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Prevention of Internalized Problems of Children and Youth in Academic Setting

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Abstract

Research of internalized problems during school years shows their stability and tendency of enhancement during the period of growing up. There are many challenges children and adolescents have to face: greater academic expectations, changes in relationships with parents and peers, physical changes, and transitions. Given the context and their background, students' feelings such as shy or withdrawn behavior, frequent worrying, sadness, loneliness, and low sense of self-worth are unavoidable part of every classroom. Childhood and adolescence seem to be a critical age for prevention of internalized problems, and schools seem as a natural setting to support the accumulation of positive experiences that outweigh risks. When thinking about general evidence-based approach to internalized problems, findings show that is crucial to educate youth how to develop active coping strategies and to cope with negative thoughts. Schools can be good environments to do that. The aim of this chapter is to offer an overview of critical epidemiological data on internalized disorders of children and youth as well as a summary of evidence-based practices focused on their prevention in schools, going from universal to targeted programs and highlighting mindfulness-based interventions. Finally, Croatian example of investments in socioemotional learning is presented, examining its effects on students' internalizing symptoms.

Keywords: internalized problems, prevention, school prevention programs, mental health

1. Introduction

1.1. Internalized problems of children and youth

Internalized problems are defined as group of emotional symptoms turned toward individual that reveals more prevalent effortful control of behavior, feelings of sadness, low self-esteem,

behavioral inhibition, and fears. A substantive body of research indicates that although children and youth are a healthy subpopulation group, 20% of them could experience mental health issue until early twenties, anxiety and depression being the most prevalent [1–3]. That statement is not so surprising if we are aware of the fact that puberty and adolescence bring more sensitivity to social clues, seeking approval from important others, immaturity of neurobiological system connected with emotions, progressive reduction of parental control, and greater importance of peers. Half of all lifetime mental disorders begin before the age of 14, anxiety even before between age 6 and puberty [4]. That being said, school setting is unavoidable when talking about factors that support children and youth to thrive. It seems that students' feelings such as shy or withdrawn behavior, frequent worrying, fears, sadness, loneliness, hopelessness, and low sense of self-worth are unavoidable part of every classroom.

Newer American epidemiological studies state [4] that there is a prevalence of 32% of anxiety disorders and 14.3% mood disorders in the group of youth from 13 to 18 years old, while around 8% of American youth had a major depressive disorder. A British study included younger children, from 5 to 15, and found a prevalence of 3.7% for any anxiety disorder [4]. 1-year incidence rate for the first onset of major depression in adolescents is between 5.6 and 10%, while 17.9% of adolescents have a recurrent episode within a year [5–7]. Adolescent depression is associated with high rates of comorbid anxiety disorders, disruptive behavior disorders, and suicide attempts. It predicts future adjustment problems including marital difficulties, unemployment, and attachment problems in offspring [5–7]. By late adolescence, twice as many girls are depressed as boys, and 40% of those who experienced depression during youth end up with a diagnosis of major depression in adulthood [7]. After the first major depressive episode, the chance of recurrence and chronicity is very high [8]. Worldwide data shows that depression is a major public health problem that requires the development, implementation, and evaluation of interventions preventing its onset. The World Health Organization estimates that depression is the third leading cause of global disease with projections that it will rank first until 2030 [9]. There is also a great impact of depression on physical health: 40–60% of people who have experienced depression die prematurely [9], often show greater rates of smoking, and, as an aftermath of various circumstances affecting the quality of life, deal with heart disease [10]. When talking about the costs for adults, comprehensive European study estimates annual cost of mood disorders on 113. 4 billion Euros for 33.3 million affected people [11]. Burden is not only personal but also economic, affecting families, communities, and governments.

All this evidence shows that it is crucial to tackle emotional health problems early and shift focus from treatment to prevention and early intervention [4], enabling full potential for future adults. Emotional well-being has implications on children's and adolescent's self-esteem, pro-social behavior, school attendance, and success and increases risk of suicidal behavior, smoking, substance abuse, and delinquency [1, 12, 13] as well as choices of profession, directly leading to circumstances for adulthood [6] and future life chances [9]. Good sense of self in childhood is transferred to adulthood, together with good problem-solving skills, social competence, and feeling of purpose [13]. These resources vouch for good outcomes, serving as buffers in times of risks, stress, and hardship, and they are not only dependent upon child or a teen but also upon family characteristics and various environments in which they live [13, 14].

Many authors suggest that research of interventions for children and adolescents should be a priority since the first signs of disorder often happen in adolescence. Adolescence seems to be a crucial window for preventive interventions given the fact that rates of emotional ill health increase during this developmental stage. The 2009 Institute of Medicine report on prevention of mental, emotional, and behavioral disorders presented evidence that anxiety and mood disorders can be prevented [14]. Leaders in the field of mental health recommend further research on prevention and interventions for mental disorders of children and adolescents [1, 9, 15].

1.2. Risk and protective factors for internalized disorder trajectories

Risk and protective factors on individual, family, school, and community level help to understand the possibilities of organized support for sustaining a state of mental well-being and buffering possible adverse circumstances. Offering opportunities that support strengths should be planned within regular, already existent settings and systems supporting development of children and youth [13]. Program activities and interventions should be theory driven and science based, addressing well-known factors.

It is not surprising that research of developmental cascades implies crucial importance of family influences, early attachment, and parent-child relationship [16]. Transfer of emotional problems from parents to offspring is related both with shared genetic factors and vulnerability as well as with inadequate parenting [17]. It seems that maternal depression or existence of parental anxiety symptoms is a risk factor for elevated internalizing problems [17]. Parents' negative emotional expressiveness, including hostility and irritability, affect child's feeling of security [17, 18]: depressed mothers are less responsive to child's needs, more authoritarian, and rejecting, while anxious parents tend to be controlling and express less warmth. Additionally, internalized problems are related with family dynamics where emotion expression is quite restricted, i.e., both positive and negative emotions are suppressed, leading to heightened negativity and avoidance as a mean of regulation [17]. Children in such family context show less emotion recognition and lower emotion regulation strategies. Same authors explain risks specific to child's temperament, such as inhibition, fearfulness, shyness, and avoidance of new situations. Additionally, cognitive style characterized with pessimistic attributions, negative expectations, external locus of control, and rigidity is also a contributor.

One of few longitudinal studies [19] assessing internalized disorders has shown that academic problems, elevated parental stress, serious health issues, and social isolation strongly predict internalized symptomatology that lasts until early adulthood. Specifically, children with three or more negative life events were almost nine times likely to exhibit internalized problems. Such experiences were neglect, maltreatment, family violence, or sexual abuse, rarely found in sample, but also parental conflict and divorce which happen considerably more. Substantive influence on internalized problem development is reported upon peer victimization, rejection, and bullying [20] what stresses the need of school interventions once again.

The more opportunities young people have to accumulate protective factors that outweigh the influence of risks, the more likely they are to preserve their mental health well-being. Key protective factors for stable emotional development include a sense of family belonging as well as school attachment, i.e., caring and warm environments where both adults and peers

are supportive [14]. Research shows that children who have a close emotional relationship with at least one peer have smaller chances to develop internalized problems than children who do not have such experience. Relationships with others are significant protective asset since they buffer negative experiences and low mood, symptoms often seen within children isolated by friends or by their own choice [20]. Active methods of coping such as problem-solving lessen the amount of negative feelings and improve functioning and regulation.

2. Interventions for prevention of internalized problems of children and youth

2.1. Changing role of schools in modern era

In the age of information, schools really have a duty to revise their mission: knowledge is available almost everywhere, but quality relationships are becoming quite rare. In order to prepare future adults for challenges in full scale, schools have to provide critical skills for future education, work, and life in general. Besides cognitive skills, to develop positively and be empowered and participating member of society, young people need social and emotional skills. Modern school has holistic focus and has to incorporate care for emotional and social well-being in their curricula [21–25]. Reduction of subjective distress as well as behavior problems is possible by implementing interventions and specific classroom-management practices that develop understanding of emotions, positive goal achievement, maintenance of positive relationships with others, and responsible decision-making. From preschool to middle school, those competencies are being taught within the process of socio-emotional learning and universal programs. International evidence strongly confirms that school interventions teaching socio-emotional learning advance mental health, social functioning, positive health behaviors, as well as academic success [21–25]. Cost benefit studies are also supporting the case: data from 2011 demonstrates that for every dollar invested in socio-emotional learning, average return is 11$ [26]. It is important to determine if universal evidence-based programs can respond to the needs of young people with different characteristics and if enhancement of young people's social and emotional skills and resilience building is sufficient strategy [24].

2.2. Evidence-based prevention programs for internalized problems

Since lots of evidence suggests that large proportion of children and young people with anxiety disorders and depression are not included in the treatment, universal prevention programs that promote well-being and preventative interventions are even more essential [27, 28]. Lack of effective treatment probably has a lot to do with problems in the provision of care and poor access to services but also has a cause in low symptom awareness, stigma, inadequate treatment, and available funding [29]. Comprehensive answer to the issue of internalized problems is slowly directing its aims to prevention since it could relieve the burden on health care and social services. When thinking about general evidence-based approach to internalized problems, findings from literature review [30] propose that effective strategy is using cognitive-behavioral therapy model, educating adolescents how to cope with negative thoughts, to solve

problems more effectively and develop active coping strategies, as well as to support caring relationships and quality interactions with important others.

Terzian and colleagues have reviewed 37 programs [30] aiming at internalized problems in general, from depressive symptoms, suicidal thoughts or behaviors, anxious symptoms, PTSD, and shy/withdrawn behavior. Twenty-four out of thirty-seven programs had positive impact, three had mixed findings, and ten were not effective. Programs that were found to work were from either therapeutic approach (individual, family, and group) or skills training approach. Evidence suggest that good programs should teach children and youth to cope with negative thoughts and feelings through (1) building cognitive-behavioral skills such as thought monitoring, identification of triggers, and reframing of negative thoughts and (2) investment in coping skills such as relaxation, seeking help from others, and teaching participants to react adaptively on stress. When focusing only on prevention programs in this review: 10 out of 19 were found to have positive impact on at least one internalizing problem.

After 2010, several reviews and meta-analytic studies have considered effectiveness of various types of interventions, being universal or focused on specific populations in various levels of risk as well as for those with already diagnosable internalized problems [29–34]. Within Cochrane review [29], prevention studies were grouped in universal and targeted; targeted included both selective populations in higher risk and indicated programs focusing on signs suggesting the onset of disorder. Examples of population in higher risk are related with children of parents with diagnosable mental health issue; children with elevated family risks such as violence, neglect, and disputes; as well as children and youth with experience of trauma or bullying. Issue was raised [29] about the inclusion of secondary prevention studies, i.e., those that included children and youth with a history of anxiety or depression, but typically previous history is not described well. Preventive interventions aimed at internalized symptoms, especially those in school settings, need to be researched more thoroughly in the future. Findings are mixed or small to moderate, and it seems that the most problematic issue is that effects easily fade after the program completion. Universal prevention programs last for between 3 to 9 months. Evidence is promising in ways of reducing levels of depressive symptoms and only in some cases episodes of clinically significant depression [29].

Conclusions for internalized problems in general are even more difficult since studies are usually focused on specific problem, depression being most often nowadays, and not the whole group of issues. For example, Cochrane review of programs aiming at depression included 53 studies and more than 14,000 participants and concluded that both targeted and universal interventions are effective for prevention of depression although effects of selective interventions last longer. Also, it has been shown that psychological interventions are more effective than educational interventions since they do more than teach; they really change thinking strategies and skills. Secondary analysis of Cochrane trials [31] aimed at investigation whether specific therapeutic approach was more effective, indicating variation in outcomes across trials. There is some evidence that more consideration should be given to specific therapeutic approach since cognitive-behavioral interventions were more often proven effective. Also, that additional review showed that results were not moderated by the type of prevention. On the other hand, meta-analysis conducted by Horowitz and Garber [32] included 30 studies where prevention of depression of children and youth was in focus and their conclusion was

that regarding depressive symptoms, selective and indicated interventions have larger effects than universal. Nevertheless, universal approach should not be neglected [33]: Australian examples show that universal programs involved less stigma and less attrition of participants.

Since the focus of this chapter is related to school context, choice of school preventive intervention programs is presented in **Table 1**. Current literature suggests those programs are either promising since they have mixed results in various evaluations or are still being adapted from more clinical interventions to preventive approach and school settings [30, 33–36]. Brunwasser, Gillham and Kim [34] looked at various studies of Penn Resiliency Program and highlighted promising results for more than eight-session program of longer duration, delivered by a healthcare professional. Generally, many school prevention programs for internalized problems tend to have cognitive-behavioral foundations, and it is notable that they incorporate optimism and hope as their values. Besides school, partners in prevention have to be parents, especially if parental style and parent–child relationship have its difficulties but also if they have anxiety or depression disorder as well. Parental part of the program is adjunct to program activities with youth, and it is implemented simultaneously [33–35].

It is important to emphasize that the use of online and computer delivery of interventions for internalized problems and their prevention is rapidly growing. For new generations of children and adolescents, usage of the Internet or their computer and cellphone seems easy and cost-effective, increases uptake, and secures anonymity that is often being an issue in help seeking. Description of new technology wave interventions is out of the scope of this chapter, but it is necessary to address numerous benefits such as instant availability (especially for mobile phones and apps) and less need for face-to-face professional or time-consuming

Name of the program.	Short description of the program
Mindfulness in Schools Programme (MISP)[1]	Universal, a set of nine scripted lessons tailored to secondary schools, supported by tailored teacher training; it involves learning to direct attention to immediate experience, moment by moment, with open-minded curiosity and acceptance
Learning to Breathe Mindfulness Curriculum[2]	Universal and selective, for adolescents, consists of six themes that may be delivered in 6, 12, 18, or more sessions; the six core lessons are body, reflection, emotions, attention, tenderness, and healthy mind habits
Mindfulness Group Program [53]	Universal, for students aged 13–20, includes eight weekly delivered 100-min sessions; it integrates elements of MBSR and mindfulness-based cognitive therapy (MBCT) [54]; students develop specific skills in their capacity to become nonjudgmentally aware of thoughts, feelings, and sensations and increase their capacity to replace automatic, habitual, and often judgmental reactions with more conscious and skillful responses
Mindfulness Training [42]	Universal, modified MBSR program, students aged 14–15, four 40-min group trainings one per week; training covers the concepts of awareness and acceptance, and practices include bodily awareness of contact points, mindfulness of breathing and finding an anchor point, awareness of sounds, understanding the transient nature of thoughts, and walking meditation

[1]https://mindfulnessinschools.org/what-is-b/b-curriculum/
[2]https://learning2breathe.org/

Table 1. Mindfulness school-based programs found promising/effective for internalized problem prevention.

teacher training [37]. There are several examples of promising interventions using the Internet, applied game or gamification interface for mental health, and meta-analysis shows a moderate effect of d = .55, favoring serious games over no intervention controls. Regarding the fact that this topic requires new chapter, just one illustration—excellent New Zealand example program, SPARX, interactive fantasy game using CBT approach—aims adolescents from 12 to 19 years with elevated depression symptoms, and it is goal-oriented and problem-solving. Each level module lasts 30 min and can be available online or at home computer [38]. Findings show positive impact on emotion regulation and depressive symptoms reduction, and there are several other international examples [37, 38].

2.3. Mindfulness interventions for internalized problem prevention

When thinking about new wave of approaches, mindfulness practice also enhances the very qualities and goals of education in the twenty-first century and is usually seen hand in hand with socio-emotional learning approach. Since of it focuses on the body and different approaches to mind, it is a good choice when addressing internalized problems. The application of mindfulness with children and adolescents has increased more recently. Regarding changing lifestyles and risks, it would be helpful if children could learn to stop their mind wandering and regulate attention and emotions, to deal with feelings of frustration, and to self-motivate. A review of the emerging body of research on mindfulness-based interventions with children and adolescents reveals that such interventions might be beneficial in many different ways [39]. Mindfulness is considered one of many contemplative practices and has become a very popular practice due to its various mental and physical health benefits [40]. It is said to have originated two and a half thousand years ago from the religious traditions of Buddhism. Around the late 1970s, Jon Kabat-Zinn introduced mindfulness to Western cultures as a secular health practice [41]. It is defined as the practice of "paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" ([42], p. 145). Mindfulness is considered as "the self-regulation of attention so that it is maintained on immediate experience… characterized by curiosity, openness, and acceptance" [43]. From this perspective, mindfulness practice can be understood as the foundation and basic precondition for education [44]. Modern education abilities embrace not only good attention skills and emotional competence but also prosocial abilities such as responsiveness, kindness, high ethics standards, sensitivity, imagination, and as well as good problem-solving. They allow children to face forthcoming challenges of the progressing environment, preferably becoming thoughtful, kind, and dedicated people [45, 46].

There are clear indications now that mindfulness-based programs with children and youth within school setting are feasible and acceptable [39]. Many of the existing school-based mindfulness programs for mental health have been adapted from Mindfulness Based Stress Reduction (MBSR) to meet children's and adolescents' developmental needs and shorter attention spans [47, 48]. These programs include a number of mindfulness-based activities such as breath awareness, psycho-education components, body scans, sitting meditations, and mindful movement, among others [44, 49]. Lately, scientists have initiated studies of various short mindfulness-based interventions, from 1 to 4 weeks long, including mindful eating,

walking contemplation, and coloring, as well as combination of mindfulness and yoga activities. Findings suggest this is effective in diminishing emotional problems and problem behaviors in school settings [50–52]. Some of the promising/effective mindfulness school-based programs for internalized problems are presented in **Table 1**.

In terms of school-based mindfulness intervention effectiveness, these programs have been associated with decreases in stress levels [55–58], rumination, intrusive thoughts, emotional arousal [59, 60], and depression symptoms [53, 55, 57, 58, 61] along with increases in emotional well-being [62] and self-compassion among participants [57]. A study conducted by Britton et al. [47] on a sample of 100 elementary school students involved into Integrative Contemplative Pedagogy program has shown reduced suicidal ideations and affective disturbance among students after 6 weeks of everyday short meditation training (3–12 min per day). Studies have also confirmed that mindfulness-based interventions in schools lead to a reduction in symptoms of depression in minority children [63] and to a reduction in anxiety and increase of social skills in students with learning disorders [64].

Zenner and colleagues [44] have conducted a systematic review and meta-analysis to summarize data available on the effects of 24 studies of mindfulness-based trainings for children and youth in a school setting and report a significant medium effect size of d = .40 across all controlled studies and domains. In 2017, big meta-analysis of 24 studies (n = 3977) was led to examine specific moderators contributing to school-based mindfulness interventions for mental health in youth [65]. Overall, mindfulness interventions were found to be helpful, with small to moderate significant effects pre-post intervention compared to control groups; however, interventions that were delivered during late adolescence (15–18) and that consisted of combinations of various mindfulness activities had the largest effects on mental health and well-being outcomes.

3. Croatian example: Effects of socio-emotional learning on internalized problems

3.1. Research studies

The aim of this part of the chapter is to present two studies of empirical evaluation of social–emotional learning curriculum, Promoting Alternative Thinking Strategies (PATHS) [66], conducted in Croatian kindergartens [67] and elementary schools [68] in order to examine the effects on the level of internalized problems such as emotional withdrawal, depressive symptoms, and worry.

3.1.1. Preschool study

The preschool PATHS study involved a quasi-experimental design, evaluating the short-term outcomes of the preschool PATHS curriculum implemented in six buildings across three Croatian sites (Zagreb, the capital city of Rijeka, and the Region of Istria, Croatia). Within each building two groups were chosen, and twelve kindergarten groups were included in the

study. The impact of the PATHS program was tested within the sample of 443 children (aged 3–6) for whom their preschool teachers collected data during three time points within a 2-year period. The first measurement was within the usual practices, before implementation, while second was at the start of the program and third in the end. Forty-five percent of children in the sample were girls.

3.1.2. School study

The study relied on a randomized controlled design to evaluate the impact of PATHS. Originally, 30 schools were recruited with the help of local authorities in three abovementioned implementation sites in Croatia. Within each region, equivalent pairs of schools were coordinated according to area features, household financial status, and proportion of pupils getting free-of-charge meals, number of pupils in school and classroom, as well as overall marks. Within each pair, one school was intervention and other continued typical program. Within each building, two first classrooms were chosen for the program. Only ten children from whole classroom were randomly nominated for assessment. Since some teachers failed to complete assessments, final sample consisted of 568 children and 546 children (96% of the sample) had complete post-intervention assessments. Forty-seven percent of the school children participants were girls. At the beginning of this study, all children were 7 years old in average and in the middle of the first grade. At the end of the study, children were near the end of the second grade.

3.1.3. Measures

Both preschool and schoolteachers were assessing children with the same battery. Among nine rated child behaviors, two of them are related with internalized symptoms:

3.1.3.1. Emotion regulation

Emotion regulation was measured with seven items from the *Social Competence Scale* from Fast Track Project (http://www.fasttrackproject.org/techrept/s/sct/). Sample item was "accepts things not going her/his way." All items were rated on a 6-point Likert scale with response options ranging from almost never to usually (α = .89) [68, 69].

3.1.3.2. Withdrawn/depressed behavior

Withdrawn/depressed behavior was assessed with six commonly used items compiled for Head Start REDI [28–30]. Sample items were "avoids playing with other children" and "sad, unhappy." All items were rated on a 6-point Likert scale, with response options ranging from almost never to usually (α = .81).

3.2. Paths

PATHS is one of the most effective socio-emotional learning programs for children from pre-school to middle school worldwide. It has been tested in multiple randomized controlled

trials and implemented in many different contexts with children of various backgrounds. Various research and independent studies show that PATHS program is a successful example of whole-school generalization, enhances classroom climate and significantly contributes to children's emotion recognition and self-regulation, improves relationships with others, and diminishes externalizing problems [70, 71].

3.3. Results in Croatia: effects of PATHS on internalized symptomatology

To test intervention effects, hierarchical linear models were estimated, nesting children within classrooms. In school study, analyses were conducted for subgroups of children within the sample. Each of the child behaviors included in this study was dichotomized to specify whether a child was above or below average in terms of her/his functioning at the pre-intervention assessment. Latent class analysis was applied to nine indicators to determine whether children were relatively high or low risk. In this analysis, 223 children had the highest probability of being in the most elevated risk group. Those children had highest likelihood for lower scores on prosocial behavior, control of emotions, and school-related performance. In the same time, the same kids had a highest chance for high results on problem list (inattentiveness, hyperactivity, opposition, aggression, difficulties with peers, and inhibited/sad behavior). Analysis showed that 335 children had maximum chance of being in the low-risk subclass, which was characterized by above average scores on the positive behaviors and below average scores on the negative behaviors.

In preschool study, analyses were done in two stages: the first stage aiming to see changes in intervention sample across time and the second stage to compare scores with comparison condition. The first stage of preschool analyses shows insignificant change score for emotional symptoms of $-.14$, $p < .0001$, $d = .41$; ICC $= .02$, $p =$ ns. Second-stage analyses show differences among children who were in comparison and PATHS condition: there was statistically significant difference in rates of change for emotional symptoms, $\beta = -.33$, $p = < .05$, $d = .56$; ICC $= .27$, $p < .05$. The magnitude of this difference in rates of change was over one-half of one standard deviation. Results for school study are shown in **Table 2**.

In school study, the pre-intervention level of functioning on the outcome and child sex were included as covariates. Among the children who were relatively high risk, there were no statistically significant differences between intervention and control group children.

Among the children who were relatively low risk, there was a small to moderate effect for emotion regulation and a marginally statistically significant difference in withdrawn/depressed behavior but no changes for high-risk group. To examine the robustness of effects among the low-risk children, latent class analysis was used again to determine whether children exhibited any problems. In this analysis, 81 children had the highest probability of being in the low risk with social difficulties subgroup, which was characterized by below average scores on prosocial behavior and emotion regulation and above average scores on withdrawn/depressed behavior. The other 254 children had the highest probability of being in the low risk without social difficulties subgroup, which was characterized by above average scores on all the positive behaviors and below average scores on all the negative behaviors.

School study	Complete sample (N = 568)	High-risk children (n = 223)	All low-risk children (n = 335)	Low-risk children with social difficulties (n = 81)	Low-risk children without social difficulties (n = 254)
Emotion regulation	.18+	.06	.38**	.65**	.32*
Withdrawn behavior	−.09	.06	−.26+	−.52*	−.19

Legend:*level of significance p = <.05;*
***level of significance p = <.01.*

Table 2. School PATHS effects on emotion regulation and withdrawn behavior for the complete sample and subgroups of schoolchildren.

Problem in focus	Found to work	Short description of program
Depressive symptoms	Adolescents coping With stress	Fifteen sessions for group from three to ten participants, adapted from Coping with Depression Course[1], group CBT preventive intervention for adolescents in risk, managed by educated therapist
	Problem-solving for life	
	Penn Prevention Program/ Penn Resiliency Program	Universal, teacher-implemented classroom program[2], for 12–14 year olds, 8 sessions, focusing on life problem-solving skills, positive problem-solving orientation, and optimistic-thinking styles
		School based, facilitated by school counselor[3], 12 sessions, aimed at depression and anxiety symptom reduction, special accent on optimism, coping strategies and perspective taking, one of the most widely disseminated
Anxiety symptoms	FRIENDS Program/Friends for Life Program	Cognitive-behavioral approach for adolescents, delivered by school staff supported by trained graduate psychology student, 10 one and half hour sessions, teaching coping skills and problem-solving + parallel parent intervention, four sessions
Suicidal thoughts or behaviors	Signs of Suicide Prevention Program	Universal, school-based program for middle school and high school; central activities are raising awareness for depression and suicide signs and help seeking behavior[4]

[1]https://www.childtrends.org/programs/adolescent-coping-with-stress/
[2]https://www.childtrends.org/programs/problem-solving-for-life/
[3]https://ppc.sas.upenn.edu/research/resilience-children
[4]https://nrepp.samhsa.gov/ProgramProfile.aspx?id=85

Table 3. Prevention programs found promising/effective for internalized problems prevention.

Among the children who were relatively low risk with social difficulties, there were statistically significant differences on emotion regulation and withdrawn/depressed behavior. Intervention effects of this magnitude shown in **Table 3** would be considered moderate to large. Among the children who were low risk without social difficulties, there was a small effect on emotion regulation but no effect on withdrawn behavior.

3.4. Discussion of results

Both of the presented studies of PATHS curriculum in Croatia indicate participation of children in universal, social-emotional curriculum that promotes emotion recognition and

relationships with others and self-esteem and self-control can diminish emotional symptoms, withdrawal, depressed symptoms, and worry, even for young children from 3 to 6. Also, data clearly shows that the decrease of risks for development of internalized problems is not uniform for all children: benefits vary depending upon sets of negative behaviors or lack in social or learning skills.

Analyses conducted for subgroups of children show that effectiveness depends upon child's capacity and needs. For children that are low risk but seem to have smaller issues in relating to others and lower social skills as well as lower learning behaviors, it is plausible to conclude that mental health promotion intervention like PATHS is very useful. For that group of children that need additional but not clinical support, improvement of classroom climate, boost of social competencies, and focus on feelings, such classroom intervention gives promising results. For that subgroup, improvement of emotion regulation and decline in withdrawal happened within a year of program implementation. Our results for high-risk children subsample show that they need additional care and support, probably more attention within indicated prevention approach or even clinical support. Nevertheless, within comprehensive policy addressing mental and emotional well-being of children, Croatian example shows that universal strategies are helpful and should be considered when planning prevention of internalized symptoms.

4. Conclusion

This chapter focused on internalized problem prevention in academic setting, since they are integral part of every classroom. Teachers and even parents do not recognize them in exact amount; children and youth tend to hide them and avoid reporting they need help. Findings from literature clearly accent that schools have an important role in reducing internalized problems, starting early on with emotional well-being promotion and responding to first symptoms. Comprehensive whole-school approach to mental health and internalized problems could serve as a climate change since research shows that besides supporting relationships, skill-building approach is most promising. Effects of school prevention programs are small to moderate, but thinking strategically, comprehensive planning of interventions on all levels could relieve the burden on health care and social services.

More research is needed to identify effectiveness of various types of programs, but it seems that universal school prevention programs have small to moderate effects and there is evidence that mindfulness programs also reduce internalizing symptoms. Conclusions for internalized problem selective and indicated prevention are still mixed, some studies showing effects in reducing depressive symptoms and enhancing emotional regulation and coping skills, but other studies show effect only for some measures. Making general conclusions is hard since studies are usually focused on specific internalized problem, depression being most often nowadays. Answer to a public health problem has to be comprehensive. Combination of investments from early years, coming from universal approach such as socio-emotional learning and mindfulness-based programs, and then being followed with selective programs for those in elevated risk and indicated interventions for those showing first symptoms, seems promising public health strategy and a way forward.

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Conflict of interest

Authors certify they have no financial or nonfinancial interest in the subject matter of this manuscript.

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