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SYNTHESIS

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A systematic narrative review of subjective well-being promotion intervention programmes in the school setting

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Abstract

Given the growing number of interventions aimed at promoting well-being in the school setting, this narrative review sought to synthesise available evidence about the characteristics of the interventions: theoretical components, evaluation designs and their reported results. Two electronic databases (EBSCO and Scopus) were searched, and articles published between 2015 and 2020 were included. A total of 1477 articles were identified from these search engines and based on the systematic scrutinising process a total of 55 articles were included in the review. Only one-third of the studies employed experimental, causal designs. Therefore, the review is unable to make conclusive statements about promising approaches, Nevertheless, the results show that the majority of interventions used to promote school children's well-being were based on positive psychology, most of which were focused on promoting positive emotions. The studies reviewed also suggest that longer interventions, with a higher number of sessions, which are targeted at multiple components of positive emotions are more likely to yield positive results. Almost all these studies were carried out in developed countries, with only one empirical work in Latin America. Therefore, more robust experimental studies using causal designs

are needed, and more empirical work is needed in low- and middle-income countries on effective practices in developing children's subjective well-being.

KEYWORDS
intervention, promotion, school, subjective well-being

Context and implications

Rationale for the study

This study reports on the theoretical foundations, evaluation designs, as well as empirical results of programmes that aim to promote subjective well-being at school due to the lack of updated and integrated information in this regard even though in recent times applied research on this subject has been growing. Most of the studies in this subject are based on positive psychology, mindfulness and positive youth development among others, and the research designs of these studies are mostly non-experimental, with only one-third using experimental designs.

Why the new findings matter

These results are important in that they provide guidelines for the characteristics most commonly used in interventions that aim to promote school well-being. For example, interventions focused on one or more components of positive psychology mostly use activities that promote positive emotions to increase the subjective well-being of children and adolescents. These results suggest that an effective way to develop subjective well-being in children and adolescents is to enhance experiences of positive emotions. If developing better well-being among children is a priority, the findings of the review suggest that the best way to do this is to cultivate positive emotions in them. While it is not possible to indicate which practices are the most effective in promoting subjective well-being at school because of the great variability in the components and characteristics of studies in this area, this review does give an indication of which practices are most commonly used and which have achieved the most positive results. It would seem that longer interventions, with a higher number of sessions, which are focused on promoting more than a single factor targeting positive emotions are more likely to show positive effects.

Implications for researchers, policy makers and practitioners

This paper is therefore relevant to classroom practitioners, academics, educators and policy makers, providing information on the most commonly used practices, as well as guidelines on the practices that are mostly to show positive results.
The review highlights the need for more robust studies employing large-scale experimental designs with well-controlled counterfactuals. The study also shows the glaring lack of empirical work in developing countries (only one study was conducted in Latin America) despite the growing concerns with children's mental health and subjective well-being in these regions. The review calls for more work to be done in developing countries to promote children's well-being.

INTRODUCTION

In 2011 the UN determined that the search for happiness and well-being should be a fundamental goal of human development. This set up a framework to encourage well-being in childhood and adolescence, which has become a goal of increasing interest to governments and international development programmes (OCDE, 2013). This increased concern has led in recent years to a considerable proliferation in the production of interventions in the promotion of well-being, generating the need for updated systematic reviews.

The importance lies in the fact that during childhood and adolescence low levels of subjective well-being is associated with risky conduct, emotional stress, a greater likelihood of self-harm behaviours and risk of suicide, as well as impoverished academic performance (Arabiat et al., 2018; Crous et al., 2018). Likewise, it has been reported on the protective effect subjective well-being offers, serving as a moderator for a large number of risks at the individual and micro-social levels (Morrish et al., 2018), relative to family dynamics (Gónzalez-Carrasco et al., 2017), links between peers (Muscara et al., 2018), and child and adolescent school interactions (Aldridge & McChesney, 2017; Vranda, 2015). In addition, during adolescence, subjective well-being tends to decline, negatively impacting the lives of adolescents, with this decline starting around the age of 10 years (Casas & González-Carrasco, 2019).

Although subjective well-being has been a widely studied concept, a variety of terminology has been used to refer to this concept, which sometimes generates confusion. Traditionally, it has been considered a synonym of happiness and has included within its definition concepts such as life satisfaction and positive affect, among others (Diener, 1984). Therefore, widely used and validated instruments to measure subjective well-being also include variables such as those mentioned previously (Diener et al., 2009). Additionally, the study of subjective well-being has been influenced by different traditions, such as the hedonic tradition that includes the search for happiness, which has been measured through life satisfaction, and the eudemonic tradition that includes psychological well-being (Ruggeri et al., 2020). Considering this variability, the present work will include interventions that aim to promote the subjective well-being of children and adolescents in the school setting.

INTERVENTIONS TO PROMOTE SUBJECTIVE WELL-BEING IN THE SCHOOL SETTING

A range of academic and research groups have tested interventions aimed at promoting well-being through strategies targeted toward enhancing the individual and their life skills to develop positive relationships at the individual, family and contextual levels. Specifically, efforts include variables such as positive emotions (e.g., Schonert-Reichl & Lawlor, 2010; Shoshani et al., 2016), character strengths (e.g., Vranda, 2015), satisfaction with the school experience in general (e.g., Haraldsson et al., 2008), training and education of teachers and teaching assistants (e.g., Shoshani et al., 2016), and other primary and secondary intervention outcomes variables. This line of work has for the most part remained within the realm of positive psychology due to its empirical associations with well-being (Suldo, 2016), but also integrates theoretical and intervention approaches related to positive youth development (PYD) (e.g., Ma et al., 2018), mindfulness (e.g., Amundsen et al., 2020), physical activity (e.g., Burckhardt et al., 2015), social-emotional learning (SEL) (e.g., Allara et al., 2019), and emotional intelligence (e.g., Sarrionandia & Garaigordobil, 2016) among others.

Intervention characteristic

Regarding the characteristics of the interventions that aim to promote well-being in the school environment, the literature reports that most of them have been carried out in developed countries most commonly located in North America and Western European countries, focusing on students between 7 and 18 years of age (Caar et al., 2020; Sancassiani et al., 2015). Also, in a systematic review by Hendriks et al. (2018), they found that 78.2% of the studies were conducted in Western countries, these being conducted in general highly industrialized countries with highly educated and high-income populations. Likewise, it has been seen that in general this type of intervention is aimed at the secondary school population (Piñeiro-Cossio et al., 2021) but interventions are reported at both primary and secondary levels. Also, the literature indicates that interventions aimed at promoting well-being in the school population present a great variety in terms of duration and the strategies used, reporting, for example, durations ranging from 4 to 30 weeks and reporting from 6 to 18 sessions (Tejada-Gallardo et al., 2020). In their systematic review, Caar et al. (2020) report an average of 10 sessions over a period of approximately 6 weeks. In general, this type of intervention has reported both a school-wide or student-centred approach, but few interventions include parents or direct caregivers of children and adolescents (O'Reilly et al., 2018). Also, studies indicate that interventions that aim to promote well-being in the school setting tend to cover a wide range of well-being outputs, presenting a large number of variable outcomes (Lomas et al., 2017).

Designs and methodologies used

Systematic reviews and meta-analyses that have been done concerning interventions specifically aimed at promoting well-being and mental health in the school system have reported wide variability in the outcomes, designs and methodologies employed, making comparison and analysis difficult (Caar et al., 2020; Cilar et al., 2020; Mackenzie & Williams, 2018; O'Reilly et al., 2018; Schmidt et al., 2019). Regarding the design used, several systematic reviews report the use of both RCTs and non-RCTs (quasi-experimental pre-post study) and to a lesser extent case study or prospective study (Mackenzie & Williams, 2018; Tejada-Gallardo et al., 2020; Tomé et al., 2021). Concerning follow-up, Sancassiani et al. (2015) found that 50% of the studies did not report having conducted a post-intervention follow-up. For example, in a systematic review of positive psychology-based interventions that sought to promote well-being, 54.5% of the interventions were found to have follow-up outcomes at an average of 6.25 months (SD = 2.75) (Tejada-Gallardo et al., 2020). For their part, Sancassiani et al. (2015) reported that 41% of the studies reviewed presented follow-up at 6 months or later, and only 9% presented more than two follow-up measures. About the control groups used, a wide variety of choices have been reported, ranging from the presence of control groups with intervention, control groups without intervention, and the absence or no report of a control group. As reported by Caar et al. (2020), 54.76% of the studies had an active control group, in which both the usual intervention and the placebo-type intervention were used in the same way. For their part, Lomas et al. (2017) reviewed 19 studies that aimed to impact well-being, finding that most of these were inconsistent and in particular needing more attention on the methodologies used.

Reported results of the interventions

Systematic reviews mention that in recent years there has been an increase in the use of RCTs (randomised controlled trials) in this type of intervention, which suggests a greater

interest in their efficacy and reported results (Hendriks et al., 2018). In general, studies reported degrees of success in the short term (Tejada-Gallardo et al., 2020) without any clarity regarding the durability of these effects over time. Thus, a narrative review by Baños et al. (2017) that included the study of interventions that promoted well-being and resilience mentions the need for studies that present greater control and include long-term follow-up of the results to assess its effectiveness. Also, in another systematic review, it was found that these types of interventions tend to show immediate effects in their variable outcomes, but the long-term effects are unclear due to small sample sizes and poor follow-up (Cheney et al., 2013). In contrast, a systematic review by Mackenzie and Williams (2018) that included universal, school-based interventions aimed at promoting well-being in the United Kingdom found that the effectiveness of these presented a neutral or small effect, with more positive results being found in studies with poorer quality. Regarding the results presented by this type of intervention, several systematic reviews reported rather small effect sizes (Cohen, 1998) ranging between 0.24 and 0.34 for subjective well-being and between 0.25 and 0.39 for psychological well-being (Hendriks et al., 2020; Tejada-Gallardo et al., 2020).

Notwithstanding the background information described above, currently, there is no integrated, sufficiently updated framework of a systematic review of the programmes to promote child and adolescent well-being in the school system that incorporates in an updated manner the available evidence regarding intervention characteristics, design features of employed assessments and reported results. This knowledge gap and the limited systematisation of information production currently available inhibit and hinder any decisions on intervention characteristics. This leads to a loss of resources that could have been utilised more effectively. Hence, a narrative review, which is intended to integrate information from different research studies, would help to fill this gap. In light of the above, this study sought to contribute toward progress on current knowledge in regards to the subjective well-being promotion programmes aimed at children and/or adolescents in the school setting by conducting a narrative review guided by the following questions:

1. What are the underlying theoretical models approaches most utilised for this type of intervention?
2. Which research methodologies and designs are used to prove the efficacy of such interventions?
3. What are the reported outcomes of interventions that aim to promote subjective well-being in children and/or adolescents in the school context?

METHOD

We followed the guidelines on systematic review and meta-analysis proposed by PRISMA (Moher et al., 2009) to conduct this narrative systematic review.

Search strategy

To meet the research goals, a literature search was conducted using the EBSCO and Web of Science (WOS) databases. The selected time boundaries for the articles were from January 2015 through December 2020. This age range was selected for the review to know the current and most updated status and characteristics of the subjective well-being promotion programmes in the school space considering the large number of new intervention programmes that have been developed in the last 5 years. The search terms we used were: AB (“subjective well*” OR “life satisfaction” OR “psychological well*” OR “happiness”) AND AB (school) AND AB (child OR children OR adolescents OR students) AND AB (intervention OR

program OR strategy OR promotion OR prevention) for the title, summary, and keywords. Both Spanish and English terms were searched.

Article selection

The *inclusion criteria* were: (1) the study looked at the implementation or assessment of one or more interventions, activities, strategies or programmes; (2) the purpose of the intervention, activity, strategy, or programme had to try to promote, improve or increase the subjective well-being (with subjective well-being understood as psychological well-being, life satisfaction or happiness) of participants; (3) the intervention was done inside a school; (4) the intervention was aimed at promoting, improving or increasing the subjective well-being of students belonging to primary and/or secondary school; (5) the study was published in Spanish or English; (6) published between 2015 and 2020; (7) and it was a peer-reviewed article.

The *exclusion criteria* were: (1) it was a study protocol or did not include data analysis; (2) it did not include primary or secondary measures of subjective well-being among the variables (understood as subjective well-being, psychological well-being, life satisfaction or happiness) of children and adolescents; (3) the intervention was carried out outside of the school facilities; (4) the entire article was not available for review even after searching in other databases, searching manually or trying to contact the corresponding author.

Process of information extraction and quality assessment

Duplicate studies were excluded from the review. To reduce the risk of leaving out articles that met the inclusion criteria, study summaries and titles were examined to identify those that did not meet the inclusion criteria using the Rayyan platform (Ouzzani et al., 2016) in a single-blind format by four independent reviewers. Articles were immediately included when three or more reviewers agreed that the inclusion criteria were met. Any articles that received mixed opinions were reviewed again on the Rayyan platform in a single-blind format. In the event agreement of three or more reviewers to include or exclude a study was not obtained, the reviewers would proceed to discuss the case. All remaining articles were then divided among the four participating reviewers to fully go over the texts. In the event there was any hesitation over including an article after being fully reviewed by its first reviewer, a second reviewer would go over those uncertainties to jointly determine if said study should be included or excluded.

Information extracted from the articles

A narrative synthesis was done for this literature review since that is considered to be the best strategy to qualitatively integrate the results of quantitative research (Siddaway et al., 2019). Additionally, according to See et al. (2020), meta-analyses are not always the most appropriate method for reporting information obtained from research studies, as they can sometimes lead to results that are not very meaningful and may even lead to errors. Instead, it is proposed to weigh each work according to the information it can provide. In addition, due to the great variability of the information collected, it is not possible to conduct a meta-analysis, being more pertinent to conduct a systematic narrative review. The collected information includes the country where the intervention was done, the sample characteristics, the study design, and its features, the intervention type and its theoretical components, the

variables of interest to impact using the intervention, and the instruments employed to measure the variables of interest.

RESULTS

The database searches found 746 studies in EBSCO and 731 in Web of Science. A total of 1477 studies were collected. Of these, 533 were excluded since they were duplicates and 879 because they did not stand up to the inclusion criteria. A total of 66 studies met the inclusion criteria, all of which had been fully reviewed by independent reviewers. Eleven articles were eliminated because they matched an exclusion criterion. This report includes information from 55 articles. Figure 1 presents the PRISMA diagram that shows the selection process of the included articles.

General description of the studies

The majority of the 55 reviewed studies were conducted in Europe, Asia, North America, and countries in the northern hemisphere, with only one from Latin America. Eleven studies on interventions to promote subjective well-being were published between 2015 and 2016. There were 25 published between 2018 and 2019, depicting increasing growth in the publication of this type of work in the last years.

Results related to the theoretical models approaches of the intervention

The theoretical aspects that serve as the basis of interventions to promote well-being reviewed in this work can be categorised into two large groups: programmes with one or more components of positive psychology and programmes with other theoretical backgrounds or reference frames as the basis that are not directly related to positive psychology.

Interventions programmes based on positive psychology theoretical model

As shown in Table 1, 26 studies (47%) had as the theoretical basis of their intervention one or more components of positive psychology such as positive emotions, character strength and positive thinking. Specifically, it was observed that of these studies, 14 presented interventions or activities that referred to only one component of positive psychology while 12 interventions presented activities associated with two or more components of positive psychology. For clarity in reporting the results, it will be divided into interventions that present only one theoretical component of positive psychology (Positive Psychology Interventions—PPI) and those that present two or more (Multi-component Positive Psychology Interventions—MPPI).

Positive Psychology Interventions (PPI)

As shown in Table 1, a total of 14 studies (25%) were classed as PPI. Of these, 58% had a component of positive psychology at the base of the intervention into positive emotions

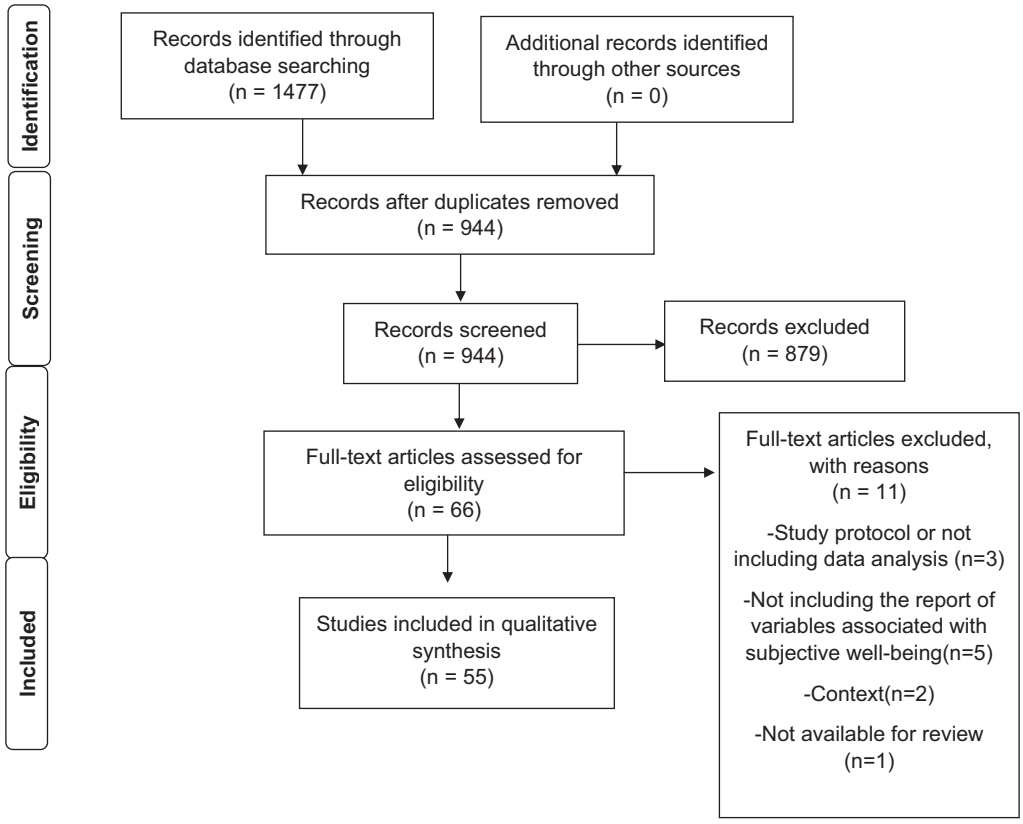

FIGURE 1 PRISMA flow diagram
Note: We used the PRISMA flow diagram proposed by Moher et al. (2009).

(e.g., kindness, gratitude, hope, optimism) while 21% had a positive thinking component and another 21% included strength of character. Of these interventions, 71% were universally applied while 29% focused on a certain population segment such as adolescents with higher levels of depression, anxiety or behavioural problems.

There was a great deal of variability in terms of the outcomes variables studied in the reviewed work. All the reviewed studies had some sort of dimension defined as well-being in conjunction with the aims of this report. Elements related to both positive and negative development were also found among the studied variables such as self-esteem, positive and negative affect, depressive symptoms, school satisfaction and anger management.

Multi-component Positive Psychology Interventions (MPPI)

As shown in Table 1, a total of 12 studies (22%) were classed as MPPI. In this group, all the studies included positive emotions as an aspect of one of the positive psychology components at the foundation of the intervention. A total of 83.3% included strength of character as a component, with 41.7% having positive relationships as part of one of its components. Only 8.3% had positive thinking as one of the components. Of these studies, 66.7% were universally applied whereas 33.3% focused on a certain population segment such as adolescents with lower levels of well-being.

TABLE 1 Characteristics, theoretical components, and study variables of the interventions reviewed

Author (year)	Location	Programme name	Constructs/ theory at the base/Components	Studied variables	Universal/Focused
PPI					
Baek and Kang (2017)	South Korea	Literacy Therapy Program	Literature curriculum based on Positive Psychology (*Positive emotions*)[a]	Happiness, self-esteem, optimism, friendship, family environment	Universal
Binfet and Whitehead (2019)	Canada	-	Kindness (*Positive emotions*)	Subjective and psychological well-being, kindness, happiness, social connectedness	Universal
Bluth et al. (2015)	United States	Learning to BREATHE	Mindfulness, body, thoughts, emotions, attention, loving kindness, and healthy habits (*Positive emotions via mindfulness*)	Mindfulness, self-compassion, emotional well-being (life satisfaction and perceived stress)	Universal
Carter et al. (2018)	Wales	Positive thinking diary	Positive thinking	Happiness, depression	Universal
Colla et al. (2016)	Australia	-	Positive thinking, problem solving, coping skills, self-concept, body image, assertiveness, resilience (*Positive thinking*)	Subjective well-being, positive affect	Universal
Duthely et al. (2017)	United States	-	Gratitude (*Positive emotions*)	Life satisfaction, school satisfaction, gratitude	Universal
García-Álvarez and Soler (2019)	Uruguay	Creciendo Fuerte (Growing strong)	Character strengths	Psychological well-being, self-esteem, depressive symptoms	Universal
Hong and Kim (2020)	South Korea	Emotion management programme	Based on the broaden-and-build theory: gratitude (*Positive emotions*)	Subjective happiness, anger control ability, gratitude	Focused on students with behavioural problems
Kwok et al. (2016)	Hong Kong	Live a positive life	Hope, gratitude (*Positive emotions*)	Depression, life satisfaction, hope, gratitude	Focused on children with anxiety and depression

(Continues)

TABLE 1 (Continued)

Author (year)	Location	Programme name	Constructs/ theory at the base/Components	Studied variables	Universal/Focused
Kwok (2019)	Hong Kong	-	Hope, gratitude (*Positive emotions*)	Depression, life satisfaction, hope, gratitude	Focused on adolescents with anxious symptoms
Lambert et al. (2019)	Kuwait	Bareec programme	Positive thinking, happiness, engagement, physical activity (*Positive thinking*)	Satisfaction with life, eudemonic well-being, and hedonic well-being	Universal
Quinlan et al. (2015)	New Zealand	Awesome Us, six-session strengths programme	Character strengths	Well-being, academic engagement, class cohesion and friction, relatedness, strengths use	Universal
Quinlan et al. (2019)	New Zealand	Awesome Us, six-session strengths programme	Character strengths	Well-being, student classroom engagement, psychological need for autonomy, relatedness and competence, class cohesion and friction, strengths use	Universal
Sánchez-Hernández et al. (2019)	Spain	Smile programme	Optimism, cognitive restructuring, mood monitoring, emotional education (*Positive emotions*)	Well-being, depression, self-concept	Focused on adolescents with higher levels of depression
MPPI					
Boniwell et al. (2016)	England	The personal well-being lesson curriculum	Positive emotions, positive relationship	Subjective well-being	Universal
Burckhardt et al. (2015)	Australia	Bite Back	Gratitude, mindfulness, optimism, flow, meaning, hope, characters strengths, healthy lifestyle, positive relationship (*Positive emotions*, *character strengths*, *positive relationship*)	Depression, anxiety, stress, life satisfaction, mental well-being	Universal

TABLE 1 (Continued)

Author (year)	Location	Programme name	Constructs/ theory at the base/Components	Studied variables	Universal/Focused
Freire et al. (2018)	Portugal	Challenge: To Be+	Positive emotions, character strengths, optimal experience	Self-esteem, self-concept, psychological well-being, satisfaction with life	Universal
Huen et al. (2016)	Hong Kong	Professor Gooley and the Flame of Mind	Digital Game Based Learning (DGBL): Realistic thinking, self-esteem, achieving goals, hope, communication skills, gratitude, problem solving *(Positive emotions, character strengths*)	Mental health, automatic thoughts, self-esteem, procrastination, hope, communication skills, gratitude, problem solving skills, engagement	Universal
Khanna and Singh (2019)	India	Three good things in life, Gratitude visit, You at your best, using signature strengths and using signature strengths in a new way	Seligman et al. (2005) model (*Positive thinking*, *positive emotions*, *character strengths*)	Well-being, depressive symptoms, negative affects	Universal
Leventhal et al. (2015)	India	Girls First Resilience Curriculum	Character strengths, goals, and planning, identifying emotions, problem solving, gratitude, social emotional learning, life skills (*Positive emotions*, *character strengths*)	Emotional resilience, self-efficacy, social-emotional assets, psychological well-being, social well-being, depression, anxiety	Focused on girls
Lombas et al. (2019)	Spain	Happy Classroom Program	Character strengths, appreciation of beauty, gratitude, hope, humour and spirituality, mindfulness (*Positive emotions*, *character strengths*)	Psychological well-being, mindfulness, self-esteem, depressive symptomatology, perceived stress, basic psychological needs, emotional intelligence, school aggression, classroom environment, academic motivation, empathy	Universal

(Continues)

TABLE 1 (Continued)

Author (year)	Location	Programme name	Constructs/ theory at the base/Components	Studied variables	Universal/Focused
Roth et al. (2017)	United States	Multitarget PPI (Suldo et al., 2014)	Gratitude, kindness, use of signature character strengths, savouring, hope, optimism (*Positive emotions*, *character strengths*)	Mental health (subjective well-being, life satisfaction, positive and negative affect, internalising and externalising problems).	Focused on adolescents with lower levels of well-being
Shoshani et al. (2016)	Israel	Maytiv	PERMA: Positive emotions, engagement, positive relationship, meaning, achievement *(Positive emotions*, *positive relationship*)	Subjective well-being, school engagement, academics achievements	Universal
Veltro et al. (2015)	Italy	-	Competence strengths: optimism, resilience, the ability to recognise the origin of the stress with the ability to communicate in an effective way, and making mutually satisfying relationships *(Character strengths and positive emotions*)	Self-efficacy, well-being, emotional and behavioural problems	Universal
Wingate et al. (2018)	United States	The Well-Being Promotion Programme (Suldo, 2016)	Positive emotions, gratitude, kindness, hope, identification and use character strengths and positive relationship *(Positive emotions*, *character strengths*, *positive relationship*)	Life satisfaction	Focused on adolescents with lower levels of well-being

TABLE 1 (Continued)

Author (year)	Location	Programme name	Constructs/ theory at the base/Components	Studied variables	Universal/Focused
Yaghoobi and Moghadam (2019)	Iran	Based on the programme of Savage (2011)	Positive emotions, gratitude, kindness, hope, identification and use character strengths and positive relationship *(Positive emotions*, *character strengths*, *positive relationship*)	Well-being	Focused on adolescents with lower levels of well-being
Other frameworks					
Allara et al. (2019)	Italy	Diario della Salute (My Health Diary)	Emotion recognition and management, critical thinking, effective communication skills, interpersonal skills, peer-pressure resistance skills (*SEL*)	Subjective well-being, health behaviour (reduction of smoking and alcohol drinking, improvements of dietary habits and physical exercises), aggressive behaviour	Universal
Amundsen et al. (2020)	England	Living Mindfully programme	Mindfulness	Subjective well-being, mindfulness, emotion regulation	Universal
Bazzano et al. (2018)	United States	Yoga Ed	Mindfulness, yoga	Life satisfaction, quality of life	Universal
Bremer et al. (2018)	Canada	Daily physical activity programme	Physical activity	Social and psychological well-being, mastery, self-regulation, emotional well-being, behavioural difficulties, and pro-social behaviour, self-esteem, grit, happiness, commitment to school, sense of belonging, physical activity, self-efficacy	Universal
Burckhardt et al. (2015)	Sweden	-	Physical activity	Quality activity, emotions, behaviour	Universal

(Continues)

TABLE 1 (Continued)

Author (year)	Location	Programme name	Constructs/ theory at the base/Components	Studied variables	Universal/Focused
Campbell et al. (2019)	United States	-	Mindfulness	Subjective well-being, perceived stress, emotion regulation	Universal
Gigantesco et al. (2015)	Italy	Definizione di obiettivi e soluzione di problemi (Establishing goals and problems solving)	Goleman's emotional intelligence model and Falloon's psychoeducational approach (*Emotional intelligence and problem solving*)	Self-efficacy in regulating emotions, psychological well-being, life satisfaction	Universal
Harvey et al. (2020)	UK	Outdoor education programme	Biodiversity focused activities	Mood, well-being, connection to nature	Universal
Joussemet et al. (2018)	Canada	How-to parenting Program: The French version of the 'How to talk so kids will listen & listen so kids will talk'	Optimal parenting style	Mental health, well-being, self-esteem, life satisfaction	Universal (Parents)
Kall et al. (2015)	Sweden	-	Physical activity	Quality activity, emotions, behaviour	Universal
Hernández-López et al. (2018)	Spain	-	Biodanza	Self-esteem, emotional intelligence, life satisfaction	Universal
Luna et al. (2020)	Spain	-	Sport education model *(Physical activity)*	Subjective well-being, psychosocial adjustment	Universal
Ma et al. (2018)	Hong Kong	PATHS: Positive Adolescent Training through Holistic Social Programmes	PYD (Positive youth development) constructs proposed by Catalano and his colleagues (Catalano et al., 2004).	Positive youth development, life satisfaction, thriving	Universal in tier 1 Focused on tier 2
Ma et al. (2019)	Hong Kong	PATHS: Positive Adolescent Training through Holistic Social Programmes	Based on the PYD (positive youth development) framework, 15 key constructs (Catalano et al., 2004)	Positive youth development, life satisfaction, thriving	Universal

TABLE 1 (Continued)

Author (year)	Location	Programme name	Constructs/ theory at the base/Components	Studied variables	Universal/Focused
Madsen et al. (2020)	Denmark	11 for Health in Denmark	Physical activity, health education	Quality of life	Universal
McQuillin et al. (2015)	United States	Instrumental School Based Mentoring programme	Mentoring	Academic achievement, school behavior, life satisfaction, connectedness to school and teachers	Universal
Midford et al. (2017)	Australia	The social and emotional education programme	Social and emotional learning (SEL)	Psychological well-being, resilience factors, anxiety, depression, positive developmental outcomes	Universal
Modi et al. (2018)	India	-	Mindfulness, meditation	Self-regulation, self-esteem, psychological well-being, mindfulness	Universal
Panayiotou et al. (2019)	England	PATHS: Positive Adolescent Training through Holistic Social Programmes	PYD (positive youth development)	Psychological well-being, peer social support, school connectedness	Universal
Pandya (2017)	India	-	Spirituality	Psychological well-being, happiness, spirituality	Universal
Pandya (2018)	20 cities	Chinmaya Bala Vihar Yoga Pogramme	Yoga	Emotional awareness, happiness, anxiety	Universal
Rees-Evans and Pevalin (2017)	England	Principle Based Model (PBM) of Mind, Consciousness, and Thought	Mind, consciousness, thought (*Principle Based Model*)	Psychological well-being	Universal
Sarrionandia and Garaigordobil (2016)	Spain	-	Emotional intelligence (*EI*)	Emotional intelligence, happiness, personality, health	Universal
Schmidt et al. (2020)	Norway	The Active and Healthy Kids	Physical activity	Learning, well-being, health	Universal

(Continues)

TABLE 1 (Continued)

Author (year)	Location	Programme name	Constructs/ theory at the base/Components	Studied variables	Universal/Focused
Schoeps et al. (2018)	Spain	PREDEMA	Emotional intelligence model of Mayer and Salovey (1997): emotional competences as perceiving, labelling, expressing, using and understanding emotions, emotional regulation and management (*EI*)	Cyberbullying, subjective well-being, emotional competences	Universal
Smith et al. (2018)	Australia	Resistance training for teens	Physical activity	Self-esteem, subjective well-being	Universal
Uhlig et al. (2018)	Netherlands	Rap & Sing Music Therapy	Stimulate regulative emotional processing, as it is constructed around components of cognitive behavioural therapy (CBT), music	Psychological well-being, emotional regulation, self-esteem	Universal
Yook et al. (2015)	South Korea	Physical activity programme	Physical activity, mindfulness, yoga	Self-esteem, resilience, happiness	Universal
Zhu and Shek (2020)	China	PATHS	PYD (positive youth development) constructs	PYD attributes, well-being, adolescent developmental problems (depression and delinquency)	Universal

[a]The concepts in italics in parentheses were added by the author to facilitate organisation.

There was also a great deal of variability in the MPPI outcomes variables reviewed in this type of study. Considering the aims of this report as stated earlier, all the reviewed studies included well-being as one of their assessed variables. MPPI studies measured outcomes other than well-being, including self-esteem, self-concept, communication and conflict resolution skills, academic achievements, positive and negative affect, depressive symptoms, anxiety, stress, and externalising and internalising problems.

Intervention programmes based on other theoretical models or frameworks not directly linked to positive psychology

As shown in Table 1, a total of 29 studies (53%) were classified under a different reference framework not directly linked to positive psychology. Six of these (19.4%) were found to base their intervention on physical activity, five (16%) on mindfulness, four (13%) on PYD, three (9.7%) on emotional intelligence, two (6.5%) on SEL and another two (6.5%) on yoga. We found that of the studies classified in this category all of them were universally applied, whereas just one also included a second stage during which the intervention focused on a specific group of students. Additionally, the studied outcomes variables were shown to be related to both positive and negative developmental elements such as depression, anxiety, aggressive behaviours, alcohol consumption, stress, cyberbullying, emotion regulation, self-esteem, sense of belonging, psychosocial adjustment, academic achievements, social support and health.

METHODOLOGIES AND RESEARCH DESIGNS USED TO PROMOTE SUBJECTIVE WELL-BEING IN THE REVIEWED INTERVENTIONS

The results of the methodological design features and the results obtained from the reviewed studies are presented next and, for a better review of the results, will be divided into experimental and non-experimental studies.

Experimental studies

Table 2 shows that a total of 20 studies defined their design as experimental. There was a great deal of variability in terms of the sample sizes used in these designs, which was anywhere from 42 to 10,687 participants ($M = 1362$). The average participant age was 14.7 years and the majority included girls and boys.

The tested interventions lasted an average of 847 min (250–1600 min) distributed across programmes that went from 1 to 52 weeks duration ($M = 13.1$). The interventions that proposed briefer sessions included 45-min activities. The longer ones went for 225 min with an average duration of 87 min per week. Every study had a control group. In almost half of the cases (40%) this group got the standard intervention and 20% functioned as an active control group, receiving an unspecified intervention. The control group was given no intervention at all in just 5% of the studies.

Non-experimental studies

Another 34 studies described their designs as non-experimental as shown in Table 3. The average sample size for these studies was 971 students with wide variability from studies working with samples of anywhere from 9 students up to 10,807 individuals. The average

TABLE 2 Methodological characteristics of studies with experimental design

Author (year)	Sample size (age), % female	Duration in weeks (minutes)	Control group	Well-being instruments and statistical significance
Bazzano et al. (2018)	52 (third grade), 50%	8 weeks (400 min)	Usual intervention	PedsQL-ES**; BMSLSS-PTPB
Binfet and Whitehead (2019)	383 (*M* = 12.8), 50%	4 weeks	Active control	CHS;SWLS-C;PANAS-C; PWB
Burckhardt et al. (2015)	336 (*M* = 14.1), 59.5%	6 weeks (360 min)	Active control	SLSS; WEMWBS
Carter et al. (2018)	606 (8–11), 50%	3 weeks (450 min)	Waitlist	OHQ*
Gigantesco et al. (2015)	308 (*M* = 15.2), 60.6%	20 weeks (1200 min)	No report	SWLS***; RPWBS*
Hong and Kim (2020)	52 (*M* = 17.06), 0%	5 weeks (250 min)	No report	SHS***
Joussemet et al. (2018)	256 parents of children aged 5 to 12 years	6 weeks (900 min)	Waitlist	PANAS
Khanna and Singh (2019)	372 (11–13), 44%	1 week	Active control	BMSLSS*
Kwok et al. (2016)	68 (9–12), 43%	8 weeks (720 min)	Usual intervention	SWLS*
Kwok (2019)	106 (*M* = 13.58), 30%	8 weeks (720 min)	Usual intervention	SHS**
Leventhal et al. (2015)	2387 (7th & 8th grade), 100%	23 weeks (1380 min)	Active control	KIDSCREEN
Madsen et al. (2020)	3061 (*M* = 11.5), 50.3%	11 weeks (990 min)	Usual intervention	KIDSCREEN−27
Modi et al. (2018)	100 (*M* = 12), 50%	10 weeks (450 min)	Usual intervention	PWB***
Panayiotou et al. (2019)	5218 (*M* = 8.12), 49.6%	20 weeks (1600 min)	Usual intervention	KIDSCREEN−27*
Pandya (2017)	10678 (13–15), 48%	52 weeks (900 min)	Usual intervention	HHS-AV*; WBMMS*
Roth et al. (2017)	42 (11–13), 50%	10 weeks (500 min)	Waitlist	SLSS*; PANAS-C**
Sánchez-Hernández et al. (2019)	89 (*M* = 13.88), 51.7%	11 weeks (1320 min)	No intervention	WEMWBS* (4 months follow-up) WEMWBS (8 and 12 months follow-up)
Shoshani et al. (2016)	2517 (12–15), 50%	30 weeks (1350 min)	Waitlist	SWLS; PANAS***; SAR-friends subscale***
Smith et al. (2018)	508 (14.1), 49.6%	10 weeks (1030 min)	Waitlist	PFS
Uhlig et al. (2018)	95 (8–12), 56.1%	16 weeks (720 min)	Usual intervention	SDQ-Kid; SDQ-Parent; SDQ-Teacher**

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

participant age was 12.7 years and 33 of the 34 reviewed studies had a proportional balance between boys and girls. The interventions lasted an average of 1147 min (120–6000 min) distributed across 23.4 weeks (4–156 weeks) on average. The students received intervention modules or activities every week with a duration of 10 to 180 min and an average session length of a bit more than one hour per week ($M = 62.2$ min).

A total of 23.5% of studies had no control group. For those that did have a control group of students, 44.1% did no activities with the group, and 17.6% carried out the intervention that had been regularly planned for this group of students.

REPORTED RESULTS OF THE REVIEWED INTERVENTIONS

Experimental studies

In terms of results, and as shown in Table 2, 59.4% of the studies reported statistically significant results, 50% reported their results with a threshold of 0.05, while 33% arrived at conclusions with $p < 0.001$. Specifically, concerning the results reported through scales that measure well-being, 26% of these scales measured life satisfaction, with statistically significant results reported in 50% of the cases. In turn, 13% were measured with happiness scales, where all reported statistically significant results. Also, 13% used a scale measuring positive and negative affect, with statistically significant results reported in 50% of the cases. Likewise, another 13% reported using psychological well-being scales, where 75% showed statistically significant results. Finally, 9.7% reported using well-being scales, with statistically significant results reported in 33.3% of the cases.

Non-experimental studies

Regarding results, and as shown in Table 3, 70.2% reported statistically significant results for the well-being measures, 40.4% used a statistical significance threshold of 0.05, while 14.8% arrived at conclusions with a $p < 0.001$. Specifically, for the results reported through scales that measure well-being, 31.3% of these scales measured life satisfaction, with statistically significant results reported in 40% of the cases. In turn, 23% measured with well-being scales, where 73% reported statistically significant results. Also, 20.2% used a scale measuring positive and negative affect, with statistically significant results reported in 80% of the cases. Likewise, another 6.3% reported using happiness scales, where 67% showed statistically significant results. Finally, 4.2% reported using psychological well-being scales, with statistically significant results reported in 50% of the cases.

DISCUSSION

The results obtained through this narrative literature review assist in the study of promoting subjective well-being in the school setting. It provides information on the main components of the theoretical model's approaches that support these interventions, the principal characteristics of the methodological designs employed, and the results of reported interventions. In general, the most relevant results show that well-being promotion programmes in the school setting are mostly based on positive psychology and are divided into studies with both experimental and non-experimental methodology. In the former, the average age of the participants was 14.7 years and the interventions lasted an average of 847 min distributed over 13 weeks, with 59.4% of the results showing statistically significant results. On the other hand, the non-experimental studies presented a mean age of the participants of 12.7 years

TABLE 3 Methodological characteristics of studies with non-experimental design

Author (year)	Sample size (age), % female	Duration in weeks (minutes)	Control group	Well-being instruments and statistical significance
Allara et al. (2019)	2630 (*M* = 12), 50%	5 weeks (900 min)	Usual intervention	HBSC**
Amundsen et al. (2020)	108 (*M* = 10.23), 49%	6 weeks (360 min)	Active control/ Waitlist	PANAS-C**; SCWBS**;SLSS**
Baek and Kang (2017)	48 (6th grade), 50%	8 weeks (800 min)	No intervention	Happiness***
Bluth et al. (2015)	28 (10–18), 57%	6 weeks (540 min)	No control group	SLSS*
Boniwell et al. (2016)	164 (11–12), 50%	36 weeks (900 min)	Active control	SLSS; MSLSS;PANAS-C*
Bremer et al. (2018)	362 (9–14), 48.6%	20 weeks (2000 min)	Usual intervention	SDQ; SHS
Bunketorp et al. (2015)	349 (*M* = 11.1), 47.8%	40 weeks (3600 min)	No intervention	KIDSCREEN-27
Campbell et al. (2019)	1007 (*M* = 15.96),49.3%	6 weeks	Usual intervention	I-PANAS-SF
Colla et al. (2016)	252 (*M* = 13.6), 39.3%	6 weeks (270 min)	Waitlist	PWI-SC**
Duthely et al. (2017)	55 (6th−8th grade), 58.2%	4 weeks (200 min)	Waitlist	SLSS**, MSLSS***
Freire et al. (2018)	99 (*M* = 14.34) 56%	8 weeks (720 min)	No intervention	SWLS**; PWBS
García-Álvarez and Soler (2019)	160 (11–15), 53%	156 weeks (4320mi)	No control group	PERMA-S**
Harvey et al. (2020)	549 (*M* = 9.34), 50.6%	40 weeks (1260 min)	No intervention	KIDSCREEN−27***; PANAS-C****
Huen et al. (2016)	192 (*M* = 12.6), 50.6%	12 weeks (360min)	No control group	PWBS****
Kall et al. (2015)	349 (*M* = 11.1), 47.8%	40 weeks (3600 min)	No intervention	KIDSCREEN- 27
Lambert et al. (2019)	320 (*M* = 16.8), 53.7%	8 weeks (120 min)	No intervention	PFS**; SWLS
Lombas et al. (2019)	524 (*M* = 13.6), 50.2%	18 weeks (180 min)	No intervention	SWLS**
Hernández-López et al. (2018)	53 (M = 10.53), 52.8%	32 weeks (1920 min)	Usual intervention	SWLS
Luna et al. (2020)	146 (*M* = 10.78), 54.11%	8 weeks (900 min)	Active control	PANAS-C**
Ma et al. (2018)	10807 (*M* = 12.99),46.8%	40 weeks	No control group	SWLS***
Ma et al. (2019)	9226 (*M* = 12.94), 45.5%	10months (600 min)	No control group	SWLS****
McQuillin et al. (2015)	134 (*M* = 11.9), 47%,	10 weeks (360 min)	No intervention	SLSS**
Midford et al. (2017)	56 (13–14), 61%	10 sessions (500 min)	No control group	Ad-hoc questionnaire
Pandya (2018)	3178 (8–9), 56%	104 weeks (6000 min)	No intervention	EAQ3**; SFAS**

TABLE 3 (Continued)

Author (year)	Sample size (age), % female	Duration in weeks (minutes)	Control group	Well-being instruments and statistical significance
Quinlan et al. (2015)	196 (*M* = 9.95), 45%.	6 sessions (540 min)	No intervention	I-PANAS-SF **SLSS
Quinlan et al. (2019)	193 (*M* = 10.5), 45.1%	6 weeks (540 min)	No intervention	PANAS** SLSS
Rees-Evans and Pevalin (2017)	9 (14–15), 33%	16 weeks	No control group	FWBS**
Sarrionandia and Garaigordobil (2016)	148 (13–16), 54.7%	20 weeks (1200 min)	No intervention	OQH**
Schmidt et al. (2020)	644 (*M* = 13.2), 50%	28 weeks (1680 min)	Usual intervention	KIDSCREEN−27****; SVS***
Schoeps et al. (2018)	148 (*M* = 12.63), 57%	12 weeks (500 min)	No intervention	SWLS
Veltro et al. (2015)	79 (*M* = 15.35), 93.7%	24 weeks (1440 min)	No intervention	HWQ**
Wingate et al. (2018)	17 (3th to 5th grade), 41.2%	10 weeks (600 min)	No control group	SLSS***; MSLSS***
Yaghoobi and Moghadam (2019)	30 (14–18), 100%	10 weeks (900 min)	No intervention	PWBS****
Yook et al. (2015)	46 (*M* = 10.98), 45.6%	8 weeks (640 min)	No intervention	PWBS-K
Zhu and Shek (2020)	1044 (*M* = 13.1), 39.9%	32 weeks (720 min)	Usual intervention	SWLS

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$; ****$p < 0.001$.

and had a total mean duration of 1147 min distributed in 23 weeks, showing statistically significant results in 70.2% of the cases.

Regarding the theoretical models approaches, and as reported in the literature, there is greater use of interventions based on positive psychology interventions (which includes PPI and MPPI) (47%), followed by other theoretical models approaches or activities such as physical activity (19.4%), mindfulness (16%), PYD (13%) and others. Specifically, these results also show that a part of these studies (25% of the total) was founded on a single component of positive psychology (PPI), while another portion (22% of the total) included multiple components (MPPI). These results, which show a variety of theoretical models, coincide with Suldo (2016) regarding the diversity and heterogeneity of theoretical foundations for well-being promotion practices that incorporate conceptual frames like positive psychology together with other similar ones such as humanist therapy, SEL, PYD and resilience.

It is also noteworthy that interventions based on one or more components of positive psychology mostly use activities that promote positive emotions (77%) as a way to increase the subjective well-being of children and adolescents. These results suggest that an effective way to develop subjective well-being in children and adolescents is to enhance experiences of positive emotions. The theoretical proposal and review of empirical evidence made by Fredrickson (2001) support this approach, in terms that experiences of positive emotions expand the repertoires of personal resources, ranging from physical and intellectual resources to social and psychological resources. It would therefore be relevant to cultivate positive emotions in working with children if what is sought is to develop better well-being.

It is interesting to note that the great majority of the interventions reviewed aim not only to promote subjective well-being but also present other primary and secondary outcomes. The reports also consider assessments of self-esteem, levels of mindfulness, emotional commitment to school, the presence of depressive symptoms, anxiety, aggressive behaviour, among others (Duthely et al., 2017; Huen et al., 2016; Kwok, 2019; Lombas et al., 2019; Quinlan et al., 2019), which suggests the systemic effect of this type of intervention, which would affect different levels of children's school life. However, considering the diversity of outcomes assessed between studies, it is not possible to conclude that interventions that promote well-being are associated with certain effects on other outcomes. Likewise, this also occurs with the great variability of concepts used to refer to subjective well-being, as mentioned in the introduction and also observed in the intervention programmes reviewed.

These findings are in line with what has been reported by other literature reviews (Lomas et al., 2017), being interesting for future research to understand why there is this great variability when using concepts and outcome variables. This great diversity of outcome variables shows the extended potential impact of interventions that aim to encourage subjective well-being during childhood and adolescence development as well as the complexity that comes with studying these variables. However, it can also obscure the scant clarity that persists today about which of these variables can be successfully promoted using this intervention type, making it more difficult to reach clear conclusions.

Regarding the characteristics of the methodological designs for evaluation and the results described in the assessed reports, a total of 20 (37.1%) of the studied reports defined their designs as experimental, whereas 34 (62.9%) used non-experimental designs. Diverse studies indicate the advantages of both designs when it comes to researching the effects of interventions in health and education (Zurita-Cruz et al., 2018). The results obtained by the reviewed experimental studies are favourable to the field of well-being promotion in that they report positive outcomes for subjective well-being, showing that more than half of the results were statistically significant. This shows us the potential for progress on research with highly rigorous standards in the field of well-being promotion, above all considering the strengths and advantages of disseminating this type of design among the population (Marín-Navarrete et al., 2013). This outcome is even more relevant when we consider the fact that

experimental designs are used less often by the social sciences due to the requirements for procedural controls to achieve the methodological rigour they entail (Concha et al., 2011). This means such a practice becomes quite complex, especially in developing countries (Lazcano-Ponce et al., 2004).

Also, the results obtained through this review show us that non-experimental studies were able to demonstrate positive results for the outcome variable. Nevertheless, given the limitations of such designs, the results should be interpreted with caution. Non-experimental studies present challenges with internal validity, which have been described by several authors and can be discerned from the reviewed studies. Such factors include school self-selection (Shoshani et al., 2016) and contamination between groups when both the intervention and control groups attend the same school (Sarriera et al., 2017). In cases where the control group intervention is insufficiently specified, questions can arise about the details of the intervention proposed to improve well-being levels (Shoshani et al., 2016), also hindering the clarification of the mechanisms that were used to obtain the outcomes. As researchers in this field more clearly define the issues that arise when reviewing their studies, a better balance between internal and external validity will likely be achieved in the testing of intervention programmes.

However, this latter consideration must also be qualified because non-experimental designs are a type of research widely used in psychology and education, where oftentimes an experiment cannot be carried out either because of high costs or because the intervention must be done in a natural context due to ethical or procedural reasons (Zurita-Cruz et al., 2018). Furthermore, this design type can overcome the challenge of generalising the outcomes, also known as external validity. Some experimental designs suffer from this when the intervention environment becomes artificial, making it hard to apply to natural interaction settings (Concha et al., 2011).

About these results, it is important to maintain a conservative approach, since some studies that present positive results could have weaker evidence in terms of the sample, research design and methodology. Evidence from large-scale experimental designs with low attrition should be taken more seriously than evidence from small-scale non-experimental studies. The significance of the results concerning the *p*-value can and should be ignored.

Concerning the duration and length of the interventions, our review results also provide interesting information, ranging from a short programme of 1 week to those that unfurl over 156 weeks and ranging from 120 to 6000 min total duration of interventions. This is a matter of special importance since the available information on well-being promotion has established that the duration and length of interventions is a relevant condition affecting the reach and potential effects. Some authors recommend the duration should extend beyond a single school term, both to improve the effects upon well-being and to ensure they are sustained over the long term (Roth et al., 2017; Sarriera et al., 2017). This coincides with assertions from the systematic review conducted by O'Reilly et al. (2018) in which they suggest that prolonged interventions bring better outcomes than do short ones. However, future research should analyse in more detail the duration of the interventions, to understand what the best measure of duration would be to optimise and improve the impact on children's subjective well-being.

Another key outcome of our review is that over 70% of reported interventions were universally applied, with less than one-third targeted to specific groups. These findings are in line with Murphy et al. (2017) who indicate that universally applied interventions par excellence would be those that can be done inside a school or classroom since they are aimed at all students. Lastly, it is notable that our review found that only 15% of revised works reported any follow-up results beyond 6 months even though this step is recommended for long-term intervention evaluation (O'Reilly et al., 2018; Schmidt et al., 2019).

Concerning the results reported by the reviewed interventions, the studies that used experimental designs, 59.4% reported statistically significant results for the measures of well-being, while of the studies that used non-experimental designs, 70.2% reported statistically significant results for the well-being measures. In general, in both types of design, the most commonly used measure of well-being is life satisfaction scales, showing statistically significant results in about 40% to 50% of the studies. Moreover, it is noteworthy that the studies that use scales measuring positive and negative affect show statistically significant results in more than 50% of the studies, whereas those that measure well-being through happiness scales show results that are statistically significantly more than 67% of the time. These results are interesting because they provide evidence that different constructs that measure well-being can show varying degrees of results. Thus, future research should explore this situation further to understand how the use of different scales that measure well-being can provide different results. In this regard, VanderWeele et al. (2020) mention that when choosing instruments that measure well-being, several elements should be considered, such as the context in which the questionnaire will be applied as well as the purposes of data collection.

Finally, it is very important to highlight that only one intervention (1.8%) of the total interventions reviewed in this study was carried out in Latin America. Considering the importance of promoting well-being in the positive development of children and adolescents, it is of great importance to test the efficacy of this type of intervention in Latin America, especially in undeveloped countries. Likewise, the need to generate interventions based on Latin American countries is relevant to generate contextualised evidence, since it is known that it is often not possible to extrapolate the results from other cultural, economic and educational contexts. In this regard, Bradshaw et al. (2021) indicate that cultural adaptation of interventions, which includes consideration of the cultural, educational and social context, should be an aspect to look at as they increase the likelihood of positive mental health outcomes.

In general, the results show the need for robust strategies for evaluating interventions focused on fostering the well-being of children and adolescents in the school setting, just as has been increasingly recommended in the specialised literature on the topic (Roth et al., 2017; Sarriera & Bedín, 2017; Shoshani et al., 2016). The results are also particularly relevant insofar as they provide clear evidence about the importance of research designs that are used to prove the efficacy of interventions and their correlation with the efficacy obtained through programme assessment. As has been increasingly proposed, this illuminates and focuses attention on the need to utilise methodological designs that are based on standards that ensure rigorous responses to the questions of causality and help ascertain which achievements are obtained through the interventions (White, 2013; White et al., 2014) thereby reducing uncertainty about which factors are directly associated with which observed changes (Shoshani & Steinmetz, 2014).

One of the limits of this study is the use of only two search engines, the inclusion of studies published between 2015 and 2020 only, and being written in just English or Spanish. Such decisions may have led to the exclusion of other publications that could have been of interest to the analysis and systematisation of scientific production in the field of well-being promotion in the education system. Therefore, it is recommended in future studies to extend the review to previous years, that gray literature is reviewed, work that is not published in scientific journals be sought out, and that intervention programmes be reviewed that have not gone through assessment procedures yet may be considered important for analysis due to their development trajectories.

Great variability and differences were uncovered concerning how the components and characteristics of the works under study are presented (for example, differences when

reporting age, having some cases that report the classroom level, differing age averages, different age ranges, etc.). This means that when reporting on interventions and their methodological designs in a joint, comparative and integrated manner, key contributions of some of the valuable studied interventions could have been rendered undetectable. Future work should consider including other search and study selection mechanisms that enable the inclusion of valuable information that may have been left out.

A major limitation of the present study is related to the lack of quality assessment since studies with poor quality studies (i.e., small scale, non-randomised studies, lack of control group) were not distinguished from the stronger and more robust large-scale studies. This makes it necessary to view the results of the present study with caution when reaching conclusions.

Furthermore, it could be considered a limitation of the present study that only a narrative review of the articles was carried out, and no meta-analysis was performed. Although a meta-analysis was not among the objectives of the present study because when analysed studies present a great variability—as was the case—this can lead to misleading results, it might be interesting to compare the effect sizes of interventions aimed at promoting subjective well-being in the school setting, taking into account the precautions required for this type of analysis. Consequently, this review cannot provide definitive conclusions about which characteristics of an intervention are most effective, but it does provide systematisation and guidelines as to which practices have been most used and have achieved the most positive results in their own studies.

Despite the limitations and in recognition of the advances that have yet to take place, this work provides a useful addition to the endeavours to promote children and adolescents' well-being in the education system. It gives the scientific community ordered and systematised information about the theoretical characteristics, methodologies and practices that make up the subjective well-being promotion interventions in the school space. This helps advance our understanding of the various practices while considering the diversity of traditions and implementation conditions. Most importantly, it highlights the need for more robust experimental studies in this field that can help explain what are the most effective programmes. This will help researchers and public policy decision makers to prioritise more evidence-based interventions.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to report.

ETHICAL APPROVAL

The research has been conducted under BERA ethical guidelines.

DATA AVAILABILITY STATEMENT

The data that support the findings of this review can be requested to the corresponding author.

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