Research Article

Integrated Social and Pediatric Care Approaches Supporting Adolescents Facing Cyberbullying, Anxiety, and Academic Challenges Within Schools

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Abstract

Cyberbullying is a serious public health problem that harms the mental health, social well-being and academic performance of adolescents. This study aimed to assess the effectiveness of integrated social–pediatric care model for adolescents with social–pediatric issues related to cyber-bullying. 16 weeks prospective interventional study between 13 to 18 years of age was conducted among 250 adolescents after screening of 800 students across 10 secondary schools. The intervention was comprised of a pediatric evaluation, mental health counseling, social service support, family engagement, and academic mentoring. Anxiety, school performance, school connectedness, and social resilience were measured at the start and end of intervention. Mean anxiety scores decreased from 14.2±3.1 to 8.6±2.7, representing a 39.4% reduction ($p<0.001$). Academic performance improved from 64.8%±8.5 to 76.9%±7.2 (18.7% increase; $p<0.001$). School connectedness increased from 2.7±0.6 to 3.9±0.5, while social resilience improved from 48.5±9.3 to 68.7±8.4 ($p<0.001$). The results of this study provide evidence that holistic SPC can support the psychological health and well-being, social resilience and educational outcomes of cyberbullying-exposed youth.

Keywords: Adolescents, Cyberbullying, Anxiety, School Health, Pediatric Care, Academic Performance.

1. Introduction

Adolescence is a transitional stage of development that involves many profound changes in physical, emotional, social and cognitive areas. Adolescents are living in a digital world or an environment that uses social media, and these technologies have significantly changed the way teens communicate, learn, and socialize. These technologies have provided opportunities for learning and social interaction, but have also led to expanded exposure for adolescents to Internet risks, especially cyberbullying. Cyberbullying is harassment that is intentional, repeated and harmful, and happens via digital communication tools like social media, messaging services and online forums. Cyberbullying can be ongoing, have a wider reach, happen outside of school and have a greater harmful effect on young people, compared to traditional bullying.

There are growing reports of a number of negative mental health consequences associated with cyberbullying such as anxiety, emotional distress, low self-esteem, social isolation, and psychological poor mental health. Besides the psychological effects, victimized adolescents may have academic problems that include difficulties with concentration, low participation in class, school absenteeism and poor academic performance. The effects of these challenges may have a negative impact on learning and growth outcomes. Although there is more awareness about the issue, many school-based interventions are also not comprehensive, with just a disciplinary program or only a single counseling service intervention, but not coverage of the wider health, social and academic needs of impacted pupils.

The existing literature has focused mainly on the psychological, educational and/or social consequences without considering a combined multidisciplinary intervention approach. There, therefore, is a need for evidence-based models that integrate both pedagogical, mental health, and social work services, family engagement, and academic support within school-based interventions. Thus, the purpose of the present study is to assess the effectiveness of using an integrated social–pediatric care approach to reduce anxiety, school connectedness, the social resilience, and academic performance in adolescents who are victims of cyberbullying. The implementation of the intervention is expected to have a significant positive impact on psychological, social and educational aspects.

2. Literature Review

The adoption of digital communication platforms has become a major issue in the health of adolescents with the rise of cyberbullying. This covers everything from harassment, threats, exclusion, impersonation, rumours, the sharing of hurtful content via social media, messaging apps and online communities. Cyberbullying happens at any time and may go to a much wider group of individuals and create a greater psychological impact than traditional bullying [1]. As bullying is becoming more common, and because it has obvious differences from traditional bullying, this phenomenon has received considerable research interest [4]. Moreover, extensive research has pointed out that cyberbullying is a significant public health issue for adolescents globally [5].

Research from various countries suggests that a significant portion of youth is experiencing cyberbullying, and digital prevalence differs based on age, gender, Internet access, and cultural context [6]. Online victimization is due to greater exposure to screens and high prevalence of smartphone use [7]. There has been a consistent relationship found across the various studies on cyberbullying and negative mental health outcomes such as anxiety, depression, emotional distress, low self-esteem, loneliness and social withdrawal [8]. There is often an internalizing or externalizing of behavioral disturbances that impact psychosocial functioning in victims [10]. Adolescents who have been bullied have also been linked to self-harm, suicidal ideation, and suicidal behaviors [2], [3], [13] in severe cyberbullying. The strong link between exposure to cyberbullying and bad mental health also has been supported by other systematic reviews of the literature conducted with children and youth [14]. Such psychological effects can be long-lasting, and have adverse effects on well-being as a whole [9].

In addition to mental health, cyber-bullying greatly impacts academic performance. Adolescents who are victims often experience decreased focus, not being able to engage in class discussions, skipping school, low motivation to learn, and poor grades [11]. As a result, when looking at the overall effects of cyberbullying, educational performance and engagement in school play a crucial role. There has also been some evidence of significant overlap in the prevalence of cyber bullying and traditional bullying of students, which can exacerbate their learning and socio-emotional challenges [12].

Schools have responded with interventions for teachers, peer supports, and counseling services, in response to these needs. Pediatric health care providers are also critical in early identification and screening for mental health issues and in preventive care [4]. Furthermore, the role of family support, parent involvement and community engagement are also known to be protective factors which increase resilience and support recovery [8]. The findings of school-based intervention studies indicate that a multi-disciplinary support plan may be able to mitigate the negative impacts of cyberbullying and enhance positive developmental outcomes for youth [7].

Recent studies emphasize the importance of concurrent social and pediatric services, including family engagement, psychological and social work services, academic services, and healthcare services. Multi-disciplinary approaches are also seen to be more effective than single-discipline approaches as they unite various aspects of adolescent well-being at the same time [5]. However, there is limited evidence on what integrated care models for schools look like [14]. Based on this, the present study suggests the concept of a coordinated multi-level approach involving pediatric, psychological, social, and educational interventions that could be implemented to support adolescents' mental health and social resilience, school connectedness, and academic performance, as a positive consequence of reduced exposure to cyberbullying.

3. Materials and Methods

3.1 Study Design and Setting

The design of this study was a prospective, school-based, interventional design that assessed the effectiveness of an integrated approach to social–pediatric care for cyberbullied adolescents with anxiety and academic difficulties. The intervention methodology was chosen as a prospective approach that would allow psychological, social, and educational changes after implementing a multi-disciplinary structured support program to be assessed. The intervention lasted for 16 weeks, and was carried out at baseline and at the end of the intervention.

The study was conducted in 10 Secondary schools in the urban and semi-urban communities to represent adolescents from different socioeconomic and educational background. The schools were chosen due to the size of the schools, availability of counselling services and willingness to undertake the study. I selected the school environment as the location because a major target of cyberbullying behavior is to impact a student's social interactions, emotional health and academic outcomes in the school environment.

This intervention incorporated pediatric health assessment, mental health counseling, social work support, family involvement, and academic mentoring to give holistic support to impacted students. 800 adolescents age 13-18 exhibited baseline screening which identified eligible participants as those who were exposed to cyberbullying and had an anxiety-related response to that exposure. Twenty-five young people finished the intervention and evaluation.

The study aimed to understand the changes in anxiety, academic achievement, school connectedness, and social resilience after participating in the integrated care program. The current study aimed to evaluate the feasibility and effectiveness of a coordinated multidisciplinary approach to address both health- and education-related issues surrounding cyberbullying among adolescents conducted within the school setting.

3.2 Study Population and Sampling

The study population comprised adolescents aged 13-18 years attending the selected secondary schools that enrolled into the intervention programme. The participants were selected for this age group because they are among the most active users of digital communication networks and are at a high risk of psychological, social and academic issues due to cyberbullying. A diverse and representative sample of students was included from varying family structures, socioeconomic statuses from varying grades.

At the start there were 800 students who were screened with the Cyberbullying Exposure Questionnaire and preliminary mental health scale. Of the students screened, 312 (39.0%) reported being cyberbullied in the last year in at least one of the measured types of cyberbullying. After the eligibility assessment, 280 students were invited to join the intervention due to the inclusion criteria. Of these, 89.3% (250) completed the 16 week intervention program and post-intervention evaluation. The necessary sample size was determined with:

$$n = \frac{Z^2 P(1-P)}{d^2}, \quad (1)$$

Where: n = sample size needed, Z = the standard normal value, such as 1.96 for a 95% confidence level, P is the estimate of prevalence of cyberbullying, and d is the margin of error.

A multistage sampling technique was used. The selection of the secondary schools in the first stage was purposive, involving ten secondary schools which were selected due to their size, accessibility and administrative approval. For the second phase, students were assessed for cyberbullying exposure and cyberbullying anxiety symptoms. Participants suitable for the study, in terms of criteria, were then sampled systematically up to the desired sample size.

Adolescents between 13 and 18 years old, who experienced cyberbullying over the past 12 months, with mild to moderate anxiety symptoms who attended school regularly, and who gave parental consent and participant

assent were included. Severe psychiatric disorders that required psychological specialist treatment, significant cognitive impairment, involvement in other psychological intervention programs and incomplete study activities were excluded.

3.3 Integrated Social–Pediatric Intervention Framework

Integrated social–pediatric intervention framework has been developed to deliver a holistic support for adolescents who are presumed to be cyberbullied, anxious and struggling in school. The intervention pathway is structured and multidisciplinary and starts with the identification of cyberbullying victim adolescents as shown in Figure 1. After initial identification a child and family will receive a pediatric evaluation to assess overall health, sleep, lifestyle, and physical signs of psychological distress. Students then are provided with mental health counseling, individual counseling sessions, and anxiety management skills and emotional regulation training to assist them in developing their psychological well-being.

The third component is social work support that includes family counseling, peer support activities and building social resiliency to enhance adolescent coping and social relationships. After psychosocial intervention, learners get academic support from teacher mentoring, study skills training and academic tracking on a continual basis. The coordinated interventions aim to take account of health and social and education effects that cyberbullying has and will have on the victim. The intent of the framework ultimately is to improve mental health for impacted adolescents, social resilience, school connectedness, and academic performance.

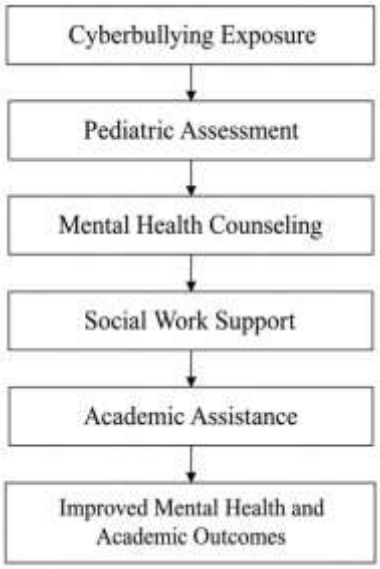

Figure 1. Integrated Social–Pediatric Care Framework

This Framework provides a visual map of the steps that children take when they experience cyberbullying, from pediatric screening, mental health counseling, community referral to academic support to better mental health and academic outcomes.

3.4 Data Collection and Outcome Measures

A structured assessment protocol for the evaluation of adolescents' cyberbullying exposure, psychological well-being, social functioning and academic performance was used to collect data from participating adolescents. There were 5 validated tools used in both the pre and post-tests. The Cyberbullying Exposure Questionnaire (CEQ) was used to measure cyberbullying experiences and the Generalized Anxiety Disorder Scale (GAD-7) was used to measure anxiety symptoms. Standardized scales of school connectedness and social resilience were used to assess these constructs, while the academic performance data came from official school records and teacher

assessments. To ensure consistency and reliability of data collection procedures, all assessments were carried out through the efforts of trained researchers and school counselors.

The study took an iterative and gradual approach with three phases: In Week 0, baseline assessment was carried out to determine the psychological, social and academic status of the participants before starting intervention. Following this, 16 weeks of intervention took place providing comprehensive support to participants via pediatric health services, mental health counseling, social work services, family engagement services and academic mentoring. Post intervention assessment occurred in Week 16, with the same instruments used to determine the changes in study outcomes immediately after the intervention.

The main outcome measures were reduction in anxiety and improvements in academic performance. Secondary outcome measures included improvements in school connectedness, social resilience and family engagement. The overall effectiveness of the intervention was measured by the Intervention Effectiveness Index (IEI) that was derived from Equation (2):

$$IEI = \frac{(A_{pre} - A_{post}) + (AP_{post} - AP_{pre})}{2}, \quad (2)$$

IEI is the overall intervention effectiveness, Apre is the baseline anxiety score, Apost is the post-intervention anxiety score, APpre is the baseline academic performance score, and APpost is the post-intervention academic performance score. This suggests that the more positive the IEI results are, the more effective the psychological state, and educational performance, are after the program of integrated social–pediatric interventions.

3.5 Ethical Considerations and Statistical Analysis

This study was carried out following the ethical principles for conducting research with human subjects. Ethical approvals from relevant Institutional Ethics Committees were obtained before collecting the data. Consent for the study was also given by the participating school administrators. Informed consent by parents/legal guardians was obtained, and assent was obtained from all adolescents participating. Students were aware of the voluntary nature of the study, and their rights to withdraw from the study with no repercussions. All of the collected information was kept confidential and was analysed anonymously to protect the participants' privacy. Study methods were consistent with the ethical guidelines for adolescent health research as set forth in the Declaration of Helsinki and its amendments.

Data were analyzed by the use of Statistical Package for the Social Sciences (SPSS) Version 29. Demographic characteristics and baseline variables in the study were summarized using descriptive statistics such as frequencies, percentages, means and standard deviations. Chi-square test was applied to analyze relationships between categorical variables and paired t-test for pre- and post-intervention outcome measures. Changes in anxiety levels, academic performance, school connectedness and social resilience over the study time were assessed using repeated measures analysis of variance (ANOVA). In addition, multiple regression analysis was performed to find factors that correlated with the efficacy of the interventions, and to identify factors predictive of positive results. All analyses were performed with two-tailed tests and a p-value of < 0.05 was considered statistically significant. The results were then analyzed in tables and figures, to make the results of the intervention easy to understand.

4. Results

4.1 Demographic Characteristics

250 adolescents finished the 16 - week intervention program, and were part of the final analysis. The study participants were a broad age range of 13-18 years and made up of various demographic and socio-economic groups. The proportion of female (52.8%) exceeded that of males (47.2%) participants. Most participants fell in the age range 16-18 years with 56.8% and the other participants 43.2% in 13-15 age group. In terms of residential status, the majority of the participants were from urban areas (65.6%) while 34.4% came from rural areas. The study sample was representative of the age and gender of the students and their geographical location, which bolstered the generalizability of the intervention outcomes. The demographic information of the participants who were included in the study is provided in Table 1.

Table 1. Demographic Characteristics of Participants (N = 250)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	118	47.2
	Female	132	52.8
Age Group (Years)	13–15	108	43.2
	16–18	142	56.8
Residence	Urban	164	65.6
	Rural	86	34.4
Daily Internet Usage	< 2 Hours	38	15.2
	2–4 Hours	96	38.4
	4–6 Hours	72	28.8
	> 6 Hours	44	17.6
Family Structure	Two-Parent Household	187	74.8
	Single-Parent Household	41	16.4
	Other Guardians	22	8.8

As shown in Table 1, the majority of the participants indicated that they used the Internet from moderate to high levels on a daily basis, which demonstrates the high level of incorporation of digital technologies into young people's everyday lives. These features are relevant for analysing the exposure to cyber-bullying and its resulting effects on mental health, social functioning and academic achievement.

4.2 Baseline Cyberbullying and Psychosocial Characteristics

At baseline, participants reported at least one type of cyberbullying incidents that they had experienced in the last year. The most frequent type of cyberbullying reported was social media harassment (36.8%), followed by online rumor spreading (27.2%), public humiliation over digital platforms (19.6%) and threatening messages (16.4%). Anxiety (high), school connectedness (moderate), and social resilience scores (relatively low) were high pre-intervention, reflecting a high level of psychosocial burden associated with exposure to cyberbullying.

Participants had moderate anxiety symptoms as evidenced by the mean baseline anxiety score of 14.2 ± 3.1. The mean score of the school connectedness subscales was 2.7 ± 0.6, indicating those students' general experiences and reported levels of engagement and belonging in school were not particularly high. Likewise, the mean social resilience score was 48.5 ± 9.3, representing less capacity to manage well social and emotional stress. At baseline, the academic performance was 64.8 ± 8.5%, indicating that many participants had a negative educational impact. The demographic details of cyberbullying exposure and psychosocial factors of the participants in this study are summarized in Table 2.

Table 2. Baseline Cyberbullying and Psychosocial Characteristics of Participants (N = 250)

Variable	Category / Measure	Value

Cyberbullying Type	Social Media Harassment	92 (36.8%)
	Online Rumor Spreading	68 (27.2%)
	Public Humiliation	49 (19.6%)
	Threatening Messages	41 (16.4%)
Anxiety Score (GAD-7)	Mean ± SD	14.2 ± 3.1
School Connectedness Score	Mean ± SD	2.7 ± 0.6
Social Resilience Score	Mean ± SD	48.5 ± 9.3
Academic Performance (%)	Mean ± SD	64.8 ± 8.5
Family Engagement Score	Mean ± SD	21.6 ± 5.2

As seen in Table 2, participants had significant psychological and educational problems prior to the implementation of intervention. The high levels of anxiety and low levels of school connectedness and social resilience scores highlight the importance of the need to employ a holistic approach to support strategies that focus on mental health and academic functioning among adolescents affected by cyberbullying. These pre-change data served as the bases for determining the effectiveness of the integrated social–pediatric intervention framework.

4.3 Effectiveness of the Intervention

Data comparing the psychosocial and academic results of the participants before and after the 16 week intervention period were used to assess effectiveness of the integrated social–pediatric intervention. There was considerable improvement in all indicators measured. Mean anxiety score was significantly reduced from 14.2 ± 3.1 at baseline to 8.6 ± 2.7 after intervention (39.4% reduction, $p < 0.001$). Academic performance improved from 64.8 ± 8.5% to 76.9 ± 7.2%, corresponding to an 18.7% increase ($p < 0.001$). Likewise, in schools, the mean score on the measure of connectedness rose from 2.7 ± 0.6 to 3.9 ± 0.5 representing a 44.4% increase ($p < 0.001$). Similarly, for social resilience, the scores rose significantly from 48.5 ± 9.3 to 68.7 ± 8.4, an increase of 41.6% ($p < 0.001$). Table 3 shows the outcomes for the comparison between before and after intervention.

Table 3. Pre- and Post-Intervention Outcome Comparison (N = 250)

Outcome Variable	Baseline (Mean ± SD)	Post-Intervention (Mean ± SD)	Percentage Change (%)	p-value
Anxiety Score (GAD-7)	14.2 ± 3.1	8.6 ± 2.7	-39.4	<0.001
Academic Performance (%)	64.8 ± 8.5	76.9 ± 7.2	+18.7	<0.001
School Connectedness Score	2.7 ± 0.6	3.9 ± 0.5	+44.4	<0.001
Social Resilience Score	48.5 ± 9.3	68.7 ± 8.4	+41.6	<0.001

All primary and secondary outcome measures showed significant improvements after the intervention as demonstrated in Table 3. The changes in school connectedness and social resilience were the largest relative increases, with school connectedness closely followed, suggesting that the multidisciplinary support strategy was effective in improving the psychosocial functioning of adolescents.

Overall changes in outcomes are shown graphically in Figure 2, showing that scores for anxiety, achievement, school connectedness, and social resiliency both at baseline and post treatment. The figure clearly shows the decreases in anxiety and significant improvements in educational and social–pediatric assessment measures, offering pictorial representations of the effect of the integrated social–pediatric care model.

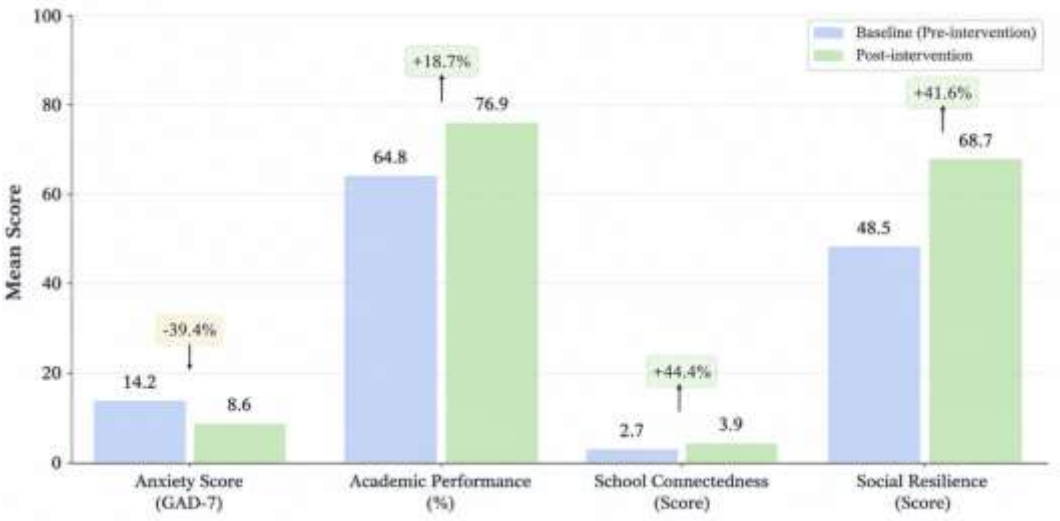

Figure 2. Pre- and Post-Intervention Outcomes.

The results included in Figure 2 are consistent with the statistical results found in Table 3, and suggest that the intervention was a catalyst for improving mental health, educational performance, and social well-being among cyberbullied adolescents.

4.4 Predictors of Intervention Success

A Multiple regression analysis was conducted with the Intervention Effectiveness Index (IEI) as the dependent variable to determine factors related to positive intervention outcomes. Family engagement, counseling attendance, participation in peer-support and involvement in academic mentoring were independent variables. Overall, the analysis showed that family engagement was the most significant predictor of intervention success, with a β of 0.42 and a p-value of < 0.001; meaning that the more parental and family involvement an adolescent has in the intervention, the more significant the overall improvements in his/her psychological and academic outcomes.

Moreover, there was a significant positive relationship between counseling attendance and intervention effectiveness (β = 0.36, p < 0.001), such that intervention effectiveness was greater with the more frequent counseling attendance. Positive relationships with peers and peer-supportive activities was also a significant predictor (β = 0.28, p = 0.002), which underscores the value of positive social interactions and peer relationships for resilience. Likewise, academic mentoring was found to have a significant impact on interventions outcomes (β = 0.24, p = 0.008), which highlights the importance of academic support for the betterment of academic performance and school engagement. Table 4 shows the results from the regression analysis.

Table 4. Predictors of Intervention Success Based on Multiple Regression Analysis

Predictor Variable	β Coefficient	Standard Error	p-value
Family Engagement	0.42	0.07	<0.001
Counseling Attendance	0.36	0.06	<0.001
Peer Support Participation	0.28	0.05	0.002
Academic Mentoring	0.24	0.04	0.008

From Table 4, the data revealed that family engagement and Family counseling attendance were the most influential variables when determining the effectiveness of intervention. The results of this study indicate that the challenge of cyberbullying issues must be managed in the school environment, as well as the active participation of families and mental health professionals. Adolescents in integrated social–pediatric care had

positive outcomes, with support from psychosocial assistance, the involvement of family members and academic mentoring.

4.5 Summary of Key Findings

The results of this study indicate the integrated social–pediatric intervention was successful in enhancing the psychological, social and academic outcomes among adolescents experiencing cyberbullying. The results from 250 participants completing the 16 week intervention programme were significant in all key primary and secondary outcome scores. Significant reduction in anxiety levels was observed with mean difference in GAD-7 scores from baseline to post-intervention being 39.4% ($p < 0.001$) as scores fell from 14.2 ± 3.1 to 8.6 ± 2.7. Academic performance improved from 64.8 ± 8.5% to 76.9 ± 7.2%, corresponding to an 18.7% increase ($p < 0.001$).

There were significant social gains, as well as academic and psychological benefits, from participation. School connectedness increased by 44.4%, rising from 2.7 ± 0.6 to 3.9 ± 0.5, while social resilience improved by 41.6%, increasing from 48.5 ± 9.3 to 68.7 ± 8.4 ($p < 0.001$). These findings suggest that the intervention was effective in improving adolescents' feeling of belonging, their coping skills and their involvement in the school.

Family engagement ($\beta = 0.42$, $p < 0.001$) and counselling attendance ($\beta = 0.36$, $p < 0.001$) were the strongest predictors of success of intervention, followed by peer-support participation and academic mentoring. The study results suggest that school-based social–pediatric care models with a multidisciplinary team, offering care in both social and psychological/educational domains, are effective in addressing the complex psychological, social, and educational burden of cyberbullying among adolescents. These outcomes are evidence of implementing a comprehensive continuum of support in schools for adolescent well-being and academic success.

5. Discussion

This is a test of the effectiveness of an integrated social–pediatric care intervention for supporting adolescents with cyberbullying; anxiety and academic problems. After 16 weeks of intervention, it was found that since there were subjects in each group the scores of each group improved greatly in all measured aspects. The anxiety scores were reduced by 39.4%, academic performance was improved by 18.7%, school connectedness was improved by 44.4%, and social resilience was improved by 41.6%. The results highlighted that it was possible to successfully address the interconnected issues that adolescents face when their exposure to cyberbullying could be addressed through a combination of a variety of disciplines such as a pediatric assessment, mental health counseling, social work support, family involvement, and academic mentoring. The most important factors for intervention success were family engagement and attendance at counseling, underscoring the importance of ongoing psychological support and family engagement.

The results are consistent with other studies that found a relationship between cyber victimization and negative psychological, social and school-related consequences. Previous studies have demonstrated that cyberbullied youth are generally more anxious, distressed, less involved in school, and have reported poorer academic performance. This study implemented a more in-depth, multi-component approach to intervention, transforming health, social, family and educational factors into a unified whole, which led to more comprehensive gains in a variety of domains of adolescent well-being than has been observed in previous studies, which tended to focus on one type of intervention.

The results of these findings have significant implications for school health services and clinical practice. There is a need for pediatric health care professionals, school counselors, teachers, and social workers to partner to develop integrated systems of support for adolescents who face cyberbullying. The prospective intervention design and the multidisciplinary aspects of this study are one of the strengths. There are some limitations: the study is undertaken in selected schools; only self-reported measures; and the follow-up period is relatively short. Larger sample sizes and longer follow-up periods are suggested for future research to further confirm the effectiveness and sustainability of integrated social–pediatric care models.

6. Conclusion

This study highlights that the application of an integrated social–pediatric care method can positively contribute to psychological, social, and academic outcomes of cyberbullied adolescents. After 16 weeks of intervention, there was evidence of anxiety levels reducing and academic performance improving, with social resilience also significantly increasing, for example. The results suggest a multi-faceted approach to combating cyberbullying that goes beyond conventional disciplinary actions and involves a pediatric evaluation, a mental health counselor, social workers, parental involvement, and academic support.

The importance of involving families in interventions and the role of family participation in intervention outcomes was highlighted, as was the role of counselling in intervention success. The multi-disciplinary approach adopted in this research indicates the importance of collaborative support systems in ensuring outcomes for adolescent success and well-being.

In general, the findings of this study confirm that integrating social and paediatric service both in and outside of school can be a viable and effective solution to the multifaceted impact of cyberbullying. Additional studies utilizing larger study samples and years of follow-up are warranted to further test the long-term viability and impact of models of integrated intervention for adolescent health promotion.

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