**Research Article**

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# EDUCATIONAL PROCESS
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# Establishing a Dynamic-Transitional Model of Personal Support in Mentoring

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## Abstract

Background/purpose. The European Union's approach to teacher mentoring emphasizes three primary dimensions: professional, institutional, and personal support. Personal support (PS) is deemed crucial for teacher candidates and newly qualified teachers. Although various elements have been identified, a comprehensive model of PS is lacking. This paper aims to bridge this gap by creating a theoretical framework for PS that can enhance mentoring practices and mentor training.

Materials/methods. A unique combination of research methods was employed. A semi-structured expert group interview was conducted to collect the most important elements of PS. Mind mapping was used to identify the interconnections among these elements. Based on the mind map, an integrative literature review was conducted to assess the importance of the identified elements and their interrelationships, which can establish a coherent theoretical model of PS.

Results. The literature review confirmed the significance of the five areas—change, learning, emotions, professional identity, and reflection. Their interrelationships, in various pairings, were also supported by the literature. These results culminated in an original theoretical system: the dynamic-transitional model of PS.

Conclusion. The paper suggests practical applications of the dynamic-transitional model for mentors, the development of mentor training, and further research.

## 1. Introduction

Mentoring teachers has emerged as a pivotal element in the professional development (PD) landscape, particularly in Central-Eastern European countries, such as Hungary, over the past decade. Aligned with European Union directives, mentoring for teachers rests on three primary pillars: professional, institutional, and personal support (PS) (European Commission, 2010). Professional support focuses on subject knowledge, teaching methodologies, and practical teaching engagements. Institutional support emphasizes understanding school-specific norms, traditions, and community integration. Conversely, PS aims to raise awareness regarding the cognitive and emotional processes intertwined with the mentees' successes and failures, aiding in the interpretation and constructive processing of these encounters. The mentoring of teachers encompasses three primary objectives: fostering and sustaining high-quality education (Chen, 2016; Wilkinson, 2024), retaining teachers within the profession (Burger, 2023), and laying the groundwork for continuous PD opportunities (Ali et al., 2018).

## 2. Literature Review

### 2.1. Importance of Personal Support in the Induction Career Phase

The significance of PS during the induction phase, which includes school practices and internships, cannot be overstated for mentoring teacher candidates (TC) and newly qualified teachers (NT) as they navigate this critical period (Bush & Middlewood, 2005; Eisenschmidt & Oder, 2018; Marie, 2012).

The induction phase is a sensitive learning period crucial to a teacher's development (Bloomfield, 2010; Ferrier-Kerr, 2009). It involves numerous novel intellectual and emotional experiences, along with complex challenges (Corcoran, 1981; Flores, 2004; Szivák, 1999). During this phase, a convergence occurs between prior beliefs (Korthagen, 2010; Wubbels, 1992) and the realities of teaching, bridging theoretical knowledge with real-life classroom situations.

NTs, while making decisions, grapple not only with professional factors but also moral, emotional, and social considerations (Eteläpelto et al., 2015). They strive to maintain congruence while taking responsibility for their decisions and actions. Furthermore, the induction phase involves the evolution of classroom management and the development of an individual teaching style (Arends, 1994; Boreen et al., 2000; Feiman-Nemser, 2012). This period also encompasses nurturing positive attitudes toward students, parents, and colleagues and a comprehensive understanding of a teacher's multifaceted roles and responsibilities (Arends, 1994; Feiman-Nemser, 2001).

Another significant aspect marking the induction phase is the vulnerability of NTs, who aspire to become effective educators and demonstrate a strong willingness to invest effort toward achieving this goal (Wallace, 2012). They actively seek feedback (Mutlu-Gülbak, 2023) and value the professional experiences shared by others. However, this phase is also fraught with negative emotions, failures, and uncertainties for both TCs and NTs (Szivák, 1999). Feelings of incompetence, rejection, bewilderment, or low self-confidence naturally arise due to a lack of practical experience, insufficient successful coping experiences, and unexplored boundaries of their competencies. Consequently, it becomes imperative for NTs to learn how to interpret and manage challenging situations and emotions effectively (Kutsyuruba et al., 2019).

A third critical aspect contributing to the sensitivity of the induction phase is the concurrent transition from adolescence to adulthood, a period when NTs define their professional identities (Buda, 2003; Erikson, 1993; Feiman-Nemser, 2001; Simon, 2019). These simultaneous processes can also induce or intensify feelings of anxiety (Korthagen, 2004) and loneliness (Ibarra, 2007).

These complex processes and associated challenges underscore the necessity of utilizing PS in mentoring both TCs and NTs. Goodwin et al. (2021) advocate for a holistic mentoring approach, inherently encompassing a strong PS component. Simultaneously, aiding these processes demands mentors with specific preparedness and methodologies.

While acknowledging the essential roles played by institutional and professional support, this paper is motivated by both the aforementioned arguments and a synthesis of theories and research that emphasize the pivotal role of PS in mentoring TCs and NTs.

Achinstein and Davis (2014) and Feiman-Nemser (2012) emphasize that mentor support should extend beyond discussing positive and corrective aspects, highlighting the importance of addressing mentees' emotions (Day et al., 2007; Helms-Lorenz et al., 2012). Newberry (2010) underscores the necessity of support for cultivating strong teacher-student relationships, particularly focusing on the emotional dimensions. A study involving NTs attributed their increased confidence in teaching partly to the emotional support provided by their mentors (Grudnoff, 2012). Furthermore, certain studies have found that mentor-provided emotional support significantly increases the likelihood of mentees remaining in the profession (Smith & Ingersoll, 2004). Atkins (2019) highlights that mentoring not only reduces teacher attrition rates but also correlates with higher student achievement. Chen (2016), drawing on the opinions of 158 Taiwanese public-school teachers, argues that emotional and psychological support is imperative for the development of mentees' competencies and teaching effectiveness. Husu et al. (2008) stress the necessity of mentors guiding NTs through reflections on their interpretations of the teacher role and focusing on the personal perspective (Akkerman & Meijer, 2011) while fostering discussions conducive to this purpose (Hahl & Mikulec, 2018). Additionally, research suggests that ongoing PS, extending from the induction phase to later stages, significantly enhances the quality of teachers' work (Fűzi & Suplicz, 2016).

The subsequent section describes the context, outlining challenges faced in the mentoring system for teachers in Hungary.

### 2.1.1. Mentoring and personal support in Hungary

In the last decade, mentoring has become crucial in the transition from teacher training to the commencement of teaching careers in Hungary. Notably, within teacher training programs, school practices demand a growing array of tasks from TCs to fulfill graduation requirements. These practicums are conducted under the guidance of both university mentors and school-based mentors. Post-graduation, NTs begin their careers as interns and must pass a qualifying examination to attain full teacher status. Therefore, they receive mentoring from school mentors in their first year.

The mentoring system, aiming for crucial teacher developmental goals, has only partially succeeded due to inconsistent quality and limited availability of school mentoring. Challenges within the system include:

- The absence of a structured selection process for mentor teachers.
- Discrepancies in mentor training programs offered by various universities, resulting in mentor teachers possessing divergent approaches and knowledge.
- Inadequate availability of trained mentor teachers in schools, leading to reliance on experienced teachers who may not be adequately prepared for mentoring.
- Despite legal provisions for reduced teaching hours for mentor teachers, schools in Hungary often struggle to implement this due to teacher shortages.
- Enthusiastic mentor teachers, despite facing numerous obstacles, risk burnout when taking on mentoring responsibilities.
- Lack of specialized programs or continuous PD training tailored for practicing mentor teachers.

- Mentor teachers in professional forums to express a desire for knowledge and skills development to address difficulties, particularly in PS.

The demands of Hungarian mentors confirm that, although elements of PS mentioned above frequently appear in the literature, no comprehensive model exists to assist mentors in understanding the links among these elements and the complex, nuanced, and dynamic nature of PS (Marie, 2012). Our work aims to address this gap by creating a model that will act as a reliable compass for mentors, improving their awareness when planning and providing PS to mentees. A novel, comprehensive model of PS has the potential to assist mentors in identifying and addressing the PS needs of mentees while improving mentors' preparedness for this uncertain and sensitive area. Ultimately, the aims of this initiative include contributing to the enhancement of mentor training. A specific combination of research methods was applied to develop this model, allowing for integrating practical aspects and theoretical approaches to PS.

### 2.2. Process of Establishing the Coherent Model of PS

The subsequent stages of establishing the PS model are delineated in Figure 1, illustrating the steps of the process. The process began with a sampling of experts with at least five years of mentoring and mentor training experience. Participants with these qualifications were recruited from lecturers in mentor training institutions, and four of them accepted our invitation, whose characteristics are detailed in Figure 2.
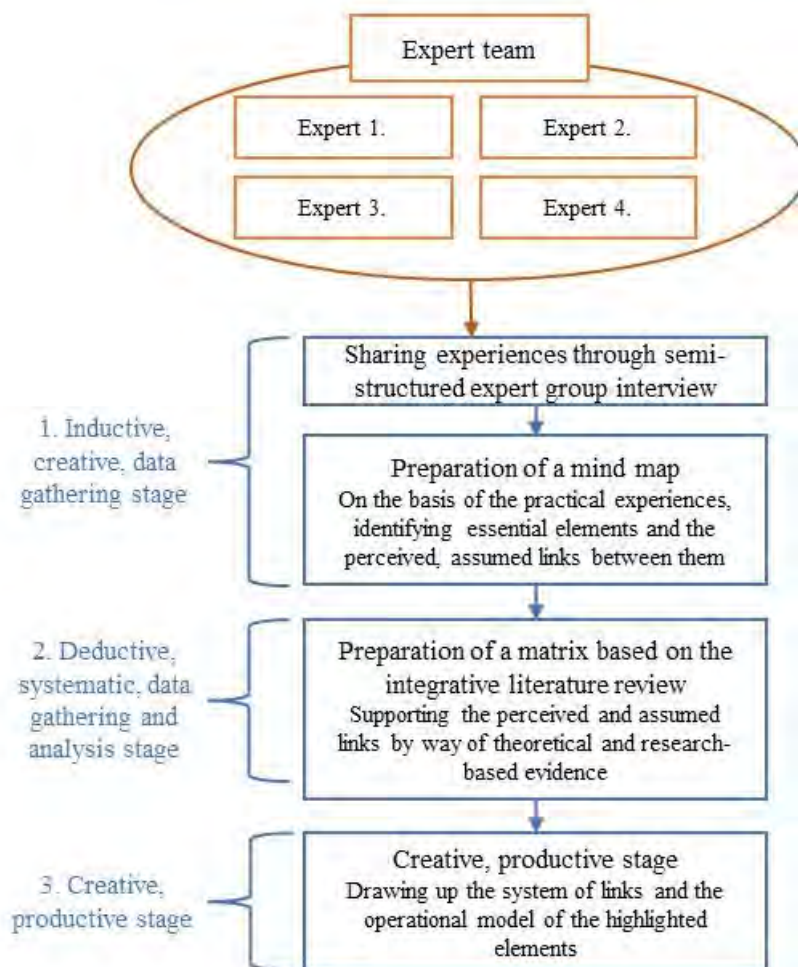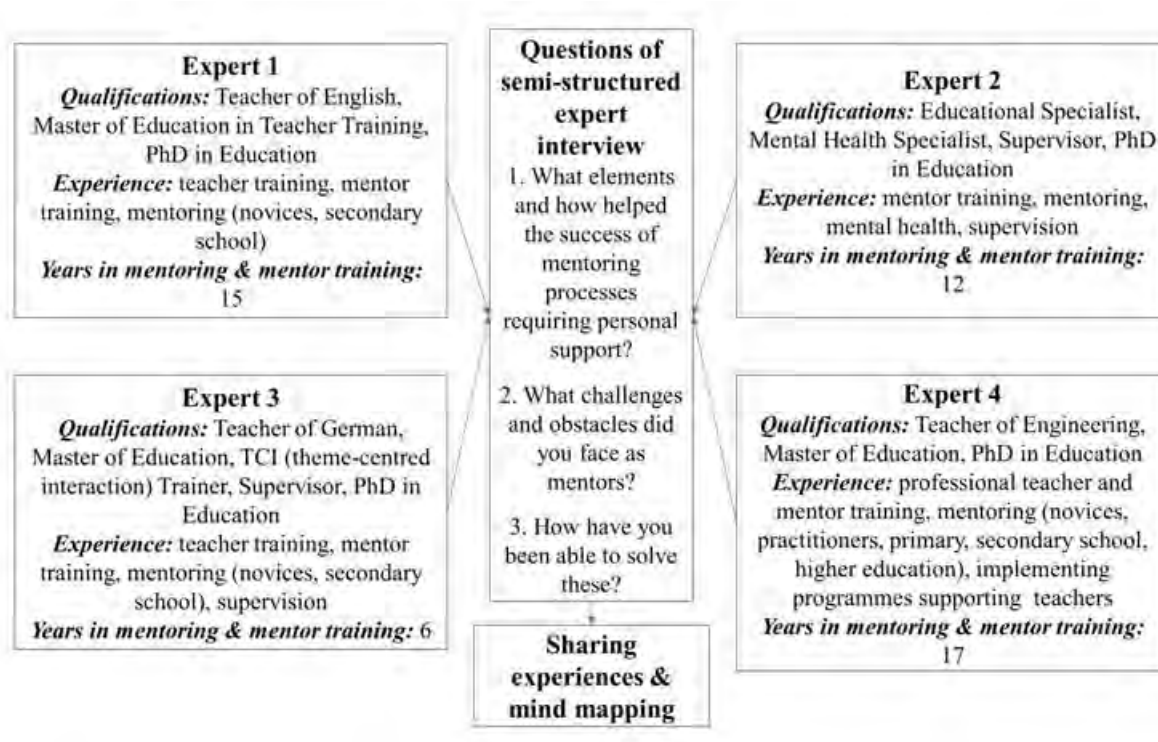


Figure 1. The research process

The initial stage commenced with an inductive, creative thought process based on sharing experiences in the framework of a semi-structured expert group interview (Bogner et al., 2009; von

Soest, 2023). This stage ensured a reality-based, experience-driven, practical approach to our research facilitated by diverse experts (Figure 2). Although the number of experts with a sufficiently wide range of experience is not unlimited, and the interviewees provided a very valuable starting point for the research, as can be seen later, their number is also a limitation of our research.

**Expert 1**
*Qualifications:* Teacher of English, Master of Education in Teacher Training, PhD in Education
*Experience:* teacher training, mentor training, mentoring (novices, secondary school)
*Years in mentoring & mentor training:* 15

**Questions of semi-structured expert interview**
1. What elements and how helped the success of mentoring processes requiring personal support?
2. What challenges and obstacles did you face as mentors?
3. How have you been able to solve these?

**Sharing experiences & mind mapping**

**Expert 2**
*Qualifications:* Educational Specialist, Mental Health Specialist, Supervisor, PhD in Education
*Experience:* mentor training, mentoring, mental health, supervision
*Years in mentoring & mentor training:* 12

**Expert 3**
*Qualifications:* Teacher of German, Master of Education, TCI (theme-centred interaction) Trainer, Supervisor, PhD in Education
*Experience:* teacher training, mentor training, mentoring (novices, secondary school), supervision
*Years in mentoring & mentor training:* 6

**Expert 4**
*Qualifications:* Teacher of Engineering, Master of Education, PhD in Education
*Experience:* professional teacher and mentor training, mentoring (novices, practitioners, primary, secondary school, higher education), implementing programmes supporting teachers
*Years in mentoring & mentor training:* 17

**Figure 2.** The characteristics of the experts involved in the interview and mind mapping

The first stage was structured around a series of questions visible in Figure 2 and also aimed to define success in PS within mentoring. Success in PS was defined as a mentoring process that assists the mentee in addressing deeper issues such as emotional labor and teacher role construction, thereby contributing to achieving the general goals of mentoring.

Throughout the expert interview, a mind map (Buzan & Buzan, 2006; Wheeldon & Ahlberg, 2017) was formulated to encapsulate the key components deemed vital for successful PS and the interconnections perceived among them (Figure 3). The visual form of the mind map allowed experts to see the elements they mentioned holistically and to highlight their conclusions about their interrelationships (Buzan & Buzan, 2006).
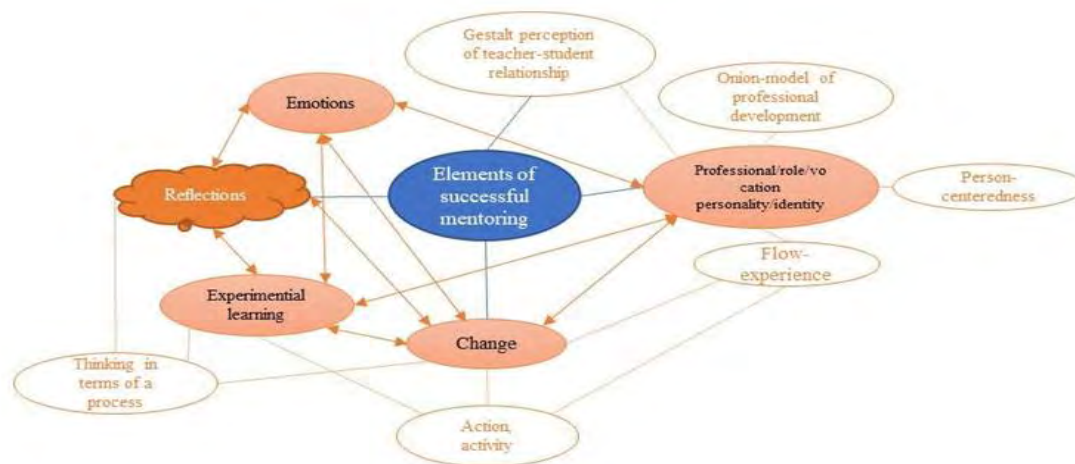
**Figure 3.** A simplified outline of the concept map

Based on the frequency of mentions and the number of connections established, the research team identified five pivotal elements: change, learning, emotions, professional identity, and reflection.

In the second stage, the integrative literature review method was employed to gain a broader understanding of the phenomenon under study based on various types of articles, including qualitative and quantitative, theoretical and practical articles, thus establishing a comprehensive theoretical model (de Souza et al., 2010; Dreer-Goethe, 2023; Hopia et al., 2016). The studies were searched in Scopus, ResearchGate, Ebsco, Google Scholar, and ERIC databases available to our institutions. Based on the expert interview and using the mind map as a foundation, the five elements —change, learning, emotions, professional identity, and reflection—and their synonyms were used as search terms. Articles containing at least one of the five elements plus the terms induction period and teacher candidate or new teacher were analyzed, including 107 articles. Those that contained more than one of the five elements were sorted into a matrix showing the relationships between the elements (Appendix 1). The five highlighted factors were thoroughly examined for their correlations.

The research team explored whether theoretical or empirical research substantiated associations among these elements. The main questions were: (RQ1) Does the literature support the importance of these factors in PS and PD during the induction phase? (RQ2) Are there any correlations between the factors according to the literature that can establish a coherent system?

This phase culminated in an extensive literature analysis, the results of which, summarized below, served as the basis for the third creative phase of building a model of PS.

## 3. Results

The outcomes of the integrative literature review (de Souza et al., 2010; Dreer-Goethe, 2023; Hopia et al., 2016) are outlined below, focusing on the five key elements. These elements are subsequently examined at two distinct levels: first, the internal processes and PS requirements of the mentees, and second, the necessary preparation and duties of mentors in delivering effective PS.

### 3. 1. Change

Change is a central concept in mentoring TCs and NTs on multiple levels and in various contexts. For TCs and NTs, mentors can rely on Maslow's assertion (2012) that the internal structure of human nature is more cartilaginous than bony.

### 3. 1. 1. Aspects of change during the transition to becoming a teacher

As mentioned earlier, preparation for the teaching profession is a complex process that includes cognitive learning, such as the acquisition of subject matter, pedagogical knowledge, methodological skills, and practical knowledge of traditions, local characteristics, and school demands (Atkins, 2019). Based on this cognitive work, considered first-order change by Watzlawick et al. (2011), development can be supported through professional and institutional assistance. First-order change enriches teachers' knowledge with new elements without necessitating a rethinking of the teacher's role, prior beliefs, or the model of student-teacher relationships. However, in the case of TCs and NTs during induction, it is necessary to reinterpret the teacher's role and prior beliefs in light of real experiences (Gilles & Wilson, 2004; Lindgren, 2005). These factors are critical for teachers' success (Bagdy, 1996; Suplicz & Fűzi, 2016). In this process, emotional factors, professional roles, and identity can be touched upon and stimulated to adapt and modify, if necessary. This modification and reconstruction of the fundamentals of the teacher's operation are referred to as second-order or system-level

change by Watzlawick et al. (2011). Since the initiation and achievement of second-order change is a time- and energy-intensive process, it requires the PS of the mentor (Suplicz & Fűzi, 2016).

### 3. 1. 2. Personal support tasks of mentors concerning change

Mentors must differentiate between problems stemming from a lack of experience and difficulties arising from, for example, a confused interpretation of the teacher's role. This ability is crucial for determining whether a deeper, second-order change is needed (Suplicz & Fűzi, 2016).

Mentors can facilitate the change process through classroom experiences (Keiler et al., 2020). The areas of change are identified through classroom observations. In experiencing and interpreting these observations, mentors can adopt the Gestalt approach (Perls, 2004), which views the social space created by the mentee and the students as an interconnected system. The mentor must act as a sensitive observer of this system, identifying the elements causing disharmony and harmony. A realistic interpretation of these events and helping the mentee formulate reflections close to reality are essential. This is achievable by jointly analyzing the mentor's and the mentee's interpretations and explanations of various situations, as well as comparing these against student feedback (Keiler et al., 2020; Otero-Saborido et al., 2024; Suplicz & Fűzi, 2016).

The mentor must perceive external (e.g., the relationship with the mentor, feedback from students) (Atkins, 2019; Keiler et al., 2020) and internal forces (e.g., feelings of discomfort, fear of change, inherent desire for development) that support or hinder change (Lewin, as cited by Schein, 1995; Watzlawick et al., 2011). In the case of TCs and NTs, there are even fewer external counterforces against change, such as solidified opinions of students or colleagues about the teacher. Internal counterforces, such as self-defense mechanisms and reactions that have become automatic, also hinder change. Another supportive force is TCs' and NTs' demand for help to understand situations (Suplicz & Fűzi, 2016), identify points of intervention, and plan the steps needed to achieve their goals (Ciavaldini-Cartaut, 2015). To facilitate change, the mentor can choose the method of support in a given situation depending on the strength of forces and counterforces and can highlight minor signs of improvement (Suplicz & Fűzi, 2016).

The mentor's attitude of acceptance can create a safe environment for experimentation (Chen, 2016; Feiman-Nemser, 2012; Lee et al., 2006), where the mentee recognizes that mistakes are a corollary of development, providing an opportunity for change.

Based on experts' experiences, the fear of encountering negative energies and conflicts with mentees discourages mentors from supporting second-order change (Suplicz & Fűzi, 2016). Simultaneously, during the initial steps taken by mentees, varying difficulties and negative experiences also arise (Helms-Lorenz et al., 2012). Thus, these energies can be effectively utilized for PS at this stage, underscoring the importance of capturing them (Watzlawick et al., 2011).

### 3. 2. Learning

Learning is one of the most fundamental forms of development, but it must also be interpreted from the perspective of PS. This section explores learning as a key facet of development and articulates the requisite PS needed by mentees during their learning journey.

### 3. 2. 1. Personal support needs of mentees concerning learning

During teaching practice and the early stages of a teaching career, i.e., during the mentored period, mentees acquire a significant proportion of their pedagogical and practical knowledge (Elbaz, 1983; Falus, 2001; Portner, 2008; Rodríguez et al., 2022). Sources of knowledge acquisition include in-school activities and the act of teaching itself. It is crucial that the focus of this learning also encompasses an understanding of the mentee's own way of operating (Boreen et al., 2000; Wexler, 2020), making it more efficient and purposeful. This enables learning to reach deeper levels and

target second-order changes, affecting the mentee's role interpretation (Crow, 2007) as well as their professional identity (Richardson, 2003).

In the experiential learning model, Kolb (1984) identified personal experience as a key element of behavioral change. Therefore, the mentee learns through the impact of their own experiences, which encompass planning, organizing, implementing, and assessing teaching activities. In this process, the mentee is actively engaged in learning with their entire personality, prior experiences, and emotions (Aderibigbe et al., 2018; Moon, 2004).

According to constructivist theory (Richardson, 2003; Steffe & Gale, 2012), learning is a change in the mind that involves the input and processing of information, is relatively permanent, and helps individuals adapt to their environment. During learning, the individual is active, constructing and building their knowledge in a unique way. Experience is not the starting point in this process; instead, existing internal schemes and views determine what information is taken up initially and what internal models are constructed from them. Mentees have considerable prior impressions concerning teachers' work, which function as filters for the training content and the interpretation of experiences (Wubbels, 1992). Practical experience tests the adaptability of prior knowledge and views. Mentees' learning is also guided by prior knowledge, experiences, and naive theories that need to be linked to their knowledge to be developed (Atkins, 2019; Burger, 2023; Flores, 2004).

In addition to the above, the learning process of mentees also exhibits characteristics of adult learning (Merriam et al., 2007; Rubenson, 2011). According to this perspective, learning is also strongly influenced by affective factors, and the focus is on the active, autonomous mentee, who takes responsibility for the learning process.

### 3. 2. 2. Supporting learning as a mentor as part of personal support

From the perspective of learning in school teaching practices, mentoring can be a process involving mutual adaptation. One trivial aspect of this process is that the mentee adapts (Chang, 2020) to the learning environment essentially created by the school, the class, and the mentor. However, a less trivial aspect involves the mentor's adaptation. The mentee's behavior, knowledge, values, and emotions necessitate constant re-evaluation by the mentor, impacting both the mentoring process and the mentor's role (Atkins, 2019; Maynard & Furlong, 1995). The four-stage model of the development of learning can also serve as the basis for mentoring.

1. The stage of concrete experience and action, which involves engaging in specific behaviors and actions.
2. The stage of observation and evaluation, where we analyze and reflect upon the experience.
3. The stage of abstraction and conceptualization, in which we draw more general conclusions by combining the analysis of experience with our existing knowledge and views.
4. Based on the above, we redesign our actions, define the aspects, and establish guiding principles for the next activity. The new "cycle" begins by testing what has been learned.

If we apply Kolb's model to teaching practices, the third stage of reflection is crucial for development (Marzano, 2012) and appears vital in mentoring. Managing a mentee's characteristics as an adult learner (Merriam et al., 2007) requires an attitude and level of preparedness from the mentor that significantly differ from those used in the traditional role of a teacher. However, while the mentees are the focus and are responsible for their own learning, the mentor's facilitating and

supportive role is not negligible either. The mentor acts as a partner and co-learner in the learning process (Aspfors & Fransson, 2015).

### 3. 3. Emotions

A sharp separation of emotions and thoughts would be both impossible and counterproductive (Hoekstra & Korthagen, 2011; Simon, 2019), as teaching evokes emotional reactions followed by conscious decisions, which, in turn, have emotional consequences. Emotions influence behavior and thinking unconsciously (Golombek & Doran, 2014) and integrate into deeper factors such as the teacher's role interpretation and professional identity. Therefore, PS is needed to provide space for the expression of the mentee's feelings and to work with emotions (Lord et al., 2008).

### 3. 3. 1. Emotions of mentees during the transition to becoming a teacher

The emergence of emotions is inevitable in the induction phase (Chang, 2020). Consider the insecurities, fears, and anxieties of mentees in connection with their first classes taught or the joy felt after a successful lesson. During this phase, mentees need to understand the drivers of their own reactions. Additionally, the deeper foundations of teachers' operations, such as professional identity, are constructed interwoven with emotions (Kálmán, 2013; Simon, 2019), and changing these is often a difficult and painful process (Korthagen, 2004; Suplicz & Fűzi, 2016). If a second-order change is needed, the importance of the emotional elements increases (Watzlawick et al., 2011). Therefore, mentees need to identify their own feelings (Meyer & Salovey, 1997), name them, search for their origin, and find constructive ways to deal with emotions (Chang, 2020).

### 3. 3. 2. Personal support of emotional labor from the perspective of mentors

Mentors have a threefold task. First, they need to establish a relationship and atmosphere in which emotional labor is possible (Chang, 2020; Dreer-Goethe, 2023). Second, they need to help mentees work through their own emotions during the reflection process, including the mentee's emotions toward students (Cross & Hong, 2012; Newberry, 2010), the teaching, and their own identity as a teacher. Third, mentors can only be authentic if they also engage in this emotional work themselves (Chang, 2020; Yılmaz & Bıkmaz, 2021). Since the mentor-mentee relationship and cooperation are inherently emotional, mentors need to identify, manage, and operate their own emotions, such as developing and maintaining motivation as mentors. Emotions are crucial not only in the dynamics of relationships but also in discussions between mentors and mentees (Rogers et al., 2013; Yılmaz & Bıkmaz, 2021). Research reveals that a positive climate contributes significantly to various aspects of work, learning, and performance (Csikszentmihalyi & LeFevre, 1989; Fredrickson & Branigan, 2005). Positive emotions—e. g., those between the mentor and the mentee—increase the likelihood of change, playing a role in fostering activity and interest (Fredrickson, 2004; Simon, 2019). Examining diverse samples, Kutsyuruba et al. (2019), Grudnoff (2012), and Cherubini (2009) found that non-judgmental emotional support and encouragement from mentors positively impact NTs' self-reported efficacy, agency, and confidence growth.

Positive and negative emotions play crucial roles in fostering development and profound (second-order) change (Watzlawick et al., 2011). Mentors have a unique opportunity to place emotions at the core of the mentee's attention, facilitating change. One method to achieve this is through reflective practices, which involve identifying and analyzing the feelings experienced during the process. This requires not only a high level of emotional intelligence from mentors but also the

ability to maintain the boundaries of competence (Suplicz & Fűzi, 2016). Mentees can engage in deeper emotional work only when they are able to control and take responsibility for their emotions.

### 3. 4. Professional Identity

Identity work, associated with life tasks at a given life stage (Erikson, 1993), is closely intertwined with identity development and the life process (Buda, 2003). Discovering and cultivating one's adult personal identity takes center stage. Erikson's theory contributes to understanding challenges in young adulthood, career entry, and professional group integration during identity development (Erikson, 1993). The identity crisis (Erikson, 1993) can guide the challenges of entering a pedagogical career. These challenges highlight the crucial need for personalized mentorship.

### 3. 4. 1. Identity work of a mentee concerning personal support

Changes resulting from learning and working with emotions can penetrate teachers' professional identity (Hoekstra & Korthagen, 2011). Although identity is continuously reconstructed and negotiated (Akkerman & Meijer, 2011; Chu, 2019; Prabjandee, 2022; Trent, 2010), building a coherent professional identity poses a significant challenge for many NTs (Henry & Mollstedt, 2021; Vaitzman & Berkovich, 2021).

The process of transitioning from student to teacher aligns with typical life tasks of identity crisis linked to existence as a young adult. Role expectations and the imperative to fulfill them (Simon, 2019) integrate sociocultural influences into personal (Buda, 1994) and social identity (Révész, 2007). Similarly, integration into a professional group shapes the social self by cultivating a communal sense of "we."

The emotions accompanying these changes often manifest as worry, frustration, stress, and isolation (Farrell, 2016). The challenges of transitioning to young adulthood and facing professional hurdles as a beginner are evident in the experiences reported by TCs and NTs in research (Simon, 2019). These challenges include loneliness (Lortie, 1965), reality shock (Szivák, 1999), transition shock (Corcoran, 1981), liminality, and the feeling of being in a vacuum, neither here nor there (Ibarra, 2007).

Experiencing self-coherence and self-continuity is essential for maintaining physical and mental health during changes in professional personality and young adulthood (Antonovsky, as cited by Buda, 2003). Developing an identity is a lifelong project for individuals to work on (Buda, 2003), involving contradictions and conflicts. Furthermore, individuals derive decisive impulses for organizing identity from human and social relationships (Vaitzman & Berkovich, 2021). Therefore, the role of mentors and PS is indispensable.

### 3. 4. 2. Duties of a mentor concerning the mentee's identity work

Our work is guided by a suitable interpretative framework provided by Korthagen's model (2004), which illustrates professional personality in layers. One of the profound elements is professional identity. According to Palmer (cited by Korthagen, 2004), successful teaching emanates from the identity and integrity of the teacher.

In identity formation, a mentor holds a significant influence, as noted by Henry and Mollstedt (2021). Self-continuity and self-coherence (Antonovsky, 1996) are vital for mental health, resilience, and coping during identity crises (Erikson, 1993). A mentor's supportive presence can enhance coherence and self-continuity during identity changes (Simon, 2019). Their guidance is instrumental

in achieving self-identity, self-continuity, and self-coherence amidst the challenges of identity transition (Ibarra, 2007; Simon, 2019).

Identity construction is dynamic and ongoing, shaped by discussions on shared experiences and perspectives (Lammert et al., 2020), including interactions with mentors and within social contexts (Prabjandee, 2022). Teacher identity is also formed through reflective support in mentoring, contributing to teachers' identity development through negotiation and dialogue in co-learning spaces (Atkins, 2019; Lammert et al., 2020).

Chu (2019) highlights the significance of reconstructing the identity of classroom teachers assuming new roles as mentors for preservice teachers, a process referred to as "identity-in-discourse," wherein identity is shaped through cognitive processes and interactions with others (Varghese et al., 2005).

Mentors' attitudes, "making their effects felt through the psychic structures" that describe the layers of the professional personality, "have a particular significance in providing support to novice teachers in their identity change and (not unrelated) keeping them in the profession" (Simon, 2019, p.234). Mentoring relationships, characterized by empathy (Henry & Mollstedt, 2021), acceptance, recognition, attention, and help, represent the "human processes of information and relationship exchanges, communication networks" through which one can discover their own identity (Buda, 1994), become an independent professional (Chu, 2019), and establish a positive professional identity (Cameron & Grant, 2017; McIntyre & Hobson, 2016).

### 3. 5. Reflection

The four areas mentioned (change, learning, emotions, and professional identity) are interconnected through the need for reflection. Well-known models, such as those by Dennison and Kirk (1990), Kolb (1984), and Schön (1983), emphasize reflecting on professional and methodological work, often isolating the teacher's activity from their overall role and human functioning. However, teaching activity cannot be separated from the teacher's emotions (Helms-Lorenz et al., 2012) or their understanding of professional identity (Gilles & Wilson, 2004). Therefore, PS appears to be justified.

### 3. 5. 1. Reflection from the perspective of mentees

Reflection primarily involves posing first-person singular questions with no inherently good or bad answers. Honest responses serve as a starting point for change, such as questioning why one operates in a certain way or what patterns are followed. Through delving into reflective practices, mentors assist mentees in going beyond simplistic evaluations like "it was bad or good" (Achinstein & Davis, 2014). The valuable questions to ask oneself are precisely what mentees may lack experience in. Levels of reflection in the development of professional identity are explored by referencing core reflection by Korthagen and Vasalos (2010) and the 'broaden and build' theory of positive emotions by Fredrickson (2004), which can be built upon to link the momentary experience with professional identity.

With mentor guidance and a shift away from judgment (Grudnoff, 2012), mentees can develop a more nuanced perspective of their activities and their roles as teachers (Gilles & Wilson, 2004). The ability to reflect will serve as the foundation for independently identifying areas that require change, thereby contributing to ongoing PD (Suplicz & Fűzi, 2016).

### 3. 5. 2. Reflection from the perspective of mentors

Reflection, i.e., the self-dialogue of the mentee and dialogue with their mentor, provides a framework for working with emotions in PD. The mentor's task is to guide the mentee's reflection by incorporating questions and perspectives that go beyond the specific event or action, considering its

context (Achinstein & Davis, 2014), deeper background, as well as the resources and possibilities for change. The process of change gains impetus and direction through the analysis and interpretation of what has been experienced and learned (Gilles & Wilson, 2004; Poom-Valickis, 2007).

To convey the content and the desired depth of reflection, Carroll's (2009) supervision model can be employed. It distinguishes four levels of reflection, with the first level involving the examination of causes based on facts. Introspection emerges in the second level, where change may commence, requiring emotional detachment. However, to achieve system-level change, it is indispensable to alter one's perspective and examine things in a broader context (level three). At the fourth level, reflection is both broadened and deepened (Fredrickson, 2004), enabling the inventory of one's own resources and the recognition that an individual can overcome mental blocks. The internal dialogue occurring at this level extends far beyond the attitude of blaming others and searching for external causes. Through deep reflection and by transitioning between the levels of Korthagen's (2004) onion model of professional personality stratification—with an emphasis on positive emotions—mentees' flexibility and courage are enhanced.

PS can bring about a (second-order) change in the interpretation of the teacher's role and the teacher's identity when it reaches the third and fourth levels of mentor-mentee interaction (Fischer & Lichtenberger-Majzikné, 2018). Additionally, the mentor can become an authentic model for the mentee in the area of reflection (Fischer & Lichtenberger-Majzikné, 2018; Maynard & Furlong, 1995; Sutton et al., 2021).

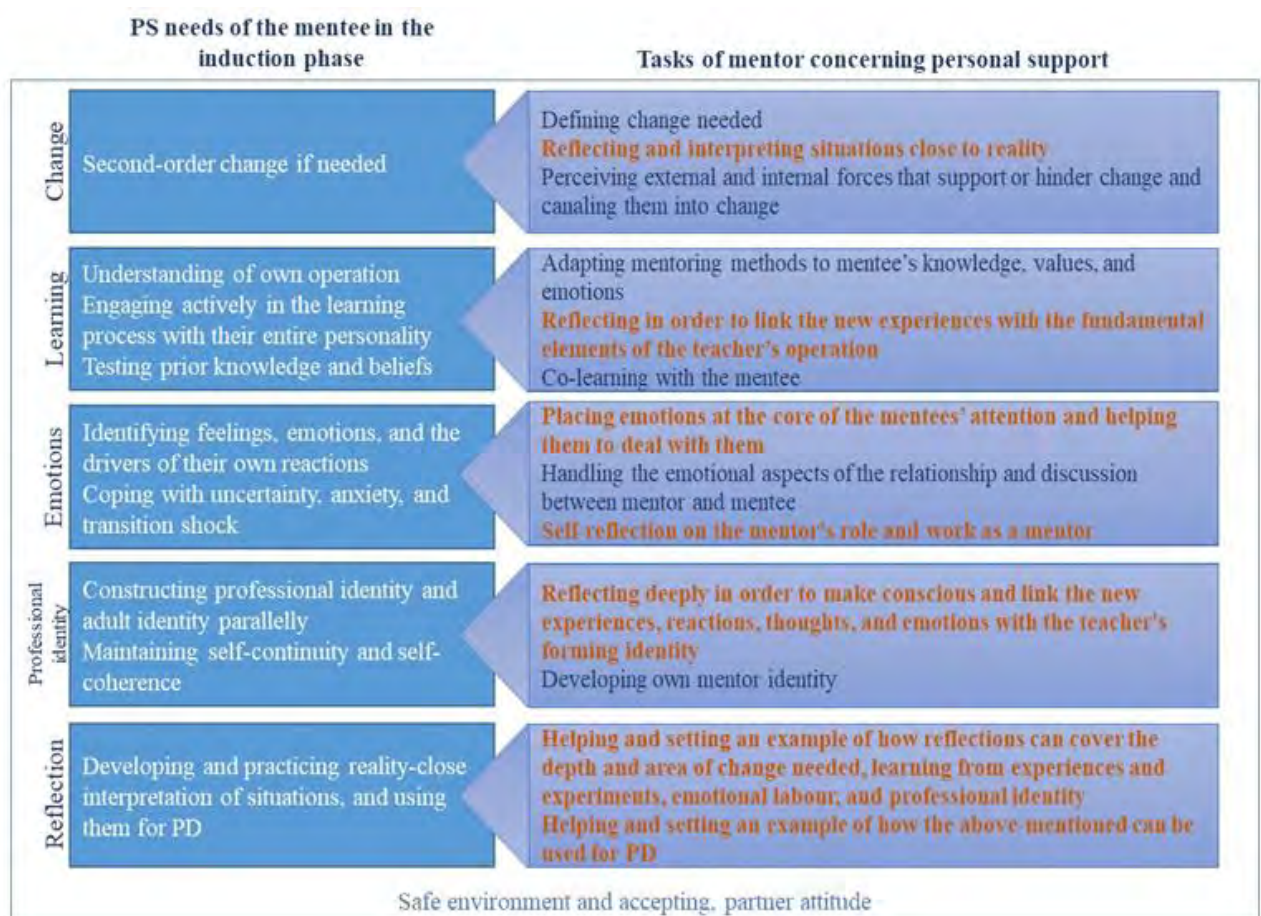The findings of the focused literature review are summarized in Figure 4 below.



**Figure 4.** Summary of the results

Upon analyzing the components of PS and their interconnections, the subsequent discussion presents a comprehensive operating model of them.

## 4. Discussion

### *4.1. The dynamic-transitional model of personal support*

Although the literature contains evidence for the importance of change, learning, emotion, professional identity, and reflection, and their roles in PS are highlighted, it became clear that they cannot be presented without mutual references between them (Figure 4); however, they have mainly been investigated independently. Conversely, teachers' functioning must be handled as a whole (Goodwin et al., 2021), based on the gestalt approach (Perls, 2004), in which all five elements are simultaneously present and form a system. Therefore, a comprehensive theoretical model was developed based on the five elements detailed above that can explain the dynamic nature of becoming a teacher with the help of PS.

The elements of PS, depicted as cogs in Figure 5, are linked and set in motion by reflection as the central rotating element. Reflection is responsible for the dynamics of the processes. It is the key factor because incorporating new practical elements into the teacher's knowledge and experiencing emotions will not automatically result in a change or affect professional identity; reinterpretation is needed to set these processes in motion. Furthermore, reflection provides a bridge between levels of thinking, emotions, change, and professional identity, facilitating the transfer of information between these areas.



**Figure 5.** The dynamic-transitional model of PS

Figure 5 illustrates that reflection not only connects the four interconnected areas but also catalyzes the complex processes of PS. A novel aspect of our model is that reflection is a much more intricate and deeper process than described by earlier models; it must delve deeper than mere behavior and action (Helms-Lorenz et al., 2012). Furthermore, facilitating deeper change presents a difficult task for mentors because it must always be tailored to the mentees' needs. This process requires creativity, and mentor teachers must operate within the limits of their competencies. The dynamic-transitional model functions effectively only when reflection is integral to the mentoring process aimed at PS in the following ways: (1) both the mentor and the mentee are committed, willing to develop and make concerted efforts toward this goal; (2) they both engage in deep reflection consciously (Maynard & Furlong, 1995) to foster change and observe its outcomes; (3) there exists

an accepting and supportive atmosphere in which problems are acknowledged, and solutions are sought (Bressman et al., 2018; Izadinia, 2015; Rogers et al., 2013; Spooner-Lane, 2017).

## 5. Conclusion

Through semi-structured expert group interviews and mind mapping, five areas crucial for successful personal support in mentoring were identified: change, learning, emotions, professional identity, and reflection. An integrative literature review investigated (RQ1) whether the literature supports the importance of these factors in PS and PD during the induction phase and (RQ2) whether there are correlations among these factors that can serve as the basis for a coherent system of PS. The results affirm the undeniable importance of the five elements—change, learning, emotions, professional identity, and reflection—in PS. Furthermore, the relationships among these factors, in various pairings, are supported by a wealth of evidence. Consequently, our aim was achieved: the interconnections among the five elements were summarized in an original theoretical system. The outcome is the dynamic-transitional model of PS, which transcends fragmented elements, organizing them into a coherent, dynamic system that emphasizes a holistic approach to mentoring. This model not only elucidates interconnectedness but also underscores the pivotal role of reflection in activating and sustaining the transformative process.

The implications of this model extend beyond theoretical constructs. Three potential practical applications have been identified: (1) improving mentoring practices, (2) incorporating the model into mentor training and further development, and (3) researching the effectiveness of mentor training or mentoring.

The dynamic-transitional model empowers mentors to adopt a nuanced, empathetic, and targeted approach to providing personalized support. With an understanding of the model, mentors can consciously plan and tailor personal support to meet the mentee's specific needs. For instance, if the mentee's teacher identity is stagnant or if they struggle to develop their teacher role, the mentor can use reflection to address this from an emotional or learning perspective. If the mentor identifies a need for second-order change, reflection can focus on emotional barriers to generate momentum for the change process. The model aids mentors in recognizing how addressing one element can affect others and navigating the area and methods of personal support with greater confidence.

Additionally, as demonstrated in Hungary, the model can enhance mentor training programs, where the findings served as a foundational framework for developing mentoring competencies at a university level. The dynamic-transitional model emphasizes that these key areas and their interconnections should be taught together. There is potential for empirical investigation into whether mentors trained according to this model will indeed exhibit greater confidence and awareness in providing PS to mentees. Would some stagnant mentoring processes be resolved within the framework of this model?

## Declarations

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**Appendix I.**

Matrix of the Integrative Literature Review

| | Change | Learning | Emotions | Professional identity | Reflection |
|---|---|---|---|---|---|
| **Part of personal support** | Fűzi & Suplicz, 2016<br>Watzlawick et al., 2011 | Atkins 2019<br>Chen, 2016<br>Aspfors & Fransson, 2015 | Kutsyuruba et al., 2019<br>Chen, 2016<br>Fűzi & Suplicz, 2016<br>Rogers, 2013<br>Feiman-Nemser, 2012<br>Grudnoff, 2012<br>Newberry, 2010<br>Cherubini, 2009<br>Lord et al., 2008<br>Smith & Ingersoll, 2004 | Husu et al., 2008<br>Eisenschmidt, 2006<br>Feiman-Nemser, 2001 | Fischer & Lichtenberger-Majzikné, 2018<br>Fűzi & Suplicz, 2016<br>Achinstein & Davis, 2014<br>Akkerman & Meijer, 2011 |
| **Part of PD in the induction phase** | Keiler et al., 2020<br>Suplicz & Fűzi, 2016<br>Maslow, 2012 | Burger, 2023<br>Atkins, 2019<br>Ali et al., 2018<br>Rubenson, 2011<br>Portner, 2008<br>Flores, 2004<br>Falus, 2001<br>Elbaz, 1983 | Yılmaz & Bıkmaz, 2021<br>Chang, 2020<br>Kutsyuruba et al. 2019<br>Chen, 2016<br>Eteläpelto et al., 2015<br>Rogers et al., 2013<br>Grudnoff, 2012<br>Helms-Lorenz et al., 2012<br>Cross & Hong, 2012<br>Ibarra, 2007<br>Smith & Ingersoll, 2004<br>Korthagen, 2004<br>Szivák, 1999 | Prabjandee, 2022<br>Vaitzman & Berkovich, 2021<br>Henry & Mollstedt, 2021<br>Cameron & Grant, 2017<br>McIntyre & Hobson, 2016<br>Izadinia, 2013<br>Révész, 2007<br>Lindgren, 2005<br>Buda, 2003<br>Gilles & Wilson, 2004 | Mutlu-Gülbak, 2023<br>Wexler, 2020<br>Kutsyuruba et al. 2019<br>Ali et al., 2018<br>Achinstein & Davis, 2014<br>Lindgren, 2005<br>Gilles & Wilson, 2004<br>Maynard & Furlong, 1995 |

| | Change | Learning | Emotions | Professional identity | Reflection |
|---|---|---|---|---|---|
| **Change** | | Atkins 2019<br>Ali et al., 2018<br>Ciavaldini-Cartaut, 2015<br>Steffe & Gale, 2012<br>Watzlawick et al., 2011<br>Crow, 2007<br>Pearls, 2004<br>Richardson, 2003<br>Kolb, 1983 | Atkins, 2019<br>Chen, 2016<br>Farrell, 2016<br>Fűzi & Suplicz, 2016<br>Suplicz & Fűzi, 2016<br>Feiman-Nemser, 2012<br>Watzlawick et al., 2011<br>Lord et al., 2008<br>Lee et al., 2006<br>Korthagen, 2004<br>Lewin mentioned by Schein, 1995 | Yılmaz & Bıkmaz, 2021<br>Maaranen & Stenberg, 2020<br>Hudson et al., 2010<br>Pearls, 2004<br>Buda, 2003 | Keiler et al., 2020<br>Atkins, 2019<br>Suplicz & Fűzi, 2016<br>Korthagen, 2010<br>Lindgren, 2005<br>Gilles & Wilson, 2004<br>Richardson, 2003<br>Wubbels, 1992 |

| | | | | | |
|---|---|---|---|---|---|
| **Learning** | | | Yılmaz & Bıkmaz, 2021<br>Maaranen & Stenberg, 2020<br>Simon, 2019<br>Aderibigbe et al., 2018<br>Chen, 2016<br>Golombek & Doran, 2014<br>Rogers, 2013<br>Hoekstra & Korthagen, 2011<br>Rubenson, 2011<br>Merriam et al., 2007<br>Fredrickson, 2004<br>Moon, 2004<br>Csíkszentmihályi & LeFevre, 1989 | Izadinia, 2013<br>Korthagen, 2010, 2004<br>Crow, 2007<br>Richardson, 2003<br>Wubbels, 1992 | Otero-Saborido et al., 2024<br>Wexler 2020<br>Ali et al., 2018<br>Ciavaldini-Cartaut, 2015<br>Marzano, 2012<br>Lindgren, 2005<br>Gilles & Wilson, 2004<br>Boreen et al., 2000<br>Kolb, 1984 |
| **Emotions** | | | | Sutton et al., 2021<br>Maaranen & Stenberg, 2020<br>Gibbons, 2020<br>Simon, 2019<br>Farell, 2016<br>Izadinia, 2013<br>Kálmán, 2013<br>Rubenson, 2011<br>Ibarra, 2007<br>Korthagen, 2004<br>Goldhaber, 2002<br>Szivák, 1999<br>Lortie, 1996<br>Corcoran, 1981<br>Antonovsky, 1996 | Dreer-Goethe, 2023<br>Sutton et al., 2021<br>Chang, 2020<br>Kutsyuruba et al., 2019<br>Simon, 2019<br>Achinstein & Davis, 2014<br>Kálmán, 2013<br>Helms-Lorenz et al., 2012<br>Hoekrtsa & Korthagen, 2011<br>Lord et al., 2008<br>Pearls, 2004<br>Meyer & Salovey, 1997 |
| **Professional identity** | | | | | Yılmaz & Bıkmaz, 2021<br>Gibbons, 2020<br>Lammert et al., 2020<br>Akkerman & Meijer, 2011<br>Husu et al., 2008<br>Korthagen, 2004<br>Goldhaber, 2002<br>Antonovsky, 1996 |

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