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Original article

Psychosocial competences in the continuing training of French National Education professionals in 2024: A major issue in promoting health in school environment



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ABSTRACT

Objective: Promoting health, and in particular developing psychosocial competences, at school encourages the emancipation of pupils and creates a favourable school environment. Furthermore, by helping to improve academic success, they improve pupils' overall health. However, school professionals need to be trained to develop students' psychosocial competences. The aim of this study was to describe the perceptions of French National Education professionals who have attended in-service training in psychosocial competences.

Method: This research adopts a mixed methodology. An online questionnaire was administered to 304 professionals in order to measure their levels of satisfaction and professional development following the training. Then, 14 professionals took part in individual semi-structured interviews to discuss their needs and the obstacles and levers they encountered in reinvesting what they had learned into their professional practice.

Results: The quantitative data showed that the professionals have an average satisfaction rating ranging from 6.96 to 8.22 out of 10 depending on the variable measured, but that they need to discover more tools and practices to develop psychosocial competences (79.28%). The qualitative data reveal that continuing training enables National Education professionals to exchange ideas with their peers and to review their posture (78.57%). They were able to experiment with psychosocial competences according to their needs and modified their practices as a result of the training (57.14%).

Conclusion: This study suggests that continuing training in psychosocial competences leads to changes in the attitudes and practices of National Education professionals, despite significant heterogeneity in terms of the length of training. Future research could focus on the actual practices of professionals trained in the development of psychosocial competences in order to assess the difficulties they encounter.

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1. Introduction

1.1. An evolving definition

Psychosocial competences (PSC) are an important concept in health promotion and were identified in the Ottawa Charter [1] as an effective means of developing individual skills such as self-awareness, social awareness, self-management, interpersonal skills and responsible decision-making [2]. They were first defined in 1993 by the World Health Organization as “a person's ability to respond

effectively to the demands and challenges of everyday life” [3]. In 2021, the French national public health agency (Santé Publique France, SpF) proposed an updated definition based on the last thirty years of scientific research: PSC represents a “coherent and interrelated set of psychological capacities [...] which make it possible to strengthen the power to act (empowerment), maintain a state of psychological well-being, promote optimal individual functioning and develop constructive interactions” [4]. SpF also updated the classification of PSC based on current scientific knowledge comprising: three cognitive PSC (self-awareness, capacity for self-control, making constructive decisions), three emotional PSC (awareness of emotions and stress, regulating emotions, managing stress) and three social PSC (positive communication, positive relationships, conflict resolution skills) [5].

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1.2. At the heart of political priorities

In 2013, the health education pathway was created in schools by the Law n°2013-595 of July, 8th 2013 [6] on the orientation and programming of the refoundation of the French national school system. It “aims to ensure health education, prevention and protection for pupils” [7]. In 2016, Law n°2016-41 of 26 January 2016 [8] on the modernisation of our healthcare system set out the framework and scope of health promotion measures, which aim to enable every child and adolescent from preschool to secondary school to “learn to take care of themselves and others” and avoid risky behavior.

In line with this orientation, since 2020, the French Ministry of the National Education has developed the Health Promoting School approach, which aims to promote “global and positive health to help pupils succeed” in three stages [9]. The first stage consists in identifying the needs and resources required to educate, prevent and protect students’ health; the second stage consists in developing a shared culture around health promotion within the school or establishment; and the third stage consists in ensuring the long-term future of the approach within the school, which can then be awarded a label. This approach is fully in line with the National Health Strategy 2018-2022 [10]. Finally, on 19 August 2022, the interministerial instruction relating to the national multisectoral strategy for the development of PSC in children and young people 2022-2037 [11] was published. The aim of this strategy is to strengthen public policies for the development of PSC among children and young people in all their living environments. To achieve this, the instruction stresses that “raising awareness and providing training in PSC for adults in contact with children and young people [...] is essential” [11]. It is in the context of this instruction that the present survey was born, with the aim of describing the continuing training in PSC offered to professionals in the French National Education system through self-evaluation by the beneficiaries.

Today, PSC are recognised as a major determinant of health and well-being on which it is possible to intervene effectively [12-14]. They play a vital role in educational success and social adaptation [14,15]. Interventions on PSC support inclusive school climates, improved academic results and attitudes and behaviors favorable to student health [15,16]. In fact, their development helps to increase self-esteem, autonomy and responsibility in children and young people, which in turn promotes educational success and the adoption of health-promoting behaviors [9]. In schools, there are many programs and tools for developing PSC that are recognised as effective health promotion strategies and have been shown to have significant effects on children’s health [12,17,18].

1.3. The continuing training for the French National Education professionals

Today, most scientific research documents the extent to which professionals implement PSC programs or measure the impact of PSC programs on children’s and adolescents’ health and well-being [19-22]. For PSC to be implemented effectively in schools, it’s essential that school professionals, particularly teachers, receive high-quality training and support [23]. The training of school professionals therefore appears to be essential, especially as it has been identified as a factor associated with the effectiveness of PSC interventions [5,24]. However, there is a lack of research on the PSC training of professionals [25] and teachers may encounter obstacles and levers in implementing new practices in the classroom [26]. In fact, after training, professional development depends on various facilitating or limiting conditions that can promote or hinder the transfer of learning [27].

Furthermore, with regard to teacher professional development in general, the international survey TALIS reported that, compared with European teachers, French teachers are less involved in collective in-service training [28]. French teachers feel that classroom

management and pupil behavior are not sufficiently addressed in their initial training and express a high need for in-service training on this topic. However, compared to European teachers, half as many French teachers take part in continuing training on this subject [28]. In this perspective, as the development of students’ PSC has been found to be an effective way to improve the school and classroom climates [29], PSC training of teachers could meet the general training needs of French teachers, particularly in the area of classroom management. Thus, in order to offer high-quality in-service training, it is now important for such training to integrate educational policy and meet the individual and collective needs of national education teachers [30].

The aim of this study was therefore to describe the perceptions of National Education professionals regarding the ongoing training they had received in PSC. Perception refers to the representation, image or idea we have of something, an event or an experience [31]. Here, perceptions relating to satisfaction, professional development, needs, obstacles and levers in terms of continuing training in PSC are explored. The main hypothesis is that continuing training in PSC met the needs of professionals and leads to a change in their posture and practice. The secondary hypothesis was that professionals encounter obstacles and levers in using the contributions of continuing education in PSC in their daily work.

2. Method

2.1. Participants

This cross-sectional study concerns French National Education professionals in five districts who have been offering continuing PSC training for at least two years. It is part of a larger study assessing the obstacles and levers to PSC training and the effectiveness of current training courses. For the online survey, professionals working wholly or partly in private establishments and those undergoing initial training were excluded. The sample comprised 304 participants, 85.2% of whom were women (mean age 45.1; SD 7.45). The majority of the respondents were teachers (75%), and had been working in this field for more than 10 years (76.97%). Around 20% (65 out of 304) work in a priority education setting (Table 1), and almost one in two

Table 1
Characteristics of National Education professionals who responded to the online survey.

| Characteristics of respondents to the questionnaire n = 304 | Workforce (%) |
|---|---------------|
| Distribution by district | |
| Créteil | 73 (24.01) |
| La Réunion | 66 (21.71) |
| Limoges | 25 (8.22) |
| Grenoble | 33 (10.86) |
| Rennes | 107 (35.20) |
| Gender | |
| Women | 259 (85.20) |
| Men | 45 (14.80) |
| Age (years) m ± SD | 45.20 ± 7.48 |
| Profession | |
| Management professional | 30 (9.87) |
| Teacher | 228 (75.00) |
| Administrative, social and health professional | 46 (15.13) |
| Seniority | |
| Less than 5 years | 21 (6.91) |
| Between 5 and 10 years | 49 (16.12) |
| Between 10 and 20 years | 115 (37.83) |
| More than 20 years | 119 (39.14) |
| Type of establishment | |
| Public | 228 (75.00) |
| Public REP/REP+ | 65 (21.38) |
| Rectorat | 11 (3.62) |

m = mean; SD = standard deviation; REP/REP+ = Réseau d’Education Prioritaire/ Réseau d’Education Prioritaire renforcé (priority education setting)

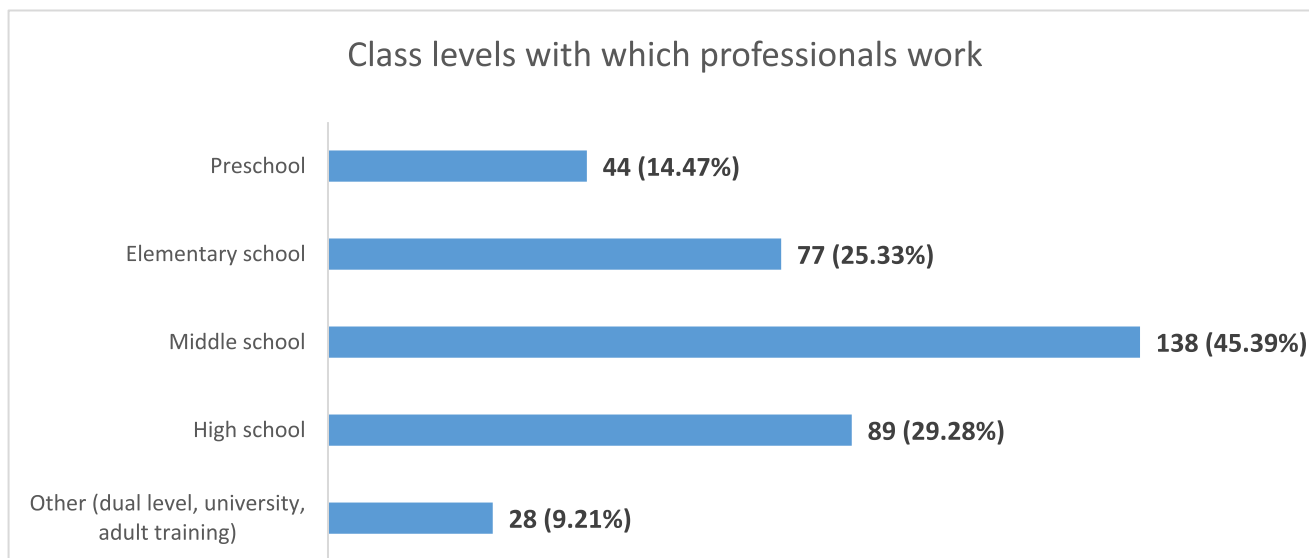


Fig. 1. Different grade levels in which professionals work.

professionals (45.39%) work in a middle school (Fig. 1). Among the 304 respondents, 14 professionals volunteered to take part in an individual interview about the continuing PSC training they had received. The interviews lasted an average of 27 minutes (min = 17; max = 51) and were all conducted by videoconference. The average age of the participants was 40.7 years (Table 2) and their average length of service was approximately 15 years. Among the 14 professionals interviewed, 11 were teachers (78.57%). Four of the teachers taught languages, three taught a technical or vocational subject, three others science and one was a special needs teacher. All the professionals worked in secondary education; seven (50%) in lower secondary schools, five (35.71%) in upper secondary schools, one in both establishments at the same time and one who worked in both secondary and primary education. The study was approved by the ethics committee of University Grenoble Alpes (N°2023-29), and was then approved by the 5 head of districts who took part in the study, as well as the director of the continuing training center of each academy.

2.2. Procedure

Participants received an email from the continuing training center of their academy indicating the possibility to take part in a online

Table 2
Characteristics of National Education professionals who took part in a semi-structured interview.

| Characteristics of the professionals interviewed n = 14 | Workforce (%) |
|---|---------------|
| Distribution by district | |
| Créteil | 6 (42.85) |
| La Réunion | 2 (14.29) |
| Limoges | 0 (0.0) |
| Grenoble | 2 (14.29) |
| Rennes | 4 (28.57) |
| Gender | |
| Men | 5 (35.71) |
| Women | 9 (64.29) |
| Age (years) m ± SD | 40.70 ± 4.65 |
| Profession | |
| Management professional | 2 (14.29) |
| Teacher | 11 (78.57) |
| Administrative, social and health professional | 1 (7.14) |
| Seniority (years) m ± SD | 14.90 ± 5.68 |

m = mean; SD = standard deviation

survey on PSC continuing training. People wishing to take part in an interview as part of the study were asked to leave their contact details at the end of the questionnaire on a separate link in order to preserve the anonymity of their responses. All participants gave their informed consent for the online survey and interview. The interviews were carried out by public health and psychology interns from University Grenoble Alpes. All the content was transcribed, perserving. For this descriptive survey, a mixed-methods quantitative and qualitative approach was used [32]. As the aim of this survey was to describe continuing training in PSC from the perspective of its beneficiaries, a sequential explanatory QUAN → qual model in which quantitative data collection was selected [33]. A mixed sequential design (quantitative then qualitative) [34] was used to establish the hypotheses. The study was conducted in five districts that represent diverse settings with urban and rural areas, high- and low-income areas, and overseas territories (i.e., Créteil, La Réunion, Limoges, Grenoble and Rennes).

2.3. Materials

The online survey was based on a self-administered questionnaire lasting approximately 15 minutes comprising seven socio-demographic questions (age, gender, profession, seniority, type of establishment, class level, home academy), four questions on training methods (setting, structure or professional delivering the training, duration, format), five questions aimed at satisfaction with continuing education in PSC (on a scale of 1 to 10), five questions on perceived professional development following the PSC training (on a scale of 1 to 10), one multiple-choice question relating to their needs following continuing education in PSC, four open-ended qualitative questions regarding their personal motivations, the perceived usefulness of the training, the transferability of what they learned into their practice, and the obstacles and levers in this respect. Qualitative data was collected through individual semi-structured interviews lasting approximately 30 minutes (SD = 10.4). During the interviews, the participants discussed the content and methods of the training. They then described their perceptions of the PSC training course, based on three central questions: "To what extent did this training course meet your needs?" "What differences did this training bring about?" "What would you need to reinvest more of what you have learnt during your PSC continuing training course in your day-to-day professional life?"

2.4. Data analysis

Descriptive statistics and correlation analysis to examine convergent validities were carried out using Jamovi 2.3 software. A series of linear regressions were also performed to examine whether the degree of satisfaction and duration of the training were related to the degree of professional development perceived by the participants. Pseudonyms for participants were assigned (from P01FR to P14FR). Transcripts were created to document verbatim the interviews. Double-coded thematic analysis was carried out using NVivo V14 software. The inter-rater reliability between the two evaluators was verified by calculating Cohen's kappa and was greater than 80% [35].

3. Results

3.1. Quantitative data

The majority of the professionals surveyed were women (85%), and received ongoing training in PSC via the Academic Training Plan (54.61%), that was delivered face-to-face (82.57%) and led by staff from their home education authority (62.17%). The duration of training varies widely. While the average duration was 10 hours (Table 3), some professionals attended a one-hour module on the subject of PSC, while others received more than 50 hours of training. At most, one professional received 110 hours of training as part of a university degree.

The data was analyzed using a series of Pearson's correlational analyses. These showed that the duration of the training was positively correlated ($r = .185$; $p < 0.001$) with the reinvestment of what had been learned in everyday professional life (Annex 1). The participants were particularly satisfied with the trainer's attitude (8.22 out of 10) and with the training climate and group dynamics (8.16 out of 10) experienced during their continuing training in PSC (Table 4). Participants reported that the trainings confirmed their intuitions and practices (7.36 out of 10) (Table 5). All the variables relating to the different degrees of professional development and satisfaction were positively and significantly correlated with each other ($p <$

Table 3
The different types of continuing training in psychosocial skills.

| Conditions of training $n = 304$ | Workforce (%) |
|--|------------------|
| Training framework | |
| Academic School of Continuing Training | 36 (11.84) |
| Local or Territorial Initiative Training | 40 (13.16) |
| Academic Training Plan | 166 (54.61) |
| On personal time | 28 (9.21) |
| Unplugged program | 5 (1.64) |
| Training for management staff | 4 (1.32) |
| Other | 25 (8.22) |
| Trainer | |
| Staff from the school | 5 (1.64) |
| A member from the district to which the school is attached | 189 (62.17) |
| A professional from the Canopé network* | 16 (5.26) |
| A professional from the IREPS | 22 (7.24) |
| A member of an association | 29 (9.54) |
| The CARDIE | 12 (3.95) |
| A researcher or academic | 12 (3.95) |
| Other | 19 (6.25) |
| Duration (hours) $m \pm SD$ $n = 296$ | 10.60 \pm 8.14 |
| Format | |
| Face-to-face | 251 (82.57) |
| Distance learning | 19 (6.25) |
| Hybrid | 34 (11.18) |

IREPS = Instance Régionale d'Éducation et de Promotion de la Santé (Regional Health Education and Promotion Authority); CARDIE = Cellule Académique Recherche Développement Innovation Expérimentation (Academic Research Development Innovation Experimentation Unit); the Canopé network is the Public operator of the French Ministry of Education; m = mean; SD = standard deviation

Table 4
Levels of satisfaction expressed by participants on a scale of 1 to 10.

| Variables measuring satisfaction $n = 304$ | Results $m \pm SD$ |
|---|--------------------|
| Satisfaction in terms of content and theoretical input | 7.62 \pm 2.10 |
| Satisfaction in terms of practical experience | 6.96 \pm 2.59 |
| Satisfaction with the balance between theory and practice | 6.99 \pm 2.61 |
| Satisfaction with the trainer's posture | 8.22 \pm 2.05 |
| Satisfaction with the training environment and group dynamics | 8.16 \pm 2.26 |

m = mean; SD = standard deviation

Table 5
Degrees of professional development perceived by participants on a scale of 1 to 10.

| Variables measuring professional development $n = 304$ | Results $m \pm SD$ |
|--|--------------------|
| Development of their knowledge of psychosocial competences | 6.43 \pm 2.25 |
| Development of their own psychosocial competences | 5.92 \pm 2.34 |
| Reinvestment of acquired knowledge | 6.01 \pm 2.42 |
| Confirmation of their intuitions and practices | 7.36 \pm 2.35 |
| Feeling of legitimacy in proposing tools and practices | 6.68 \pm 2.67 |

m = mean; SD = standard deviation

0.001) (Annex 1). The lowest correlation was between the "satisfaction with the training environment and group dynamics" and the "feeling of legitimacy in proposing tools and practices" ($r = .401$), and the highest correlation was between the "satisfaction in terms of content and theoretical input" and "development of their knowledge of psychosocial competences" ($r = .678$). In addition, results of linear regressions showed that the perceived professional development based on increased knowledge were predicted by the degree of satisfaction related to the content of the training ($\beta = .35$, $p = .001$), practices experienced during the training ($\beta = .26$, $p = .005$), and the attitude or posture of the professional delivering the training ($\beta = .26$, $p = .001$), but is not related to the training duration ($\beta = .05$, $p = .26$). In addition, the perceived professional development based on increased PSC is predicted by the degree of satisfaction related to the content of the training ($\beta = .25$, $p = .001$), and related to the practices experienced during the training ($\beta = .28$, $p = .005$), but is not related to the posture of the professional delivering the training ($\beta = .13$, $p = .11$), and to the training duration ($\beta = .05$, $p = .26$). However, overall, following their training, the professionals described a strong need (79.28%) to discover more PSC tools and practices, half of them expressed the need to be part of a PSC community for mutual enrichment (46.05%), to co-facilitate PSC practices in the classroom with colleagues or trainers (44.08%), and to acquire more scientific knowledge (43.09%) (Fig. 2).

3.2. Qualitative data

The PSC training attended by the interviewees lasted an average of 10 hours, ranging from a minimum of two hours to a maximum of 18 hours. Nine participants (64.29%) felt that the training was too short, and six professionals (42.86%) would have liked to have had more time to put the course into practice. According to National Education professionals, the main benefit of continuing training in PSC is that it gives them the opportunity to exchange ideas with their peers. They also particularly appreciate the opportunity to experiment with PSC (Fig. 3).

National Education professionals feel that continuing training in PSC has enabled them to change their attitude (11 out of 14) and has led to changes in their practices (8 out of 14). They now feel they have a "better understanding of the classroom climate" (P01FR), are able to "put things into words" (P06FR) and have a "different" (P07FR and P13FR) and "empathetic" (P10FR) look. Thanks to the ongoing training in PSC, eight professionals have been strengthened in the

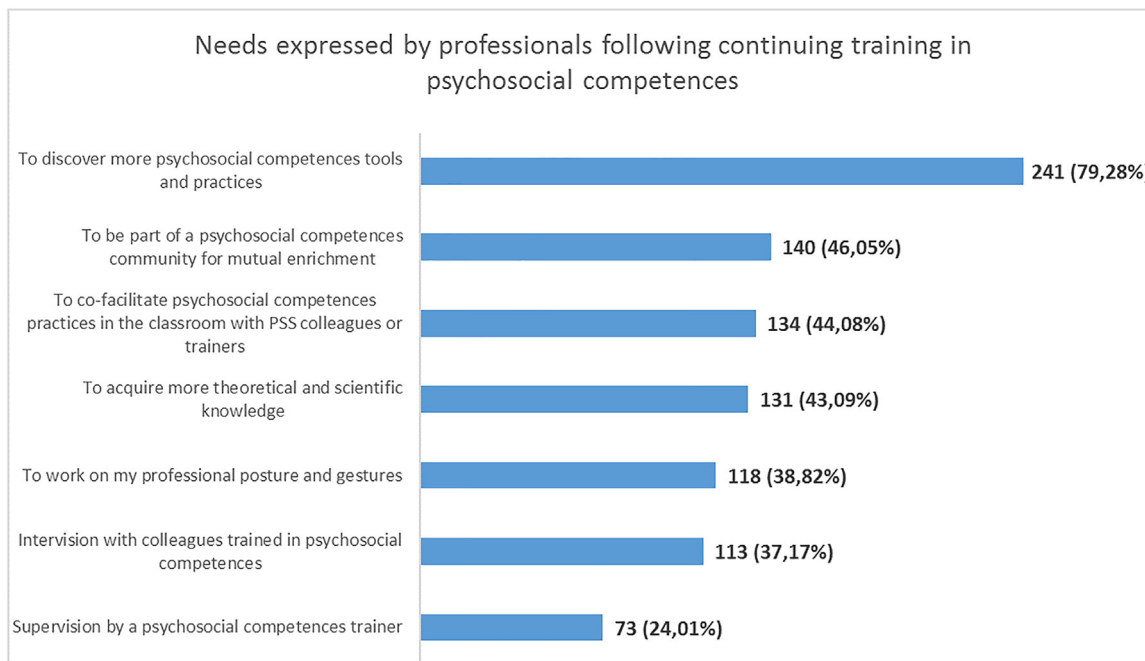


Fig. 2. Needs of National Education professionals identified in the online survey.

way they work (Fig. 4). One professional said *"I am now completely capable of legitimizing who I am in professional terms and what I do"* (P01FR).

The professionals identified several obstacles to integrating the benefits of continuing education in PSC into their day-to-day work (Fig. 5). Lack of time was identified as a major obstacle. For half of them (7 out of 14), the fact that they are the only ones practicing the development of PSC limits the implementation of what they have learned from the training into their day-to-day work. Indeed, the fact that their colleagues do not support this approach is a hindrance (10 out of 14): *"I'm afraid of being judged by certain colleagues"* (P02FR), *"I have the impression that psychosocial skills are represented in a rather negative way, or at least not taken very seriously, by my colleagues"* (P06FR). According to half of the professionals, it is also necessary to deploy more financial resources and facilitate access to continuing training in PSC.

The 14 professionals questioned identified 8 main levers which would allow for easier implementation of the PSC training into their daily work (Fig. 6). For ten of them, it is important to demonstrate the benefits of PSC to the educational community. One of them

explained, *"I would need this to be developed on a massive scale, explained by the institution and also valued"* (P12FR). The support from the hierarchy was mentioned as a lever by six professionals, as was teamwork. Ten of them (71.43%) explained that they would need the support of a trainer to *"guide them"* (P01FR) and to have *"feedback on their practice"* (P02FR). They would like to rely on *"resource persons"* (P03FR) with whom they could *"take stock on a regular basis"* (P04FR). For half of the professionals, this regular support during the school year would enable them to check that they were understanding and deploying PSC effectively. In addition, five participants (35.71%) stressed the importance of calling contributors with varying specialities. Eight professionals (57.14%) explained that they would like continuing education in PSC to be differentiated according to the school, the age of the pupils or their subject: *"I would actually have liked to be able to work on, that's it, how my subject content, I can articulate it concretely with PSC"* (P01FR). Five participants (35.71%) mentioned that they would like to learn more about PSC, and more specifically about adolescent psychology for three of them (21.43%). Lastly, four professionals said that the development of community projects specific to their establishment, with the involvement of local

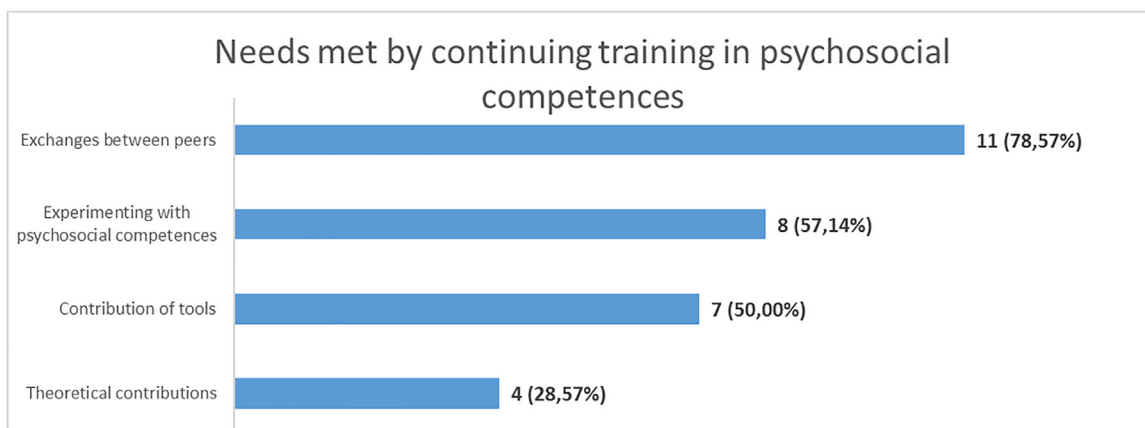


Fig. 3. Needs of National Education professionals met by psychosocial competences continuing training.

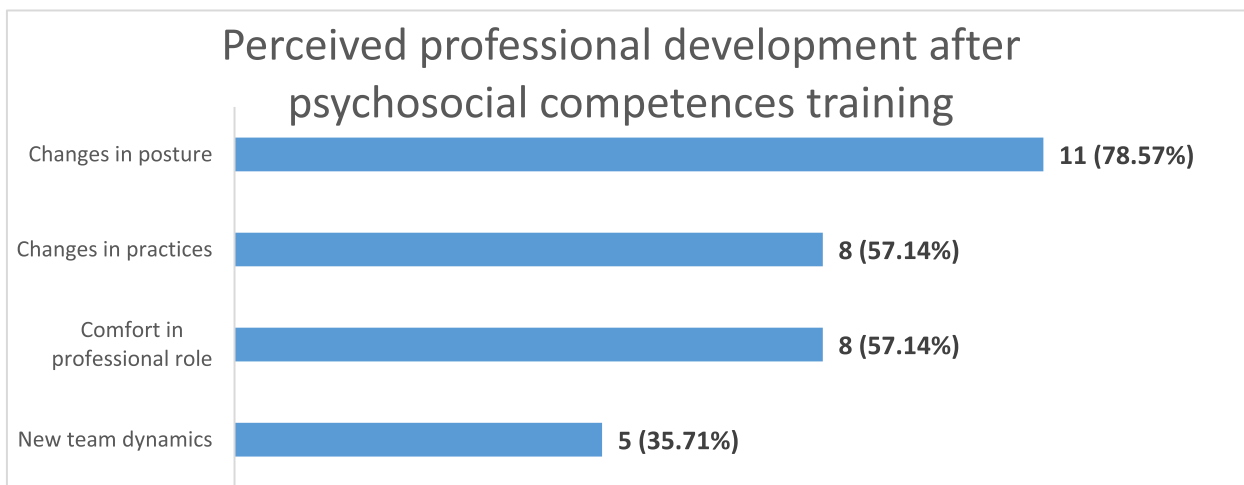


Fig. 4. Perceived professional development after psychosocial competences continuing training.

players, would help them to make greater use of the contributions of continuing education in PSC.

4. Discussion

This survey was conducted in order to describe and understand the different perceptions of continuing training in PSC held by National Education professionals who had benefited from it. The results of this survey show that participants rated their satisfaction with in-service training in PSC at between 69.6% and 82.2%, depending on the item, which is higher than the average satisfaction rate - just over a third - of French teachers pertaining their continuing training in general [36]. In addition, quantitative data analysis revealed that the degree of satisfaction of the training (i.e., related to the content of the training, the practices experienced during the training, and related to the posture of the professional delivering the training) predicted the perceived professional development, controlling for the training duration. These findings emphasize that, in addition to the content, the practices and the posture of trainers are important active ingredients of the training. Moreover, results revealed that continuing education in PSC enables them to discuss their respective practices and to experiment with PSC. While 24.01% of respondents to the online survey expressed a need for “supervision

with a PSC trainer”, 71.43% (10 out of 14) of those interviewed would like to benefit from “support from a trainer” in order to didactise PSC in their professional practice. This significant difference between the questionnaire survey and the interview survey can be explained by the term “supervision” used in the questionnaire. For teachers, supervision is perceived as an “active threat” that can even compromise their self-confidence [37]. Moreover, “the term supervision conveys an idea of asymmetry [...] they are generally either inspectors or intermediary prescribers acting on behalf of the inspectorate” [38]. The qualitative survey conducted here reveals that professionals need and seek support from a trainer in order to critically reflect on their practices [39]. These findings are in line with those of Martínez [40], who suggested the deployment of training models such as coaching, so that teachers can progress “by reflecting, observing and receiving feedback on their own practice”. Indeed, it is thanks to collegial reflection “during which trainees and trainers adopt the same attitude of co-construction of professional knowledge” [41] that National Education professionals modify their posture and practice following in-service training in PSC.

Although continuing training in PSC enables National Education professionals to modify their posture and practice, it is still very heterogeneous depending on the education authority. There is a wide disparity in the number of hours of training (min = 1 hour; max = 110

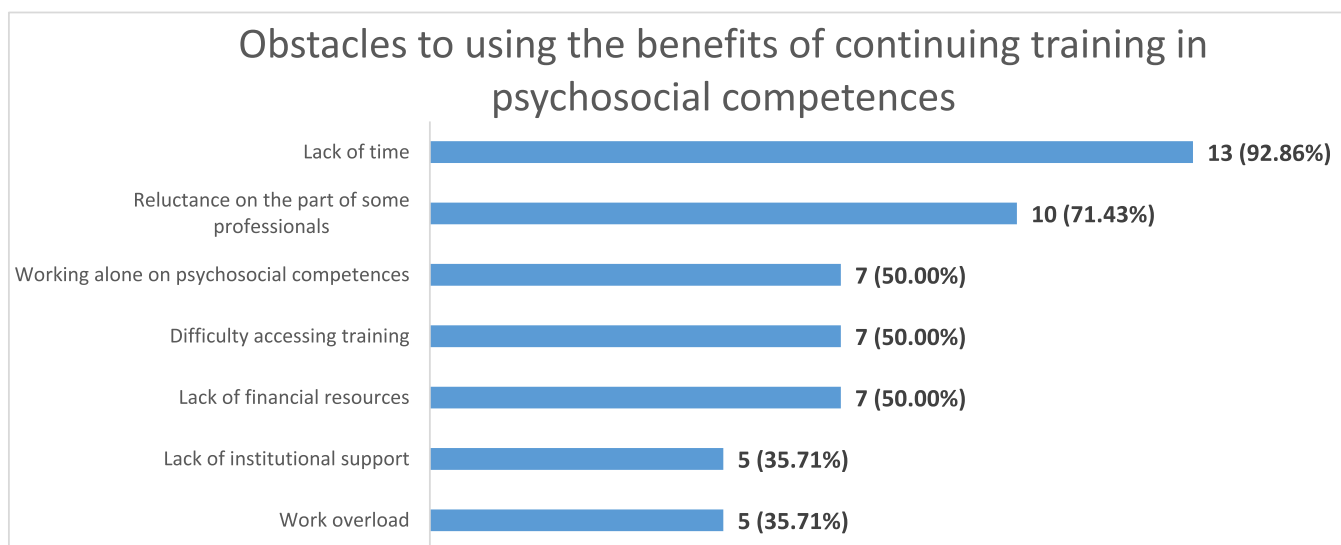


Fig. 5. Obstacles expressed by the interviewees limiting the transferability of the benefits of psychosocial competences continuing training.

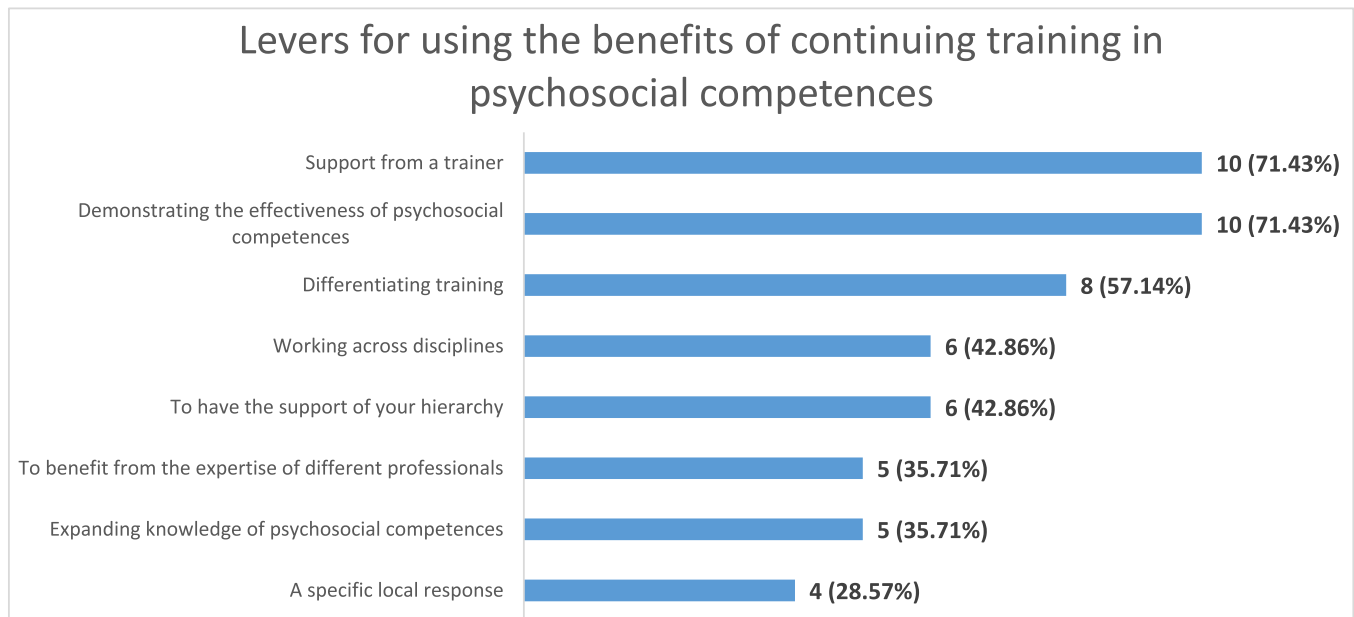


Fig. 6. Levers expressed by the interviewees facilitating the integration of the contributions of psychosocial competences continuing training into their daily professional life.

hours). However, the reinvestment of knowledge is positively and significantly correlated with the length of continuing training in PSC. The participants interviewed had taken part in training lasting an average of 10 hours, and 64.29% (9 out of 14) of them felt that it should have lasted longer, in particular in order to do more practical work and to deepen their knowledge of the PSC so that they could take them on board more effectively.

Lack of time was identified as the main obstacle to reinvesting what had been learned in continuing education into the practices of professionals. This is mainly due to the fact that they see PSC as an additional teaching activity in its own right. National Education professionals therefore need to be given the means to approach PSC through attitudes and organizational methods that do not give them the feeling of having to add a new activity, but which express themselves directly in their respective subjects [42]. Furthermore, there are significant differences in practice and in the way teachers apply their pedagogy depending on whether they teach at primary or secondary level [43]. No primary teachers were interviewed in this study. Research focusing on these professionals would make it possible to identify the obstacles and levers specific to their practice environment. This new data could be used to support the roll-out of in-service training adapted to their needs, in order to support the development of PSC at school from an early stage.

In this study, individual resistance was identified as the second most important obstacle to reinvesting what has been learned in the daily lives of professionals. It is essential that future research should focus on identifying the representations of National Education professionals regarding their role in health education [42] and in health promotion through the deployment of PSC in schools. Getting school professionals to see that individual and collective work on these issues is inherent to their professional missions is a major challenge for continuing education [44]. Indeed, although health education concerns all National Education professionals, it “remains an activity that is not part of the core of their mission” [44]. However, the involvement of all professionals is necessary for its implementation [42] and requires training [45–49]. Finally, professionals believe that demonstrating the effectiveness of PSC is a powerful lever. Several meta-analyses have demonstrated the robust effectiveness of interventions aimed at developing PSC for pupils in schools throughout the world [16–18]. And although there are now more than 136 socio-emotional learning frameworks [50], interventions

with SAFE characteristics (sequenced, active, focused and explicit) have been shown to be most effective [16].

4.1. Strengths, limitations and future perspectives

This study has three main strengths. Foremost, this is the first study in France to look at how professionals in the national education system perceive continuing training in PSC. Combining quantitative and qualitative methods, this study makes it possible to examine a complex program, continuing education in PSC, through the inclusion of different perspectives [33]. This survey is national in scope, covering five districts and involving all professionals in the French education system: managers, teachers and administrative, social and health staff. Thus, it contributes to the evidence base on the subject of PSC in schools.

Alongside these strengths, this study also has some limitations that should be acknowledged. The first concerns the limited size of the sample and the fact that 85% of participants were women, which might raise concerns about the generalizability of the findings to the whole population. In fact, this proportion is higher than the national average, where women represent 74% of national education professionals [51].

Secondly, it focuses only on the French cultural context. It would be useful to understand the impact of PSC on professionals working in schools in other cultural contexts in Europe and around the world, in order to evaluate how the cultural context influences the application and acceptance of PSC principles. Also, due to the exploratory nature of this study, the variability of the PSC trainings examined was a limitation. Future research should focus on targeted applications of PSC interventions. Indeed, the present mixed survey focused on participants' declarative data. A study measuring actual practices in schools would make it possible to analyze actual professional changes and measure any discrepancies that might exist between declarative data and observed actions [52]. In fact, analysis of professional activity “makes it possible to verify, on site, the transformations in practices and conceptualisations that have been generated through training schemes” [41].

The massive roll-out of continuous training in PSC among National Education professionals has now become a major challenge for health promotion in schools. It is the fundamental element that will

guarantee the implementation of quality interventions that will enable “differentiated improvements in pupils’ skills, attitudes, beliefs and academic results” [16]. The development of PSC, and consequently of health promotion, in the school environment contributes to a better acquisition of learning, a reduction in risk behaviours, an increase in the level of education and thus contributes to improving health [53]. The development of PSC in children is only possible if the adults themselves have developed their own PSC [17,18,23]. Training teachers to develop their PSC enables them to improve the quality of their relationship with their pupils [54]. More broadly, training National Education professionals in PSC gives them the means to work towards a positive social and emotional climate that is beneficial both for the pupils and for themselves [53]. There is now a real need for large-scale longitudinal studies looking at the actual practices of professionals trained in the development of PSCs, in order to measure the difficulties they encounter in responding to them more effectively. Otherwise, the development of psychosocial skills in schools could be compromised.

5. Conclusion

Schools play a vital role in health promotion [44]. However, health promotion policies and programs are still not widespread enough in schools [55]. Continuing training in PSC enables National Education professionals to change their attitude and practice, and thus plays a part in promoting health in schools. Regular support from a trainer and the deployment of advocacy initiatives to demonstrate the effectiveness of PSC seem to be appropriate ways of disseminating the development of PSC within schools. In addition, the promotion of student health through the development of PSC in schools will only be made possible by the involvement of the entire educational community in a collective, sustainable approach in which “the training of those involved proves to be a key issue” [44]. This is why, in addition to in-service training, it’s essential to formalize PSC and, more broadly, health promotion in the initial training of teachers and other school professionals [56].

Authors contributions

Conceptualization, L.L., D.T. and R.S.; methodology, L.L. D.T. and R. S.; validation, D.T. and R.S.; formal analysis, L.L., D.T., J.L. and R.S.; investigation, L.L., D.T., R.S.; data curation, L.L.; preparation - writing the original article, L.L.; writing—review and editing, L.L., D.T. and R. S.; supervision, D.T. and R.S.; project administration, D.T. and R.S.; project coordination, R.S.; All authors have read and agreed to the published version of the manuscript.

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Declaration of competing interest

The authors declare that they have no competing interest.

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Supplementary materials

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