



# Happy to belong: Exploring the embeddedness of well-being in the integration of migrant and refugee minors

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## Abstract

This paper aims to explore the role of Child Well-Being (CWB) in the integration processes of migrant and refugee minors. Through the co-creative development of a new child-centered system of indicators about the integration of migrant and refugee children in Europe the authors discuss a) the prominent role of well-being in this set of indicators, and b) how reappraising these indicators from a well-being approach can contribute to delving into which aspects of CWB are connected to the integration of migrant children. The contributions of this paper open new research paths: on the one hand, the methodology presented provides a reference for future research that can replicate the procedure to build child-centered indicators in disciplines different than migration studies; on the other hand, the results presented suggest not only that well-being has a prominent role in migrant children integration experiences, but also, that reappraising dimensions of migrant children's integration from a well-being approach hints at blurry borders between both concepts. This suggests promising research opportunities to underpin the relationship between integration and well-being.

**Keywords** Child Well-Being · Integration · Migrant · Refugee · Indicators

## Introduction

Migration studies have traditionally focused on adults, considering children as an extension of the household. This perspective has delimited children's integration processes in terms of family migration, thus hindering the understanding of how migrant children have a specific engagement with their context and overlooking other approaches centered on their well-being (Adserà & Tienda, 2012). In contrast, the literature about the well-being of children has addressed the specific needs of migrant children. Still, it tends to adopt an approach more focused on the eudaimonic, objective, negative, material, and individual aspects of well-being in opposition to the hedonic, subjective, positive, spiritual, and collective dimensions (Amerijckx & Humblet, 2014). In fact, very few studies are child-centered or focus on integration as a holistic process, and most of the literature about the well-being of migrant children still relies on data provided from

other relevant stakeholders such as their parents or the professionals involved in their migration process (policymakers, immigration officers, social workers, psychologists, nurses, etc.) (Curtis et al., 2018).

These gaps have recently led migration research to turn to more child-centered perspectives that emphasize how including children's subjectivity and, specifically, their perspectives about well-being experiences can enrich the understanding of integration (Fruja Amthor, 2017). However, this theoretical development still needs to be reflected in new methodological and empirical research. In this regard, social indicators have become referent measures of child well-being (CWB) due to their synthetic nature, but not so much in the area of migrant children's integration, in which the studies tend to reflect the children's integration results in specific domains instead of measuring integration holistically (European Commission/EACEA/Eurydice, 2019). Hence, more research in this area is needed to help clarify the relationship between integration and well-being experiences, which involves producing innovative measures, instruments, and strategies for data collection to obtain more meaningful data.

This paper presents the development of a new child-centered system of indicators about the integration of

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migrant and refugee children in Europe. The methodology is part of the research conducted in a broader funded project seeking to describe and monitor children's integration in formal and non-formal educational settings across six European countries (Belgium, Germany, Greece, Ireland, Italy, and Spain). The authors discuss based on the findings obtained a) the prominent role of well-being resulting from this process and b) how reappraising these indicators from a well-being approach can contribute to delving into which aspects of CWB are connected to the integration of migrant children.

## State of the art

### Current models of migrant and refugee children's integration

Integration represents a specific process of social inclusion that tackles the disadvantages derived from migration, providing opportunities for individuals and communities. In this manner, most authors agree to consider integration as a contextualized process that involves an interaction between migrants and the host society. As a result, two-sided adaptations ensue in the individual, social, economic, cultural, and political spheres (IOM, 2019). Due to its social nature, most definitions operationalize integration by measuring the micro-meso-macro interaction across domains such as the social networks and social capital, the social structure (labor, market, housing, legal frameworks...), cultural factors, civil and political rights, and identity (Penninx et al., 2004). However, understanding migrant children's integration entails acknowledging and analyzing how the place they occupy within the social and political system of the country of destination influences the future development of both children and societies (Suárez-Orozco et al., 2015).

The literature reveals five broad domains of migrant and refugee children's integration results: children's legal status, language and communication, psychosocial well-being and health, social relations and children's educational achievements (Serrano Sanguilinda et al., 2019). Besides, the literature points to barriers and facilitators in the children's context that enable or limit the integration process, such as the political leadership, the segregation of schools, the ways in which schools and teachers organize and implement educational practices with the community if there are learning support and mental health services available, and the negative attitudes permeating social interactions (Heckmann, 2008). On this subject, well-being and social relationships recurrently appear as aspects linked to attaining other material and practical resources that foster their integration (Chu et al., 2010).

### Current models of child well-being

In parallel, well-being has been defined as a holistic construct emerging from the interaction among personal, socio-cultural, and environmental factors. Its key features are its multidimensional structure, dynamicity, and fundamental role in the optimal human experience and functioning (Diener et al., 2018). This literature has experienced significant development in the last decades, and so recent research on the components of well-being has provided an empirically-based framework that merges the hedonic, social, and eudaimonic aspects unleashing people's well-being (Gallagher et al., 2009).

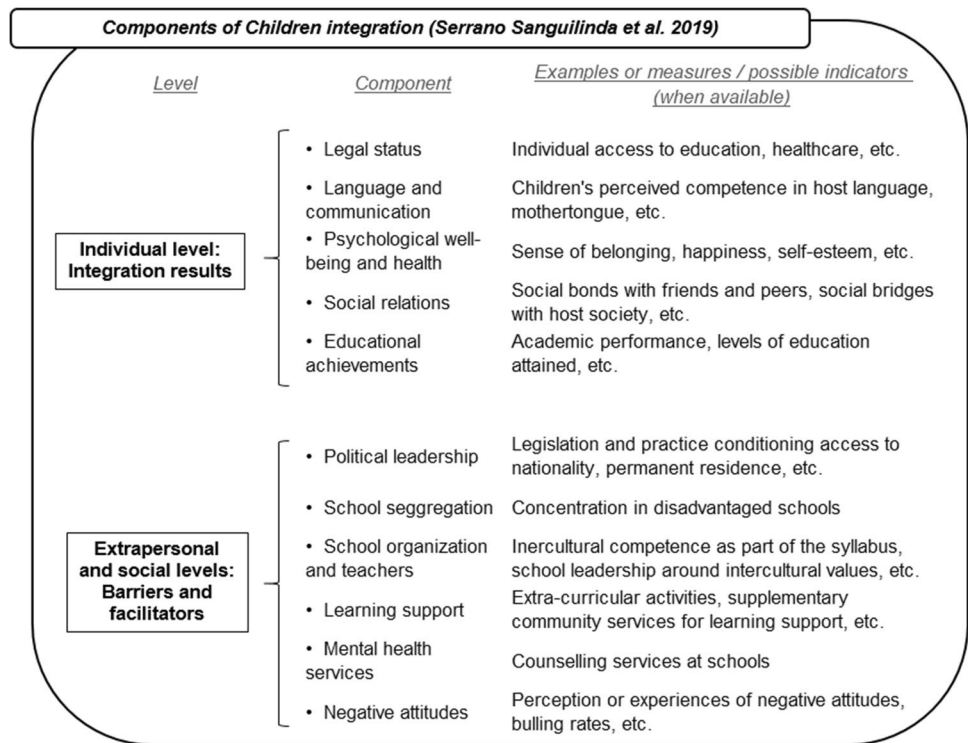
Explicitly focusing on CWB, no consensus has been reached to adopt a unique definition. Most authors agree to conceptualize it as an integrative multidimensional construct, relative to context and the child's development, broadening this way the well-being definitions for adults. In this manner, these definitions generally incorporate children's rights, a biopsychosocial concept of health, the capabilities to balance individual vs. structural conditions, and an ecological perspective of child development (Fattore et al., 2019; Nussbaum, 2013).

A theoretical model from Minkkinen (2013) has successfully encompassed this approach. This model includes the hedonic, social, and eudaimonic components of CWB by delimiting internal, material, and social prerequisites of well-being. Additionally, the author connects these prerequisites with the children's capabilities and care system, framing all the processes in the broader socio-cultural context of development. Further empirical research is still needed applying this multi-approach structural model; however, in its absence, most available measuring systems have turned to policy-oriented indicators addressing well-being domains (Newland et al., 2019). In this manner, most measures of CWB proxy the children's state and life circumstances estimating their economic circumstances, their environmental and material situation, their family circumstances, the social relationships in which they are involved, their psychological or subjective well-being, their health, the education and in some cases, their civic participation and community engagement (Pollock et al., 2018).

### Gaps and challenges of research about migrant children's well-being and integration

Despite the advances in both areas, the theoretical and empirical research connecting migrant children's well-being and integration are still very scarce and not child-focused (Harttgen & Klasen, 2009). In this regard, previous research suggests that applying a child-centered approach in the research process can help to bringing new light on the linkages between the two concepts and providing new measures

**Fig. 1** Concept map summarizing components of migrant and refugee children’s integration (Serrano Sanguilinda et al., 2019)

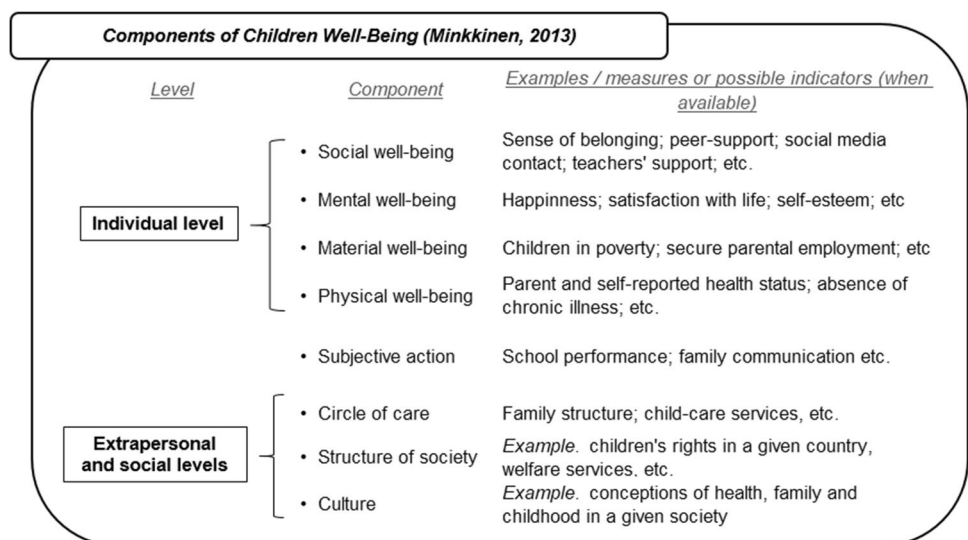


with the potential for social and political impact (Fattore et al., 2012). Additionally, the literature available does not clearly unravel the overlap between the defining components of integration processes and CWB. For instance, as shown in Figs. 1 and 2 some of the aspects of CWB such as supportive social relationships, belonging or happiness, are also identified as factors contributing to migrant children's experience of integration (Correa-Velez et al., 2010; McGovern & Devine, 2016; Smyth, 2015). Furthermore, the directionality of the relationship between CWB and integration often appears interchangeably and circularly in the

literature, becoming a recurring argument to justify psychosocial interventions and political advocacy tackling inequality (European Commission, 2016).

Research with minors sets particular boundaries and topics. Due to their place in the social system and their developmental status from infancy to adolescence, they can report different ways of interpreting reality than adults and different experiences of a given phenomenon. This way, children are a unique source of information able to provide significant contributions when they are actively involved in research, which entails putting the focus on them,

**Fig. 2** Concept map summarizing components of children’s well-being (Minkkinen, 2013)



acknowledging that they can provide meaningful inputs of their own experiences, and adapting the methodologies to learn *from* and *with them* about their subjective experiences and perceptions of well-being and integration (Gornik & Sedmak, 2021). As a matter of fact, this approach has been successfully applied in the previous literature, leading to promising results both in migration and well-being studies with children and youths (Curtis et al., 2018; Due et al., 2014). So, transferring this approach into methodological research would provide new meaningful measurement systems of migrant children's integration. On this subject, Stevens and Vollebergh (2008) have remarked that solving the lack of available data and research on child migration requires more sophisticated research designs, methodologies, and definitions. Due to their specific features, social indicators are optimal measures to reflect this approach and address these concerns as they offer several advantages to monitor social phenomena, proxy complex constructs in large groups of people, and lead strategic action for a meaningful impact (Kumar et al., 2021).

## Method

This section describes the methodology used to develop a child-centered set of indicators to measure the integration of migrant and refugee children in European educational settings and how CWB emerged in it. In line with the project framing this research, the indicators should also include relevant measures for reporting and monitoring policy-making and intervention goals. Hence, a co-creation design was implemented to include the critical participation of children, families, and other relevant stakeholders (the educative community, immigration officers, policymakers, and government representatives), as well as the collaboration among researchers, to generate a shared perspective of the integration process (Horvath & Carpenter, 2020).

The process was multistage and multi-technique, and it foresaw the cumulative achievement of three milestones: a) defining a logical model, b) operationalizing into basic indicators the latent variables constituting the dimensions of the construct, and finally c) refining the final set of indicators (Maggino & Zumbo, 2012). Every stage involved the iterative consultation and incorporation of the participants' views and researchers' analysis, applying a mixture of qualitative and quantitative strategies.

### Stage 1: Building the logical model

Following an extensive literature review, we departed from the conceptual framework of migrant and refugee children's integration described above (see Fig. 1), and further developed and refined it by performing qualitative research with

children and other relevant stakeholders. The researchers conducted workshops with children from 6 to 18 years old and their families, focus groups and world cafés with professionals intervening directly with migrant and refugee children, and in-depth interviews with experts and institutional representatives. These qualitative studies aimed to further elaborate the relevant areas to be investigated and better clarify the future indicators by exploring the same issues found in the literature review from the viewpoint of stakeholders, in an open manner and without conditioning them.

The results from these activities specifically related to well-being pointed to the fundamental role of children's feelings of belonging in the tendency to report higher happiness. In this regard, the importance of the peer-relations and the support from teachers and an inclusive school climate were broadly highlighted by all children, parents and the other stakeholders. These seemed to be closely related to the confidence and self-esteem of children, as well as their academic motivation. Finally, the workshops pointed to further look at the internal tensions derived from the coping process involved in developing intercultural identities and lifestyles (Martin et al., 2019).

The joint analysis of the literature review leading to the adoption of the conceptual framework and the qualitative research results allowed us to build a new upgraded logical model. On the one hand, the construct of integration and its five final dimensions were renamed to “access to rights”, “language and culture”, “well-being”, “social connectedness”, and “educational achievements” to better reflect how they are related with the integration results of children according to the qualitative results. On the other hand, we furthered identified specific levels of analysis – micro, meso, macro – with its respective contexts of observation for both integration results – child/family context – and the barriers and facilitators – at the school/neighborhood and region/country –. Upon this basis, the researchers envisioned a system of indicators formed by: a) constitutive indicators of integration results along these five dimensions and b) concomitant indicators that are independent of each other and represent the barriers and facilitators in different levels of the social system (Maggino & Zumbo, 2012).

### Stage 2: Operationalization of basic indicators

Once the dimensions of integration had been identified, the researchers needed to provide specific observable variables and an appropriate calculation method for each indicator. Following a parsimoniousness principle, the researchers planned the first development of 50 basic indicators to obtain the necessary and sufficient measures arising as the most relevant. To do so, they first built an operational matrix including the observable variables corresponding to the

five dimensions of integration results and the barriers and facilitators that had been identified following the literature review and qualitative research with stakeholders. Then they selected those variables that had been robustly emphasized in both analyses and across perspectives and methodologies. Next, they compiled in the matrix those existing measures available from secondary data sources; in this way, the degree of coverage could be mapped, and lacking information was identified. New measures were developed to cover the gaps of secondary sources appropriately when necessary. As a result, 57 observable variables were pre-selected through a structured discussion among the research teams. To end this process, the researchers defined proper calculations for determining the value of each indicator, obtaining 16 indicators of integration results<sup>1</sup> and 34 indicators for the barriers and facilitators identified.

### Stage 3: Selection of the final set of indicators

The design of the procedure for selecting the final set of indicators also followed an iterative and co-creational approach that included a content validation – using the Delphi methodology – and an ecological validation – using a multilevel consultation of stakeholders –. The principles of robustness and empirical soundness guided this process, which meant considering a) the consensus across methodologies, expertise, and contexts of observation, b) the empirical soundness of indicators in terms of reliability, validity, discrimination power, and consistency of measures, and c) the feasibility and adequacy of measures. To line up the decision-making process with the fixed quality criteria, the researchers instructed the participants into the CARA procedure for both the content and the ecological validation (Hernández Franco et al., 2009). This procedure consists in rating the formal aspects of the indicators (Clarity, Adequacy, and Relevance) using a four-value scale from 1 (very low) to 4 (very high) and providing an additional measure of the Accessibility in a yes/no format. Additional qualitative comments could be delivered to address unidentified issues and improve the proposed indicators.

The two-round Delphi study for content validation brought together a gender-balanced group ( $n = 24$ ; 12 males and 12 females) of international experts from academia, NGOs, and public administration. The analysis of the consensus among experts, and the consistency of their assessments, allowed to reduce the set of indicators by taking into account the quantitative scores across the CARA dimensions and additional quality criteria (e.g., high values in

adequacy). The qualitative comments made by the experts were also analyzed in-depth, alluding to the reliability of answers, the potential for misinterpretation, previous empirical evidence, suggestions for alternative measures, etc.

The ecological validation involved micro, meso, and macro stakeholders in the six European countries. The validation with meso and macro stakeholders replicated one round of the structured process applied in the Delphi study with teachers, principals and managers of educational centers, other members of the educational community, public servants, and technicians (local and regional) in the areas of education, migration and refugee services, and public administration's management. The micro-level stakeholders' validation engaged diverse migrant-background children and adolescents from 6 to 18 years old and consisted of age-appropriate adapted workshops. The analysis results were used to refine the previous selection and adjust the wording and presentation format indicators.

At the end of this process, a final set of 30 indicators was obtained comprising 14 indicators of integration results along its five dimensions, and the rest the barriers and facilitators. For reporting purposes, the following section focuses on the 14 indicators of integration results to discuss their relationship with CWB.

## Results

The procedure implemented consistently identified five dimensions shaping the integration results of migrant and refugee children: access to rights, educational achievement, language and culture, well-being, and connectedness (see Table 1).

CWB emerged in this process as a dimension of integration results measurable by two well-being indicators: children's happiness and children's sense of belonging in the school (see stage 3 in Fig. 3). This dimension takes into account the subjective and eudaimonic nature of well-being by including, on the one hand, an indicator that measures the children's hedonic experience of their own lives and, on the other hand, children's adjustment in a core extra-familiar context.

This dimension obtained a particular thematic relevance already in the literature review of the first stage of the process (Mohamed & Thomas, 2017). The qualitative research results helped delimit further the CWB dimension and identify specific aspects at the micro level that could be explored to reflect the degree of integration of children, such as the sense of belonging, self-esteem, happiness, or self-efficacy (Martin et al., 2019).

The second stage of the process permitted to obtain three basic indicators of well-being in the first pre-selection out of the 16 indicators of integration results:

<sup>1</sup> The specific sources and technical information relative to the final selection of integration result's indicators can be consulted in the supplemental material provided.



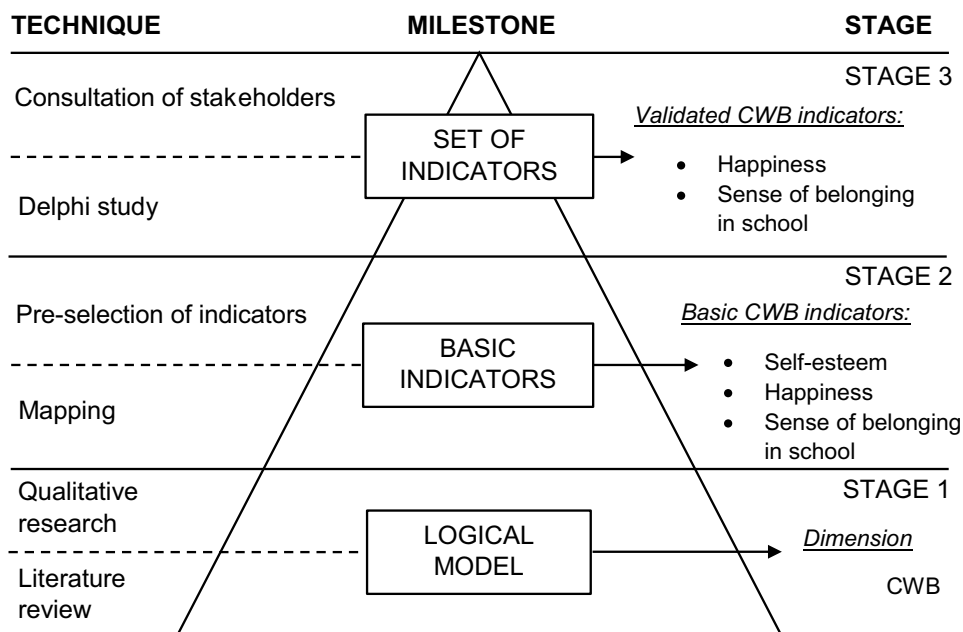
**Table 1** List of integration results indicators specifying dimensions, observable variables, and method of calculation

Dimension	Observable variable	Indicator
Access to rights	<i>Children's access to health care</i> ITEM: unmet needs for medical examination in the last 12 months	Difference in the share of migrant-background and native respondent children under 16
Educational achievement	<i>Children's access to compulsory education:</i> ITEM: schooling rates in Eurostat	Estimated by foreign children enrolled at school as a share of foreign children in compulsory ages <sup>a</sup>
	<i>Children's academic skills</i> ITEM: share of low achievers in reading, mathematics, and science	Difference among migrant-background <sup>b</sup> and native children (15-year-olds)
	<i>Children complete compulsory education</i> ITEM: share of persons with compulsory education completed	Share of persons among foreign-born <sup>c</sup> population aged 16–20 who arrived in the host country before age 15
	<i>Children remain in formal education beyond compulsory levels</i> ITEM share of early leavers	Difference among foreign-born and non-foreign born persons aged 18–24 <sup>c,d</sup>
	<i>Types and levels of (formal) non-compulsory education attended</i> ITEM population aged 16–24 who have completed (or are currently studying) upper secondary or tertiary studies in the survey country	Difference in the share of foreign-born and non-foreign born <sup>c</sup>
Language & culture	<i>Children's perceived competence in the host language</i> ITEMS children's score in perceived language competence in terms of fluency and understanding	Average score of migrant-background <sup>b</sup> students in dedicated survey items
	<i>Children maintain their cultural identity while adopting key host country cultural values and intercultural competences</i> ITEM children's score in feelings of closeness towards different social groups	Share of migrant background children picking specific sets of combinations in the survey item
Child well-being	<i>Children's happiness</i> ITEM children's score in happiness	Difference in the share of migrant-background children <sup>b</sup> and native children that pick options "very happy" or "quite happy" in survey item
	<i>Children's sense of belonging</i> ITEM children's score in feelings of belonging in the school	Average score in the survey item among migrant-background children <sup>b</sup>
Social connectedness	<i>Interconnectedness / Friends and peers</i> ITEM children's score in bonds with peers	A. Difference in the average score of migrant-background <sup>b</sup> children and native children in the item
	<i>Interconnectedness / Friends and peers</i> ITEM children's score in bridges with peers	B. Share of all children (migrant-background <sup>b</sup> and native) indicating not having neither friends from a different country nor culture in both survey items
	<i>Interconnectedness / Teachers</i> ITEM children's score in teachers' support	Difference in average score between migrant-background and native children in the survey item <sup>b</sup>
	<i>Interconnectedness / Institutions</i> ITEM children's score in trust in institutions	Difference in average score between migrant-background and native children in the survey items <sup>b</sup>

<sup>a</sup>we use citizenship (foreign children) as a proxy of migrant background (country of birth and parents' country of birth) because data on school enrolment is more often available by citizenship than by migration background (country of birth and parents' country of birth); <sup>b</sup>"Migrant background children" refers to foreign-born children and children with foreign-born parents (including mixed heritage). "Native children" refers to children born in the country of the survey whose parents are also born in the country of survey; <sup>c</sup>"Early leaver from education and training" refers to a person aged 18 to 24 who has completed at most lower secondary education and is not involved in further education or training (formal or informal);<sup>d</sup> The limit of 16 refers to the start of non-compulsory age, and shall be adapted accordingly in countries with a different limit

1. Happiness was selected versus other measures of satisfaction with life to reflect children's hedonic experience of their own lives. The rationale was to have an overall measure of the affective components of life satisfaction feasibly applicable across all age ranges from childhood to adolescence (Bell, 2007). Calculating the difference in the shares of happiness between natives and migrant background children would allow to represent and monitor the evaluations that children made about their life circumstances and how much they vary depending on the children's origin.
2. The sense of belonging in school was selected to collect a specific measure of children's adjustment in a core context of their lives. Additionally, this measure

**Fig. 3** CWB results of the hierarchical process



has been previously used as part of the Programme for International Student Assessment (PISA) as a critical indicator of long-term integration (Schachner et al., 2017), and according to numerous studies, is a social well-being outcome fundamental in the general well-being of migrant children (Li & Jiang, 2018). Calculating the average sense of belonging of migrant children would allow to represent and monitor how much these children feel that they fit in the school community of the host society.

- Finally, global self-esteem was selected due to its relevance to psychological (eudaimonic) well-being (Rosenberg et al., 1995) and as a key indicator of the affective outcomes emerging out of migrant children's acculturation and interaction with the host society (Liebkind, 2001). Calculating the average score of migrant-background children in self-esteem would permit to represent and monitor how the integration actions and specific protocols affect how migrant children perceive themselves and how these perceptions change over time.

At the last stage, the two-round Delphi study led to discarding the pre-selected indicator of the average score of migrant-background children in self-esteem due to the lower scores obtained in the CARA dimensions, as shown in Table 2. However, the cornerstone of this decision laid on the experts' qualitative comments pointing to the difficulties to accurately measure this self-evaluation with a concise measure, and even more with children from non-western cultures. The impossibility to find a suitable alternative finally led to dropping this indicator for good.

The two remaining indicators were ecologically validated with stakeholders at micro, meso, and macro levels. The meso and macro stakeholders' inputs allowed to confirm the sufficient level of agreement about the robustness of both indicators in terms of the CARA dimensions (see Table 3), while the cognitive testing with children allowed to make the indicators friendlier for them. The analysis of their qualitative comments served to introduce slight modifications in the format and wording of the items to enhance the comprehension and response rates. The final version is shown in Table 4.

## Discussion

The methodology and results presented in this paper highlight how CWB emerges as a core aspect of integration when stakeholders are engaged in developing a set of social indicators from a child-centered perspective.

Firstly, the methodology described represents a meaningful contribution to future methodological research providing a detailed procedure to build technically sound social indicators including the children and relevant children-related stakeholders' voices. The added value of this child-centered method is threefold: first, the engagement of the participants involved and the incorporation of their first-hand experience and understanding of the integration process; second, the bi-directionality of the process that allowed a dialectic exchange between researchers' and participants' outputs; and lastly, the scope of participation including the agreement not only of children and their families but also, stakeholders at

**Table 2** Summary of results of the content validation with experts

Variable	Indicator	Cara dimen-sions	First round			Second round		
			Consensus <sup>a</sup>	Mean score	Percentage <sup>b</sup>	Consensus <sup>a</sup>	Mean score	Percentage <sup>b</sup>
<i>Happiness</i>	Difference in the share of migrant-background children and native children that pick options “very happy” or “quite happy” in children’s happiness	Clarity	Very High	4	63%*	Very High	4	58%
		Adequacy	Completely Agree	4	55%	Completely Agree	4	54%
		Relevance	Very Important	4	55%	Very Important	4	58%
		Accessibility	Yes	–	77%*	Yes	–	68%*
		Qualitative comments	Positive (meaningful, better than satisfaction measures, easier to measure cross-culturally in children)					
<i>Sense of belong-ing</i>	Average score in Children’s sense of belong-ing among migrant-background children	Clarity	Very High	4	76%*	Very High	4	76%*
		Adequacy	Completely Agree	4	71%*	Completely Agree	4	71%*
		Relevance	Very Important	4	76%*	Very Important	4	76%*
		Accessibility	Yes	–	92%*	Yes	–	92%*
		Qualitative comments	Positive (crucial, meaningful)					
<i>Global self-esteem</i>	Average score of migrant-background children in self-esteem	Clarity	Very High	4	45%	Very High	4	46%
		Adequacy	Agree	4	45%	Agree	4	58%
		Relevance	Important	3	55%	Important	3	63%*
		Accessibility	Yes	–	80%*	Yes	–	68%*
		Qualitative comments	Negative (different meanings between cultures, hard to measure accurately, meaningful, indirectly related to integration)					

The threshold for an agreement was fixed at 40% of agreement, so 40–50% indicates low agreement, 50%-60% medium agreement and beyond 60% high. This way, values with high agreement appear marked (\*); <sup>a</sup> “Consensus” represents the mode, i.e. the experts’ most chosen value in a scale from 1 (very low) to 4 (very high); <sup>b</sup> “Percentage” represents the proportion of experts out of the total that have chosen the Consensus value;

meso and macro levels from educational, migration, government and administrative spheres.

Beyond the actual research results, certain empowerment of the stakeholders emerged from this process, as they had the opportunity to influence the decision-making at each stage of the methodology. Using a co-creative method contributed to obtaining innovative solutions because, even if the activities and roles are clearly defined, the actual execution of the activities is open and allows stakeholders to express their views on their own terms (Horvath & Carpenter, 2020). Hence, incorporating stakeholders in the co-creation of a measurement system of integration has allowed obtaining a more meaningful tool that will contribute to generating more comprehensive data to capture the degree of integration of migrant and refugee children in Europe. In so doing, it has also unveiled the high level of agreement about what it means to be integrated for children, families, and other relevant stakeholders at all social levels, suggesting relevant measures to estimate it. Finally, the co-creation element has provided ecologically validated

measures enhancing the relevance and applicability of this tool in future research and social monitoring studies.

Second, in terms of the results obtained, the process followed has permitted to develop thirty indicators to represent and monitor the integration results of children as well as barriers and facilitators in their context affecting those results. These findings allowed us, in the first place, to address the relevant role of CWB in the integration results of children and next, delving deeper in this relationship by reappraising the results obtained from a holistic well-being approach.

Almost half of this set of indicators is specifically designed to observe the five dimensions of integration, including a dimension of CWB. In fact, the indicators of happiness and the children’s sense of belonging have emerged as central for the assessment of migrant children’s integration: they have obtained not only a high thematic relevance in the literature and the qualitative research with stakeholders, but also they have been backed up by the experts’ assessments in the Delphi study and the stakeholders during the ecological validation. These results are coherent with previous research



**Table 3** Summary of results of the ecological validation with macro and meso stakeholders

Variable	Indicator	Cara dimension	Consensus <sup>a</sup>	Mean score	Percentage <sup>b</sup>
<b>Macro stakeholders</b>					
<i>Happiness</i>	Difference in the share of migrant-background children and native children that pick options “very happy” or “quite happy” in children’s happiness	Clarity		4	50%
		Adequacy		3	50%
<i>Sense of belonging</i>	Average score in Children’s sense of belonging among migrant-background children	Relevance		4	44%
		Accessibility		–	81%*
Qualitative comments: Suggestions to clarify for younger children					
<i>Sense of belonging</i>	Average score in Children’s sense of belonging among migrant-background children	Clarity		3	50%
		Adequacy		4	56%
<i>Happiness</i>	Difference in the share of migrant-background children and native children that pick options “very happy” or “quite happy” in children’s happiness	Relevance		4	53%
		Accessibility		–	92%*
Qualitative comments: Suggestions to use age-coherent language					
<b>Meso stakeholders</b>					
<i>Happiness</i>	Difference in the share of migrant-background children and native children that pick options “very happy” or “quite happy” in children’s happiness	Clarity		3	46%
		Adequacy		3	51%
<i>Sense of belonging</i>	Average score in Children’s sense of belonging among migrant-background children	Relevance		3	47%
		Accessibility		–	64%*
Qualitative comments: Suggestions to seek inspiration in previous sources such as HBSC or PISA, and add graphic representations for younger children					
<i>Sense of belonging</i>	Average score in Children’s sense of belonging among migrant-background children	Clarity		3	44%
		Adequacy		4	56%
<i>Happiness</i>	Difference in the share of migrant-background children and native children that pick options “very happy” or “quite happy” in children’s happiness	Relevance		4	53%
		Accessibility		–	91%*
Qualitative comments: Suggestions to specify as much as possible and to seek inspiration in PISA					

The threshold for an agreement was fixed at 40% of agreement, so 40–50% indicates low agreement, 50%–60% medium agreement and beyond 60% high. This way, values with high agreement appear marked (\*); <sup>a</sup> “Consensus” represents the mode, i.e. the experts’ most chosen value in a scale from 1 (very low) to 4 (very high); <sup>b</sup> “Percentage” represents the proportion of experts out of the total that have chosen the Consensus value;

**Table 4** Summary of results of the ecological validation with micro stakeholders

Variable	Indicator	Original item	Adjusted item
<i>Happiness</i>	Difference in the share of migrant-background children and native children that pick options” very happy” or “quite happy” in children’s happiness	<i>Taking all things together</i> , would you say you are: 1 Very happy 2 Quite happy 3 Not very happy 4 Not at all happy	<i>In general</i> , would you say you are: 1 Very happy 2 Quite happy 3 Not very happy 4 Not at all happy Adapted for younger children using a cartoon-based version
<i>Sense of belonging</i>	Average score in Children's sense of belonging among migrant-background children	How frequently do the following occur to you? For each item: 1 Almost never, 2 Sometimes, 3 Often, 4 Almost always I feel like I belong at my school I can really be myself at school I feel like people at my school care about me	How frequently do the following occur to you? For each item: 1 Almost never, 2 Sometimes, 3 Almost always I feel like I belong at my school I can really be myself at school I feel like people at my school care about me Adapted for younger children using a cartoon-based version

on this subject, stressing that migrant children's well-being can be interpreted as the result of a process of social inclusion that fosters individuals' meeting of their basic needs (Harttgen & Klasen, 2009).

The other resulting dimensions of integration can nonetheless be reappraised from a CWB approach to look at the overlap between concepts: exploring how measures specifically designed to represent the integration of migrant and refugee children can also constitute or reveal different aspects of CWB. This is clearly observed in the social connectedness dimension. Three indicators out of four can be reinterpreted as indicators of "social integration" following Keyes's et al. (2021) definition of social well-being: social bonds with peers, bonds with teachers, and links with institutions. This concept represents the positive valence of the relationships, the perceived support, and the feeling of being a meaningful part of a community. As such, the sense of belonging in the well-being dimension might also proxy the social integration of children.<sup>2</sup>

<sup>2</sup> The only indicator in the social connectedness dimension not susceptible to be reappraised from a CWB approach is the quantification of social bridges between native and migrant-background children, which measures the amount of inter-ethnic relationships of participants without collecting the fondness of them.

Additionally, the dimension of language and culture reflects aspects related to fulfilling basic needs of competence, autonomy, and self-actualization and, therefore, positive functioning (McEown & Oga-Baldwin, 2019). As language acquisition is a key competence for a functional adjustment in the host country, children's perceived competence in the host language may be reappraised as a proxy of environmental mastery (Safak-Ayvazoglu & Kunuroglu, 2021). This engagement and interaction with the host society predispose the development of new self-perceptions, which are elaborated and coherently accommodated into children's biographies. Hence, the indicator of children maintaining their cultural identity while adopting key host country cultural values and intercultural competence might represent a proxy for personal growth as defined by Ryff (2018).

A more indirect overlap can be observed in the dimension of access to rights, proxied by indicators of access to health and access to compulsory education. These indicators may proxy respectively two of the central functional capabilities defined by Nussbaum (2013) of “body health”, and “senses, imagination and thought”, which allow children to interact with their context to achieve higher well-being (Ismail, 2019). Similarly, the dimension of educational achievement represents educational outcomes, that are significantly conditioned by the adequate state of well-being of migrant

children. Therefore, the educational outcomes attained can indicate aspects of the children's context enabling their well-being (Amholt et al., 2020).<sup>3</sup>

In sum, the contributions of this paper open new research paths accomplishing the two initial objectives: on the one hand, the methodology presented provides a reference for future research that can replicate the procedure to build child-centered indicators in disciplines different than migration studies; on the other hand, the results presented suggest not only that well-being has a prominent role in migrant and refugee children integration experiences, but also, that reappraising dimensions of integration from a well-being approach hints at blurry borders between both concepts.

Future theoretical and empirical research can benefit from these contributions to further disentangle this overlapping between integration and well-being in migrant children, and clarify if and how setting out the conditions for a welcoming society for migrants also means building better life conditions for the well-being of all. Additionally, new interdisciplinary research can explore how to bridge together theoretically these two broad areas addressing fundamental aspects of the individuals from such holistic perspectives, contributing to setting the scientific basis for further political actions.

This research, however, is not exempt from limitations. The lack of previous evidence explicitly addressing a relationship between well-being and integration of migrant children prevents contextualizing this research in a widely developed theoretical framework. Future studies need to further assess the empirical validity of this system of indicators in different contexts. Finally, further research should assess how this system of indicators could be used in empirical research to quantify the relationship between well-being and integration of migrant children with a comparative perspective, including different countries and migrant populations.

## Conclusions

This paper presents a methodology for developing a set of indicators about the integration of migrant and refugee children discussing how CWB emerges in this process and the implications of this result. The set of indicators described provides measures specifically designed to capture the particular features of integration of migrant and refugee children. It will constitute a meaningful tool that will help

<sup>3</sup> In fact, previous indexes of CWB include the academic achievement of children with measures such as academic skills, or the levels of education attained at compulsory or tertiary education as key indicators to monitor the well-being opportunities of children at a national scale (Bradshaw & Richardson, 2009).

alleviate the gaps of data, providing a structured and purposeful measure to obtain an overlook of this population's state and monitor its evolution (You et al., 2018). The well-being of children emerges in the development of this set of indicators as a core dimension of integration. This fact, together with the reappraising of other integration dimensions from a well-being approach, suggests an overlapping between both constructs in terms of how setting life conditions to foster the integration of migrant children may be the more universal prerequisites to foster well-being. These results contribute to filling the existing gaps in the literature that typically addresses migrant children from adult-centric approaches and open new research opportunities to underpin the relationship between integration and well-being.

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## Declarations

**Conflict of interest** The authors declare no conflict of interest.

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