Framework

This study is situated within Albert Bandura's Social Cognitive Theory (1986), which underscores the dynamic interdependence of cognitive, behavioral, and environmental determinants in shaping human development and functioning. Central to this framework is reciprocal determinism, which posits that personal factors, behavioral repertoires, and social environments operate in a continuous cycle of mutual influence (Bandura, 1986). This perspective offers a compelling framework for understanding how adolescents

Cognitive distortion, as an internal personal factor, exemplifies Bandura's assertion that cognitive processes influence both behavior and emotion (Bruno, 2010). Recurrent negative thought patterns can reinforce maladaptive behaviors and intensify emotional distress, thereby contributing to the onset and progression of depressive symptoms (Bandura, 1986).

Another central construct is self-regulation, defined as an individual's capacity to monitor and manage thoughts, emotions, and behaviors. Adolescents with strong self-regulatory skills are better positioned to cope with adverse experiences, while deficits in self-regulation may predispose them to impulsivity, emotional instability, and persistent negative cognitions.

Furthermore, social support constitutes a critical environmental context. Bandura emphasizes that supportive environments foster self-efficacy, the belief in one's capacity to exert control over life events (Bandura, 1986). Adolescents who receive consistent encouragement are more likely to cultivate resilience, thereby reducing susceptibility to depression.

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Adolescence and Depression

Adolescence represents a pivotal stage in human development, yet it is also marked by vulnerability to mental health challenges. The World Health Organization (2025) reports that one in seven individuals aged 10–19 experiences a mental disorder, accounting for 15% of the global burden of disease in this age group. Among these conditions, depression stands out as a leading cause of illness and disability, with prevalence estimates of 1.3% among adolescents aged 10–14 and 3.4% among those aged 15–19. Notably, depression often overlaps with anxiety, as both share symptoms such as sudden and unpredictable mood changes (Danielsson, et al., 2025).

Empirical Review

Cognitive Distortion and Depression

Cognitive distortions are defined as inaccurate, exaggerated, or irrational patterns of thought that skew perception of reality. The American Psychological Association (2020) describes them as habitual patterns of faulty thinking that result in erroneous interpretations of events. While occasional distortions are normal, persistent reliance on these maladaptive patterns can have detrimental psychological consequences.

McGrath and Repetti (2002) emphasize that cognitive distortions reflect ways the mind convinces an individual to accept beliefs that are objectively false but subjectively feel true. In the 1960s and 1970s, Aaron Beck identified distinct types of cognitive distortions, including labeling, discounting the positive, mental filtering, emotional reasoning, mindreading, and catastrophizing.

Stella, Grace, and Inwan (2016) found that cognitive distortion is a low-level predictor of depressive symptoms but a strong predictor of poor academic performance among in-school adolescents in South-South Nigeria.

Usen, Eneh and Udom (2016) examined how cognitive distortion could predict in-school adolescents' depressive symptoms and academic performance in the South-South Nigeria. The study adopted a correlation design with a sample of in-school adolescents who showed evidence of cognitive distortion. Results show that cognitive distortion predicts in-school adolescents' depressive symptoms to a low degree while it predicts academic performance to a high degree.

Nasira, Zamania, Yusooffa & Khairu (2010) examined the relationship between cognitive distortion and depression among juvenile delinquents in Malaysia. Their study showed that there was a positive

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significant correlation between cognitive distortion and depression. In addition, they obtained that positive significant correlation exists between cognitive distortion and all the five dimensions of cognitive distortion: self-critique, self-blame, helplessness, hopelessness and preoccupation with danger.

Social Support and Depression

Social support is conceptualized as psychological and material resources accessible through social networks, enabling individuals to cope with stress. Researchers distinguish between perceived support (belief that resources will be available) and received support (actual provision of assistance) (Scholz et al., 2021).

Li et al., (2020) conducted a longitudinal study using cross lagged panel network modelling with 4,242 adult participants from the International Covid Mental Health Survey. The study found that social support had a unidirectional protective effect on depressive symptoms.

Pössel et al. (2018) investigated whether social support from family, friends, and teachers predicts depressive symptoms in adolescents. The study adopted a longitudinal design that followed 1,452 Australian students aged 11–16 over five

years. Results revealed that while family, friends, and teacher support were each negatively related to depressive symptoms when studied independently, only family support across all grades and teacher support in grades 8–10 predicted depressive symptoms when examined simultaneously. Ren, Qin, Zhang, and Zhang (2018) conducted a two-wave; six-month longitudinal study with 2,453 adolescents aged 11 to 17 in China to examine whether social support is a cause or consequence of depression. Using structural equation modeling, they tested three models: the social causation model (deficits in support increase depression), interpersonal theories of depression (depression erodes support), and a reciprocal influence model. The findings showed that depression significantly and negatively influenced peer support, but the social causation model was not supported.

Liu et al. (2022) reported that individuals with higher levels of social support exhibited a 57% lower likelihood of elevated depressive symptoms. A meta-analysis by Shi et al. (2024) demonstrated that active social participation, social trust, and strong social networks significantly lower odds of depression. Bedaso et al. (2021) reported that low social support during pregnancy was associated with heightened risks of depression and anxiety.

METHOD

Research Design

The study employed descriptive design to examine the predictive factors of depression among adolescents. This design allows for the collection of data at a single point in time, providing a snapshot of the relationships between various factors and depressive symptoms.

Sampling and Sampling Techniques

The study recruited in-school adolescents aged between 14 and 18 years (mean age = 15.11; SD = 1.68), consisting of 178 males and 232 females, drawn from various secondary schools. A multi-stage sampling procedure was employed. First, Oyo South Senatorial District was randomly selected from the three senatorial districts in Oyo State. Within this district, two local government areas (LGAs) were chosen using balloting (Ibarapa East and Ido Local government). From each LGA, four secondary schools were selected through simple random sampling. In each school, 52 students were randomly drawn, with the sampling purposively focused on Senior Secondary School Two (SSS II), as this level contains a larger population of active adolescents. Altogether, 416 students were identified as the target participants, of which 410 completed the study.

Measures

Beck's depression inventory

Beck's depression inventory scale developed by Beck was administered to the adolescents to screen the adolescents that were depressed, the criterion was based on Lassa (2000) i.e. adolescents who scored above 29 were considered to have depression. It is a 21-question multiple-choice self-report inventory, one of the most widely used psychometric tests for measuring the severity of depression. It has reliability of ($\alpha = 0.91$). A study in Nigeria revalidated the scale using Nigerian adolescents and the .86 and was recorded as reliability value (Ayuba, Samuel & Ihaji, 2024).

Social Support

The *Multidimensional Scale of Perceived Social Support (MSPSS)* is a widely utilized instrument for assessing perceived social support. It consists of 12 items divided into three subscales—family, friends, and significant other—each comprising four items. Scores may be calculated as a total measure either of perceived social support or separately for each subscale, depending on the source of support. Each item is rated on a 7-point Likert scale ranging from 1

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The original validation of the scale reported strong psychometric properties, with an internal consistency of 0.88 and a test–retest reliability of 0.85 (Zimet et al., 1988, 1990). Subsequent re-validation of the MSPSS among Nigerian female undergraduates yielded even higher reliability indices, with Cronbach’s alpha (α) = .93 (Bello, Akinnawo, Akpunne & Onisile, 2022).

Cognitive Distortion Scale (CDS)

The Cognitive Distortion Scale (CDS), developed by Covin, Dozois, Ogniewicz, and Seeds (2011), is designed to measure the frequency and intensity of cognitive distortions that are frequently linked to depression and anxiety. The Cognitive Distortion Scale (CDS) comprises 20 items that assess 10 distinct types of cognitive distortions, including catastrophizing, all-or-nothing thinking, overgeneralization, personalization, mindreading, labeling, emotional reasoning, discounting the positive, “should” statements, and mental filtering. Respondents rate each item based on how often they experience these distorted thinking patterns, typically using a Likert scale format. The CDS has demonstrated strong psychometric properties. In the original validation study, the scale showed excellent internal

consistency, with a Cronbach’s alpha of 0.85 for the total scale, indicating high reliability. The subscales measuring individual distortions also exhibited acceptable reliability, with alpha values ranging from 0.70 to 0.82.

Procedure

Data were collected using paper-based questionnaires administered in classroom settings under the supervision of trained research assistants. Students completed the Cognitive Distortion Scale (CDS), the Multidimensional Scale of Perceived Social Support (MSPSS), and the Beck Depression Inventory (BDI) during regular school hours. The purpose of the study was explained to all participants, and confidentiality was assured. Participation was voluntary, and students could withdraw at any time without penalty. The three-month data collection period ran from November 2024 to January 2025.

Data Analysis

Data were analysed using SPSS version 26.0. Descriptive statistics (means and standard deviations) were computed for all study variables. Pearson product-moment correlation analysis was conducted to examine the bivariate relationships between cognitive distortion, social support, and depression. Standard multiple linear

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regression analysis was performed to determine whether cognitive distortion and social support significantly predict depression scores. All assumptions of linear regression (normality, linearity, homoscedasticity, and absence of multicollinearity) were tested and met. Statistical significance was set at $p < .05$.

RESULTS

Table 1: Intercorrelations Between Depression, Cognitive Distortion, and Social Support

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Depression			—		
2. Cognitive Distortion			.270**	—	
3. Social Support			-.361**	-.287**	—

Note. $N = 410$. ** $p < .01$.

A Pearson correlation analysis was conducted to examine the relationship between cognitive distortion and depression among adolescents. As presented in Table 1, cognitive distortion was positively and significantly correlated with depression, $r(408) = .270$, $p < .01$. This finding indicates that higher levels of distorted thinking were associated with higher levels of depressive symptoms among adolescents. The positive direction of the relationship suggests that as cognitive distortions increased, depression scores also increased.

Relationship Between Social Support and Depression Among Adolescents

A Pearson correlation analysis was conducted to examine the relationship between social support and depression among adolescents. As shown in Table 1,

social support was negatively and significantly correlated with depression, $r(408) = -.361$, $p < .01$. This finding indicates that higher levels of perceived social support were associated with lower levels of depressive symptoms among adolescents. The negative direction of the relationship suggests that as social support increased, depression scores decreased, highlighting the protective role of social support.

Relationship Between Social Support and Cognitive Distortion Among Adolescents

A Pearson correlation analysis was conducted to examine the relationship between social support and cognitive distortion among adolescents. As presented in Table 1, social support was negatively and significantly correlated with cognitive

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distortion, $r(408) = -.287$, $p < .01$. This finding indicates that adolescents who reported higher levels of social support were less likely to engage in distorted thinking patterns. Conversely, lower social support was associated with higher levels of cognitive distortion.

Prediction of Depression by Cognitive Distortion and Social Support Among Adolescents

Table 2: Model Summary for Linear Regression Predicting Depression

Statistic	Mean of DV	SD	R ²	N	F (2, 407)	p	AIC	BIC
Value	13.344	5.202	.161	410	38.992	< .001	2448.893	2460.942

Note. DV = dependent variable (Depression); SD = standard deviation; N = number of observations; AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion.

A standard linear regression analysis was conducted to determine whether cognitive distortion and social support significantly predict depression among adolescents. As shown in Table 2, the overall model significantly predicted depression scores, $F(2, 407) = 38.99$, $p < .001$, accounting for 16.1% of the variance in depression ($R^2 = .161$).

Table 3: Linear Regression Coefficients for Predicting Depression

Predictor	B	SE		t	P
Constant	24.061	2.072	—	11.61	< .001
Cognitive Distortion	0.106	0.028	.256	3.83	< .001
Social Support	-0.184	0.028	-.435	-6.52	< .001

Note. DV = dependent variable (Depression);

As presented in Table 3, cognitive distortion significantly and positively predicted depression, $\beta = .256$, $t(407) = 3.83$, $p < .001$. This finding indicates that cognitive distortion was a significant positive predictor of depressive symptoms, with a small to moderate effect size. Higher levels of distorted thinking were associated with increased depression scores. Social support significantly and negatively predicted depression, $\beta = -.435$, $t(407) = -6.52$, $p < .001$. This finding indicates that social support was a significant negative predictor of depressive symptoms, with a moderate to large effect size. Higher levels of perceived social support were associated with lower depression scores, and social support emerged as a stronger predictor of

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depression than cognitive distortion. risk factor and social support as a protective
Collectively, these findings underscore the factor in adolescent depression.
dual impact of maladaptive cognition as a

DISCUSSION

This study set out to investigate the relationship between cognitive distortion, social support, and depression among adolescents. Cognitive distortion was found to be positively correlated with depression, whereas social support demonstrated significant negative correlations with both depression and cognitive distortion. This pattern suggests that distorted thinking exacerbates depressive symptoms, while social support functions as a protective factor against psychological distress.

The results indicate that individuals with higher levels of distorted cognition are more likely to experience depressive symptoms. Conversely, those reporting greater perceived social support tend to show lower levels of depression and fewer cognitive distortions. These findings corroborate the work of Chakhssi, van Dijk, and Kraaij (2023), who demonstrated that dysfunctional thoughts were significant predictors of depression recurrence among patients in remission, and that perceived social support mediated the relationship between cognitive distortion and depressive relapse. This underscores the dual role of

cognition and social context in both the etiology and maintenance of depression. Similarly, Yoon, Flett, and Hewitt (2024) identified specific distortions, such as overgeneralization, dichotomous thinking, and personalizing, as being strongly associated with depressive symptoms, with personalizing emerging as the most predictive of depression severity.

Longitudinal evidence further strengthens this relationship. Chen, Wang, and Zhang (2023) showed that reductions in cognitive distortions significantly predicted subsequent decreases in depressive symptoms, confirming that cognitive restructuring precedes affective improvement. Their findings provide longitudinal support for the causal relationship implied by the present correlational data. In addition, Sahin and Duy (2022) demonstrated that cognitive-behavioral psychoeducation effectively reduced both cognitive distortions and depressive symptoms. Participants in the treatment group reported significantly fewer negative automatic thoughts and dysfunctional attitudes compared to

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controls, reinforcing the notion that cognitive distortion is a modifiable determinant of depression.

Emerging research has also examined the manifestation of cognitive distortions in digital communication. Suh, Park, and Kim (2025) analyzed linguistic markers of distorted thinking on social media platforms and found that individuals expressing depressive symptoms frequently employed distortion-laden language patterns, including catastrophizing, emotional reasoning, and mindreading. These linguistic expressions significantly predicted depression severity, highlighting the pervasive influence of distorted cognition across both online and offline contexts.

The regression model significantly predicted depression scores, explaining 16.1% of the variance across 410 observations. The statistically significant F-test confirmed the overall strength of the model, while fit indices such as the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) supported its adequacy. Together, these results indicate that predictors such as cognitive distortion and social support meaningfully contribute to understanding depressive symptom levels in the sample.

Comparable findings have been reported in prior research. Alloy et al. (2018) found that cognitive risk factors and life stressors accounted for approximately 15 to 20% of variance in depressive symptom trajectories over time. Similarly, Abraham and Calhoun (2022) observed that cognitive distortions, combined with personality and support measures, explained about 14% of the variance in depression scores among college students. In community samples, Rajkumar et al. (2021) reported that social support and interpersonal coping strategies together accounted for around 18% of variance in depressive symptoms. More recently, Martinez and Lee (2024) demonstrated that cognitive distortions, rumination, and social support collectively explained 17.3% of the variance in adult depression scores, underscoring the robustness of models of this magnitude in mental health research.

Although approximately 84% of the variance remains unexplained, indicating that other variables such as genetics, life events, personality traits, and biological factors also contribute to depression, the present model offers valid and replicable insights into how cognitive distortion and social support jointly shape depressive symptomatology. These findings emphasize the necessity of multi-factorial

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models in depression research and highlight the importance of cognitive and social predictors as core components in explanatory and intervention frameworks.

Cognitive distortion significantly and positively predicted depressive outcomes, indicating that higher levels of distorted thinking are associated with increased psychological distress and reduced well-being. In contrast, social support exerted a significant negative effect, suggesting that stronger support networks contribute to better psychological outcomes. Put differently, maladaptive cognition exacerbates depressive symptoms, while protective social resources buffer against distress. These dual pathways illustrate how distorted thinking intensifies vulnerability, whereas social support mitigates risk.

The findings align with the structural equation modeling study by Martinez and Lee (2024), which examined cognitive distortions, rumination, and social support as predictors of depressive symptoms. Their results revealed that distorted cognition had a moderate positive path coefficient, while social support had a strong negative path coefficient, together explaining a substantial portion of variance. Although the magnitude of effects differs across samples and measurement approaches, the direction and significance

of these relationships are consistent with the present study.

Similarly, Chakhssi et al. (2023) found that dysfunctional thoughts directly predicted depressive relapse, with perceived social support mediating this relationship in a longitudinal clinical sample. While not a regression of psychological distress per se, their findings reinforce the idea that distorted thinking and social support are critical determinants of mood trajectories.

In intervention contexts, Sahin and Duy (2022) demonstrated that psychoeducational programs targeting cognitive distortions yielded significant reductions in both distorted thinking and depressive symptoms. This suggests that lowering the beta coefficient of faulty cognition can lead to improved psychological outcomes, a finding consistent with the regression interpretation presented here.

Finally, computational linguistics research by Suh, Park, and Kim (2025) revealed that distortion-laden language in social media posts, such as emotional reasoning and catastrophizing, is strongly correlated with self-reported depressive severity. This line of evidence reinforces the psychological relevance of distorted cognition, not only in internal thought processes but also in external linguistic behavior.

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Conclusion and Recommendations

The overall findings of this study consistently affirm that cognitive distortion and social support are crucial determinants of depression. Across correlational and regression analyses, cognitive distortion emerged as a significant positive predictor of depression indicating that individuals with heightened distorted thinking patterns are more vulnerable to depressive experiences. Conversely, social support demonstrated a significant negative association with both depression and cognitive distortion, signifying its protective role in mitigating psychological distress and buffering against maladaptive cognitive tendencies.

The regression analysis in this study revealed that the model significantly predicted depression scores. This underscores that while cognitive and social predictors explain a meaningful portion of depressive symptoms, other psychological and biological factors also contribute to the complex etiology of depression.

In conclusion, the integration of findings across correlational, longitudinal, intervention, and computational domains affirms the dual role of cognition and social environment in shaping mental health outcomes. Cognitive distortion acts as a risk factor, intensifying vulnerability to

depression, whereas social support functions as a resilience factor that attenuates psychological distress. The following findings were established:

1. Cognitive distortion significantly predicts depressive symptoms; mental health practitioners should prioritize cognitive-behavioral interventions that target and modify distorted thought patterns.
2. Since social support demonstrated a strong negative relationship with depression, community and institutional programs should focus on building and sustaining social networks. Peer mentoring, family involvement, and community support initiatives can serve as protective buffers against emotional distress. Counsellors and educators should also encourage social connectedness through group counselling, cooperative learning, and community engagement activities.
3. Policymakers and mental health organizations should adopt multifactorial prevention models that combine cognitive, emotional, social, and biological interventions to address the diverse determinants of depression.
4. Psychoeducational programs that teach individuals about the nature and impact of cognitive distortions can enhance self-awareness and emotional regulation.

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Integrating such programs into school curricula, employee wellness programs, and university orientation sessions will promote mental health literacy and early identification of depressive tendencies.

5. Future research should explore how cognitive distortion and social support interact across different cultures, age groups, and contexts. Longitudinal studies will help establish causal pathways, while cross-cultural validation can ensure that interventions are contextually relevant and effective for diverse populations.
6. Training programs for counsellors, teachers, and psychologists should emphasize the dual importance of cognitive and social variables in

depression management. Continuous professional development should include updated training in cognitive-behavioral techniques, empathy-based communication, and the facilitation of social support networks.

7. Governments and NGOs should initiate public sensitization campaigns to reduce stigma around depression and promote understanding of how distorted thinking and weak social ties contribute to emotional suffering. Awareness initiatives can motivate individuals to seek help early and engage in supportive social relationships.

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