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QUALITATIVE STUDY

"This is not a test": How do human resource development professionals use personality tests as tools of their professional practice?

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Henriette Lundgren, Department of Human Resource Studies, Tilburg University, PO Box 90153, 5000 LE Tilburg, the Netherlands. Email: henriette.lundgren@gmail.com Although human resource development (HRD) professionals enjoy the use of personality tests in their practice, the appeal of these tests to some is harshly criticized by others. Personality tests attract through optimistic descriptions and ease of use for individual and team development while often lacking predictive and discriminant validities. Despite those concerns, the personality-testing market can be characterized as a dynamic industry, with many professionals using assessments in developmental settings such as management training and executive coaching. The aim of this article is to explore how individual meaning-making and organizational sensemaking theories help to explain the widespread and sustained use of personality tests in developmental contexts among HRD professionals. Using grounded theory and inductive analysis, we distill meaning from semistructured interviews with 18 HRD professionals. Through pattern analysis, we establish six strategies that describe practical approaches in personality testing: 1. Ethical-protective, 2. Scientific-selective, 3. Cautious-avoiding, 4. Cautious-embracing, 5. User friendly-pragmatic, and 6. Knowledgeableaccommodating. We find that HRD professionals deal with cognitive dissonances and paradoxical situations in their professional personality test use practice on a regular basis. Research limitations and implications for practice and future research are discussed.

KEYWORDS

cognitive dissonance, grounded theory, HRD, individual meaningmaking, organizational sensemaking, pattern analysis, personality test, practitioner strategies

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Survey research conducted by the Chartered Institute of Personnel and Development in the United Kingdom shows that personality tests are increasingly employed by human resource development (HRD) professionals for individual-learning and team-learning purposes (McGurk & Belliveau, 2012). Personality tests are standardized assessments used to determine a person's set of preferences, traits, or behavioral styles, most commonly—but not exclusively—using self-report questionnaires. Human resource (HR) practitioners may use these tests for recruiting (Hossiep, Schecke, & Weiss, 2015) as well as for development purposes (Benit & Soellner, 2013), although many of the personality tests used were originally developed for personnel selection and not specifically for developmental practice (Costa & McCrae, 1996; McAdams, 1997).

When looking at research in the developmental context more closely, we find that personality tests are used in management coaching (Nelson & Hogan, 2009; Passmore, 2008; Passmore, Holloway, & Rawle-Cope, 2010; Scharlau, 2004), educational leadership (Tomlinson, 2004), organizational and team development (Badham, Garrety, Morrigan, Zanko, & Dawson, 2003; Clinebell & Stecher, 2003; Kuipers, Higgs, Tolkacheva, & de Witte, 2009; Ludeman, 1995), management learning (Ford & Harding, 2007; Furnham & Jackson, 2011; Goodstein & Prien, 2006), and leadership development (Allen & Hartman, 2008). In many of these studies, type-based personality tests, and in particular the Myers-Briggs-Type Indicator (MBTI),1 are named as the most popular tools for developmental use (Clinebell & Stecher, 2003; Passmore et al., 2010; Stothart, 2011). A type-based personality test may appeal to HRD professionals as the descriptions of personality are mostly optimistic (Ford & Harding, 2007), feedback reports ease the exploration of differences among test takers (Passmore et al., 2010) and discussion of personality test outcomes promises to facilitate team development (Clinebell & Stecher, 2003). However, the appeal of these tests to some is harshly criticized by others: Type-based tests generally have poor predictive validity (Furnham & Crump, 2005; Gardner & Martinko, 1996; Gulliford, 1991; Pittenger, 2005), low discriminant validity (Fisher, Hunter, & Macrosson, 2001), and methodological issues due to forced-choice answer formats (Converse et al., 2008; Harland, 2003). This leads to a paradoxical situation (Lewis, 2000; Lewis & Smith, 2014) wherein personality tests are popular among HRD professionals but at the same time are one of the most critiqued instruments, too (Boyle, 1995; Pittenger, 2005). It is unclear how HRD practitioners deal with the tensions that arise from this paradox. To inquire more deeply into the practice of HRD professionals who apply personality tests in developmental settings, we will first elaborate on the test industry before looking at studies that have analyzed HR practitioner reactions to tests.

Test industry data show that the personality-testing industry overall is an expanding market: With about 2,500 personality tests administered a few million times every year, they generate approximately \$500 million per annum in test license and certification revenue for test publishers in the United States (Weber & Dwoskin, 2014). It is also a dynamic market in which psychological associations try to regulate test use and agree on norms among psychologists (DIN, 2002; Evers, 1996; Kersting, 2008), while at the same time nonpsychologists look to improve professionalization in the HRD field (Carliner & Hamlin, 2015; Chalofsky, 2007; Lee, 2001; Short, 2006). As different stakeholders have different interests, tensions exist between HRD professionals and professional associations, as well as between psychologists and nonpsychologists using personality tests in HRD. Previous exploratory research indicated that professionals place more value on perceived ease-of-use than on psychometrics (Lundgren, Kroon, & Poell, 2017). Also, professionals and publishers relabel the word "test" with more positive-sounding terms, such as "tools for self-reflection and instruments for personal stocktaking" (p. 215) when psychological tests are used for development rather than selection. This indicates that some professionals may have developed strategies that prevent their entanglement with personality tests from being negatively perceived by test takers and client organizations. HRD professionals' meaning-making (Mezirow, 1991; Schön, 1983) and organizational sensemaking (Greeno, 1997; Maitlis & Christianson, 2014; Weick, 1995) hence seem to play a crucial role in the personality-testing industry as they introduce personality tests into organizations or connect test publishers and their products with test takers. The question arises how HR practitioners in general and HRD professionals in specific react to and create meaning from their personality test use.

A number of studies have analyzed HR practitioner reactions to psychological testing in general. In an empirical study conducted with HR practitioners, Benit and Soellner (2013) wanted to find out why personality and intelligence tests are less-widely adopted in Germany, compared with other European countries. The researchers collected survey data from 116 companies and found that nearly 20% of those practitioners used personality tests in developmental

contexts, mostly in leadership development. Two interesting findings emerged: Practitioners rejected personality tests because of the low face validity of certain tests; however, when they did decide to purchase tests, they would do so from external vendors rather than from psychological test publishers in 43% of all cases. A similar survey study had been conducted in the United Kingdom, where practitioners were asked about their reactions to work-related psychological tests (Furnham & Jackson, 2011). In this study, 255 HR practitioners responded to 64 statements that covered their reactions to psychometric tests in general, including cognitive ability (intelligence), aptitude, and personality tests. Different from the German sample (Benit & Soellner, 2013), HR practitioners from the United Kingdom gave a positive evaluation of personality tests' validity and their usefulness in HR practice (Furnham & Jackson, 2011). Furnham and Jackson (2011) also found that age and educational qualifications of test practitioners were positively related to perceived usefulness of psychological tests. Although the study was conducted in the area of personnel selection and not personnel development, it seems logical that cognitive skills associated with age and educational qualifications are closely linked to understanding the more abstract nature of psychological tests. Furnham and Jackson (2011) further concluded that younger professionals or those with fewer years of education might have a more limited understanding of psychological tests.

While these two survey studies give us a first impression of different HR practitioner reactions to test use, they do not detail the subjective experiences and meaning-making processes that might have led to viewing the practice negatively or positively. Therefore, we reviewed two more studies that illustrated personal accounts of HRD practitioners and their relationship with personality tests. Ford and Harding (2007) published a reflective analysis of a leadership development program in which the MBTI was used as a tool. The authors take a critical management stance when they refer to MBTI feedback as "similar to horoscopes" (p. 483) and engage in sensemaking based on personality test use as "means of controlling...individual identities with the organization" (p. 484). In comparison, Scharlau (2004) published a review of her own HRD practice wherein she ascribes meaning to the MBTI as a "useful tool for coaching and career counseling" (p. 13). Through Scharlau's (2004) frame of reference, the personality test supports the dialogue between coach and client that allows self-esteem to grow and that can be used as a common base for individual development.

In summary, studies from different countries have shown a range of reasons for test use (Furnham & Jackson, 2011) and nonuse (Benit & Soellner, 2013). Furthermore, we understand that test reactions depend largely on the individual and his or her organizational context—some who are critically reflective (Ford & Harding, 2007) and others who are happily embracing the same personality test in their HRD practice (Scharlau, 2004). These opposing reflections on personality test use by HRD practitioners suggest that individual as well as organizational influences determine whether and to what extent personality tests are used in developmental contexts. What is lacking is a theoretical foundation in individual meaning-making (Mezirow, 1991; Schön, 1983) and organizational sensemaking theories (Greeno, 1997; Maitlis & Christianson, 2014; Weick, 1995) that could help us explain the widespread and sustained use of personality tests in developmental contexts among HRD professionals. In this study, we, therefore, seek to understand how HRD professionals construct meaning and engage in sensemaking, especially where test criticism might lead to conflicting cognitions within the professionals' practice and among stakeholders of their organizations. By letting participants of this study recount their experiences and their reflections on those experiences, we intend to distinguish among different approaches on how to introduce, administer, and reason the use of personality tests in their practice.

1 | THEORETICAL FOUNDATION

Two key notions inform and shape the foundation of this study: (a) the assumption from the constructivist paradigm that HRD professionals engage in *individual meaning-making* and (b) the idea from the situative paradigm that these professionals participate in *organizational sensemaking*. Both notions will be further elaborated upon later.

1.1 | Individual meaning-making

To explore the reasoning of HRD professionals, we first turn to meaning-making theories that put the individual at the center of constructing and framing their own experiences. Individuals bring their life and work meanings as well as their knowledge, skills, beliefs, motivation, and interests when they reflect on their work practice (Marsick, Watkins, & O'Connor, 2011). They do so by using frames or "meaning perspectives" (Mezirow, 1991, p. 61) that are influenced by social norms, cultural and language codes, prototypes, and philosophies. These sociolinguistic meaning perspectives may represent the individuals' tapestry of habitual expectations, and they can be seen as the individuals' frame or paradigm from and through which they observe work practice.

Schön (1983) describes meaning-making frames that provide a set of action-governing operating assumptions as theories-in-action—what actually governs people's actions—as opposed to what people think or say governs their actions (espoused theories). Here, the individual constructs meaning from examples, models, and metaphors and attaches specific language and descriptors when articulating his or her lived experiences. In *The Reflective Practitioner*, Schön (1983) uses framing terminology to depict how an individual reviews, dissects, and reconstructs professional knowledge to take on the character of a system: "The problem he sets, the strategies he employs, the facts he treats as relevant, and his interpersonal theories of action are bound up in his way of framing his role" (p. 210). This line of thought can be applied to personality test use where HRD professionals review, dissect, and reconstruct elements of one or multiple personality tests to make them fit into their workshop practice in management development.

In line with tenets of constructivism (Piaget, 1950; Von Glasersfeld, 1984), individuals build their frames based on subjective knowledge and experiences, from which they extract interpretations. While attributing meaning, (organizational) cultures play a role in the socially constructed realities of these individuals; however, meaning construction is a cognitive process that happens in the individuals' heads rather than primarily in interaction with the social context.

The constructivist perspective of individual meaning-making is challenged by scholars who argue that social interaction in groups and in organizational debates shapes individual reflective thinking (Raelin, 2002; Vince, 2002) and should, therefore, not be neglected. As Clarke (1995) elaborates on practitioner engagement in the process of problem solving in the specific setting of teacher education, "the conversation between the practitioner and the setting provides the data which may then lead to new meaning, further reframing, and plans for further action" (p. 245). Dialogue and interaction with colleagues and tools can broaden and deepen the understanding of professional practice. As Yanow and Tsoukas (2009) highlight when reframing Schön's argument in phenomenological terms, "both self-understanding and evaluative components are learned through engaging in and with the practice, not through thinking about them" (p. 1344). These self-understandings are not qualitatively neutral as they mirror normative concepts used in professional practice and hence also carry with them an evaluative component of right or wrong.

Therefore, the embeddedness of mind in social practice—and the construction and deconstruction of frames in interaction with people, structures, and tools (and hence an extension of meaning-making into the organizational realm)—can make a useful addition that we will consider next.

1.2 | Organizational sensemaking

Various definitions of sensemaking exist that place the activity of working to understand issues or events that are uncertain or ambiguous as occurring within or between individuals (Maitlis & Christianson, 2014; Weick, 1995; Weick, Sutcliffe, & Obstfeld, 2005). Sensemaking is a social process that occurs among people who negotiate, contest, and mutually construct meaning. Sensemaking is also embedded in the professional environment, with the intent to organize and the ambition for decision-making outcomes. In the context of our study, we understand "organizational sensemaking" (Maitlis & Christianson, 2014, p. 66) as a primarily collective process that happens among individuals and within organizations.

As Weick et al. (2005) define it, "sensemaking unfolds as a sequence in which people concerned with identity in the social context of other actors engage (in) ongoing circumstances from which they extract cues and make plausible sense retrospectively, while enacting more or less order into those ongoing circumstances" (p. 409). We hence turn our focus on the interaction of organizational members and are curious about the way that they interpret their environment and construct accounts that allow them to comprehend the world around them. Here, sensemaking can be strategic when it points toward the implementation of organizational change. In a study of middle managers, Rouleau (2005) looks at the processes of *sensemaking* and *sensegiving* through the application of tacit knowledge and finds that these middle managers apply a number of "micro-practices" that help communicate and justify the change. Rouleau concludes that these sensemaking micropractices are socially constructed through nonverbal, implicit meaning structures of activities and words. Organizational sensemaking can, therefore, be seen as situated in the interaction of organizational stakeholders' practices, also referred to as the "situative" perspective of learning (Brown, Collins, & Duguid, 1989; Greeno, 1997; Lave & Wenger, 1991).

Viewed from the situative perspective, individuals participate in and collaborate with work-based tools and systems through interaction with their context. According to Greeno (1997), thinking and sensemaking are important aspects of social practice, "involving reflection and discourse on activities of individuals and groups and of meanings of concepts that are significant in evaluating and making sense of the community's and of individuals' activities and experiences" (p. 97).

In a study involving Swedish police officers, Lundin and Nuldén (2007) explore how professional tools can trigger workplace learning and how police officers talk about (police) tools and their use. The researchers chose a qualitative ethnographic approach that involved observations and field interviews. Their findings show how the application of specific tools leads to conversations among police officers and how these conversations form an essential part of community-based learning by police professionals. Sensemaking and learning take place in the participation of and interaction between individuals and their environment—a context of rules, values, colleagues, and tools. The researchers conclude that "practice is remembered through the use of tools" (Lundin & Nuldén, 2007, p. 222).

In another situative perspective study that investigates how an anesthesiology department uses organizational practices to help novice nurses become reflective practitioners, Jordan (2010) inquires about the sociocultural and political context of the individuals' practice. Rather than studying the intrapersonal processes of cognition and meaning-making, the researcher focuses on the processes of participation and interaction that are involved in becoming a (competent) nurse. Adopting an ethnographic approach that includes observation via job shadowing, narrative interviews, and document analysis of standard operating procedures, the study concludes that "reflective practices are first and foremost social practices, that is, not certain isolated techniques that are individually applied, but rather interactive ways of approaching and handling situations embedded in a specific organizational and social context" (p. 409).

Fenwick (2016) posits the term "sociomaterialism" to describe a more system-oriented approach of sense-making. In her view, professional responsibility is interrelated with materials in motion, for example, in the form of "technologies and texts, objects and bodies, built settings and natural forces" (p. 167). Therefore, whereas meaning-making is portrayed through the constructivist lens as intrapersonal and hence describes the process that happens within oneself when reflecting *in* and *on* action, sensemaking adds a dimension of interrelatedness with people, organizational structures, and tools of practice that are situated in the professionals' environment. In the personality-testing context, there is a material component, that is, the test itself, as well as a social dynamic component that happens in the interactions of HRD professionals with various other stakeholders before, during, and after delivering a management development workshop. By studying the "inter-acting dynamics of person, social and material elements" (p. 168), these organizational elements help us understand individuals' entanglement with their social environment and its material elements, for example, the tools that she or he uses for professional practice.

1.3 | Application of the theoretical foundation to this study.

Based on this theoretical foundation, the aim of the present study is to explore how HRD professionals use personality tests in developmental settings. Specifically, we want to find out:

How do individual meaning-making and organizational sensemaking theories help to explain the widespread and sustained use of personality tests among HRD professionals?

We initiated the primary research inquiry to explore how HRD professionals engage with personality tests as tools of their professional practice. We seek to understand how they construct meaning and engage in sensemaking, especially where test criticism might lead to conflicting cognitions within their practice and across stakeholders of their organizations. By letting participants of this study recount their experiences and their reflections on those experiences, we hope to distinguish among different strategies how HRD professionals introduce, administer, and reason the use of personality tests in their practice.

This inquiry is relevant as HRD is a dynamic and constantly evolving field (Lee, 2001) in which the drive for professionalization is apparent (Carliner & Hamlin, 2015) but not well defined (Kahnweiler, 2009). It could be that professionals who continue using personality tests in HRD have adopted strategies for how to deal with test criticism and stakeholder concerns—an area that is worth exploring further, possibly to reduce the research-practice gap in this field (Benit & Soellner, 2013; Short, 2006).

2 | METHODS

To probe HRD professionals' cognitions on the use and criticism of personality tests for employee development, we followed a grounded theory approach (Glaser & Strauss, 1967) involving semistructured interviews and inductive data analyses as suggested by Miles and Huberman (1994). We chose this approach to develop an explanation of the phenomenon—not merely a description of it. Rather than starting from preconceived theoretical ideas, we engaged in conceptual sensemaking while immersed in the data (Glaser, 1998). Grounded theory guided us in this process of discovery of theory that was inherent in the data we collected, which we analyzed going back and forth using constant comparison together with participants in this qualitative study.

2.1 | Sample

By means of a purposive sampling strategy, we searched for professionals who were experienced with administering personality tests in HRD, who worked either internal to an organization or delivered consulting/coaching services, and who use personality tests in developmental settings, for example, in management training, team development, or executive coaching.

Our process of discovery had started with an interview in 2012 in which we noticed a link between an HRD professional's past experience and her own practice of administering personality tests in developmental contexts. After listening to this test taker's story—we gave her the pseudonym Katie—we started looking for more HRD professionals who were willing to talk about their experiences, good or bad.

We made use of personal and professional networks to support the collection of data. An initial group of HRD professionals who were known to the authors were approached first, thus facilitating cognitive access and creating a level of trust with research participants (Anderson, 2017). Our sampling then radiated outward by asking each interview partner to recommend a colleague or collaborator to participate in the research. Additionally, a request for research participation was posted on selected LinkedIn groups, including "HR Users of Psychometrics" and "The Psychometrics Forum," which yielded little success. Individuals working for test publishers such as OPP Ltd. or Hogan or for professional association such as the British Psychological Society were excluded from participation as we thought

their commercial interests might bias our research findings. The aim of our purposive sampling was to maximize variation of characteristics among study participants in terms of gender, age, professional experience, exposure to different personality tests, academic background, and position in the company.

As part of a previous study (Lundgren, Kroon, & Poell, 2017), we had investigated the social contexts of HRD professionals and the personality-testing industry through observation, focus group discussions, semistructured interviews, and the collection of personality test feedback reports. Hence, we felt that we had familiarized ourselves sufficiently with the context and setting, which—after conducting 18 interviews and themes and approaches started repeating themselves more and more often—led us to notice that we had reached a satisfactory level of saturation (Anderson, 2017). The data collection for this article was concluded in late 2016 by a team of researchers of whom one is based in the United States and the other two are based in the Netherlands. The U.S.-based researcher grew up in Germany and had previously worked in the United Kingdom for a number of years, allowing for a somewhat international yet Western-oriented perspective on personality test use.

The sample consisted of 18 HRD professionals in different roles and from diverse industry backgrounds, with slightly more male (56%) than female (44%) participants. Ages varied, with half of the participants falling into the age group 45–54 years. The majority of respondents held a master's degree (61%), many of whom had a background in psychology (44%), business (17%), or organizational development (11%). Only one participant reported that she never used personality tests in her practice (6%), in comparison with many using tests frequently (44%), occasionally (28%), and rarely (22%). Length of experience with personality tests varied, as did the professional HRD qualifications reported. Participants were located in the United States, United Kingdom, the Netherlands, Germany, and Denmark, and upon further inquiry, we found that their country of practice was not necessarily their country of citizenship or origin. Because many participants were international and worked within a broad geographic area or globally, we decided not to focus on national culture as a distinguishing element in our analysis. Interviewee details can be found in Table 1.

2.2 | Procedure

An interview guide was developed (Appendix B), and semistructured interviews were conducted that ranged from 35–50 min. Because of the international nature of HRD practice, we did not want to constrain ourselves to one geographic area and hence decided to conduct the interviews via phone or Skype to broaden our geographic reach. All interviews were audio-recorded, transcribed, summarized, and sent back to study participants for member checking (Lincoln & Guba, 1985). According to Anderson (2017) "verification of data, analytic categories, interpretations, and conclusions with members of groups from whom the data were originally collected has been accepted as an important technique for establishing credibility" (p. 129). To ensure consistency in the interview process, the lead author, who is experienced in leadership development using personality tests, conducted all interviews. We acknowledge that the lead author's positionality will have affected our research findings, and we will elaborate on this further in the discussion section of the article.

During the interviews, participants were invited to speak openly about their personality-testing experience, their doubts, and their dilemmas. Complete anonymity of interviewees was ensured by using pseudonyms and by deleting any personal, location-based, or organizational references from the interview transcripts. Participation in the study was voluntary, and exit ethics were guaranteed. No situational ethics dilemmas were encountered, other than the confession of minor copyright infringements where participants had used training materials that they had not purchased from the copyright holder. In each of these cases, the interviewer clarified how a similar situation could be handled suitably going forward.

While we followed the interview guide that inquired about respondents' lived experiences, their reasoning and their felt challenges, we acknowledge that our approach to sensemaking is subjective and influenced by the constructivist lens that we adopted, in line with grounded data that consist of the participants' subjective experiences, interpretations, and meanings (Maines, 1991).

TABLE 1 Participants of study

Participants	Job title (years of test use experience)	Frequency of test use	Personality tests used in HRD practice ^a
Katie	Professional development adviser (6)	Occasionally	7; 8
Stephanie	Talent partner (4)	Frequently	9; 3
Martin	HR manager (15)	Rarely	7; 11; 4
Nick	Senior consultant (15)	Frequently	1; 2; 5
Dana	Senior director HR (4)	Rarely	3; 7; 8
Shaun	Global L&D director (15)	Occasionally	9; 10; 7
Dominic	Senior expert (5)	Frequently	9; 7
Hans	HR business partner (12)	Rarely	9; 7; 2
Emma	Head of talent development (8)	Frequently	9; 7; 3
Saskia	HR director (12)	Occasionally	7; 11; 6
Lila	Director talent management (8)	Frequently	3; 2
Bea	Senior consultant (21)	Frequently	5; 3; 7; others
Sophie	Education specialist (–)	Never	7; 10 ^b
Nathan	Independent consultant (20)	Frequently	12; 9; 10; 7; 8; others
Bernhard	Managing partner (40)	Occasionally	5; 1
Jackie	L&D manager (8)	Frequently	7; 2; 8
Reeta	Head of HR (11)	Rarely	2; 8
Bob	VP organization development (7)	Occasionally	3; 2; 8

HR: human resource; HRD: human resource development; VP: vice president.

2.3 | Data analysis

An inductive analysis approach was followed to code the interview data. After the first set of interviews had been transcribed, the lead author started to code those interview sections related to the research question using open coding. After this initial round, all codes were pulled together and grouped within and across interviews. For example, the interview question "What are your concerns when using personality tests in HRD"? resulted in answers that were labeled as open codes, such as "addressing the risk of pigeonholing." This initial coding allowed us to compare interviews and to select those codes that came up more often. When a code was mentioned more than three times, sufficient support was assumed for exploring this code further in the next round of selective coding of all interview transcripts to identify recurring themes (Glaser & Strauss, 1967). This resulted in an initial understanding of participants' individual meaning-making and organizational sensemaking after this second round of coding.

Next, interview summaries were created for each participant that included passages that directly related to the selective codes. By means of constant comparison, these interview summaries helped to reduce the amount of data for further analysis and to reach out to participants one more time to ask for a member checking. Of the 18 participants, 12 replied to the member-check request. Of those 12, seven participants requested some small changes to their interview summaries, four accepted without changes and one asked for more time to review the summaries. Hence, feedback from the member check was available for 11 of the 18 participants.

In the third round of coding, theoretical codes were used to seek commonalities and sort out relationships among the HRD professionals' various approaches to personality test use. Original interview transcripts were revisited several times to check that the strategies we established as theoretical codes were accurately depicting the HRD professionals' accounts (Rocco, 2003; Miles & Huberman, 1994). By looking at similar and dissimilar aspects, the patterns we found seem to address the question of "what goes with what" (Miles & Huberman, 1994, p. 249). This approach resulted in six strategies that helped to reduce the data into analyzable units and answer the research question.

^aReference Table A1 in Appendix A for test names and descriptions.

^bExperience as participant.

3 STRATEGIES IN HRD TEST USE (FINDINGS)

Professionals make use of different strategies when implementing personality tests in developmental contexts. Each strategy summarizes how HRD professionals apply personal meaning-making and organizational sensemaking structures to their approach when introducing a test, when administering it and when dealing with test criticism and concerns. We found six strategies that professionals employ to frame their use of personality tests in developmental contexts (Table 2).

3.1 | Ethical-protective

The first strategy is characterized by upholding high ethical standards, no matter what. "Doing the right thing" fuels the ethical-protective strategy. For example, professionals who adopt this approach are reluctant to share personal profile information with the line manager without prior consent of the test taker. Psychological training might increase a strong sense for protecting the profession when it comes to administering personality tests in

TABLE 2 Strategies in personality test use

Strategy	Descriptors	Selected quote	Participants
1. Ethical-protective	 High ethical standards Psychologically trained Motivated to protect the profession 	This is the field of psychologists, and, yes, other people can do it, but not in my organization. (Lila, 230)	Lila
2. Scientific-selective	 Use of more complex/costly tools Integrate negative aspects Offering a portfolio of assessments Motivated to select best-fitting tool 	I like the Hogan because it is more in depth, and I think helps people to really understand on a deeper level, because people are always multi-faceted. (Dana, 72–74)	Dana; Emma; Nick; Bernhard; Stephanie; Bea
3. Cautious-avoiding	 Skeptical toward testing practice Negative personal experiences Motivated to avoid pigeonholing 	We need to be very careful, because people can take the result of the assessment as a negative sign for them, for their career. (Hans, 199–201)	Sophie; Hans
4. Cautious-embracing	 Skeptical toward testing practice Personal experience mostly positive Motivated by "light use", for example, as conversation starter 	A tool is a conversation starter with a value and purposeyou have to decide how to exploit that for a greater good. (Reeta, 232–234)	Bob; Katie; Reeta; Shaun
5. User friendly- pragmatic	 Use of simpler tool that is easy for test taker to understand Works within organizational constraints Motivated by high test-taker acceptance 	The color test worked the best, because people find it easiest to talk about colors. (Saskia, 143–144)	Jackie; Saskia; Martin
6. Knowledgeable- accommodating	Extensive knowledge on personality-testing industry and tools Follow ethics guidelines generally, breaking them when demanded by client/employer Motivated to accommodate clients' needs	I said, 'You do know I am not trained in it.' They say, 'Oh yes, but you are trained in Jung, aren't you?' I thought, 'I've read his books, if that counts'. (Nathan, 138–141)	Dominic; Nathan

developmental contexts. Following this strategy, test accreditation and general psychometric qualification are seen as important enablers.

In our data, we found one HRD practitioner who seems to conduct her practice following the *ethical-protective* strategy. Lila, the director of talent management at a human capital consultancy, feels strongly about how a personality test ought to be introduced and administered in a workplace setting. When asked about concerns, Lila talks about the risk of stereotyping and refers to the Hogan tools which—in her view—do not categorize people: "I think...the risk is higher when you get something like a typology" (Lila, 277–278). She frames the MBTI as one of the most unscientific tests and states that she would never elect to use it (Lila, 280–281). In fact, she compares type tests to the use of "horoscopes," (Lila, 285) which she finds unethical because of their lack of scientific grounding. Lila is a trained psychologist and stresses the point again and again that only trained psychologists should be allowed to administer psychometric tests. Summarizing her point of view, she states, "This is the field of psychologists, and, yes, other people can do it, but not in my organization" (Lila, 230). To substantiate her view on personality test selection and use, Lila draws an analogy: When you get sick, you consult a doctor and not a carpenter for medical help or advice. Similarly, Lila explains that only psychologists should handle personality tests, as psychologists have the expert knowledge to choose the right assessment for a given setting.

When inquiring about Lila's source of skepticism, we found out about her personal experiences when she was first introduced to personality testing. After completing the Hogan assessment for the first time, she found herself in denial about her own test results on one of the assessment scales: "The results looked more...like a cruel monster" (Lila, 89). Lila had been quite skeptical toward that tool beforehand, and when she got her test feedback, she grappled with it further. "I put it in my desk, and after two or three weeks looking again at it, I started to think about, okay, yeah, maybe yes" (Lila, 112–114). Because of her own experience, Lila now starts her workshops with an introduction that she believes helps participants to deal with negative test feedback. She explains to them that it "is a normal reaction that you may deny something" (Lila, 76–78) to assure workshop participants and encourage openness for test feedback.

3.2 | Scientific-selective

While drawing from psychometric test qualities and scientific evidence, the focus of the second strategy is on choosing the most robust tool rather than being selective about who gets to administer it. HRD professionals are often certified in three or more personality tests, and it is not uncommon that they select more complex tools as part of their professionalization. These chosen tests may also be more costly and elaborate, which may represent higher quality and greater levels of sophistication. Equally, negative personality traits like the "de-railers" in the Hogan assessment are perceived to give more depth and are welcome in the *scientific-selective* strategy. This approach can be further characterized by taking pride in offering a portfolio of tools and by selecting the appropriate one depending on the situation and developmental purpose.

In our data, we found six HRD practitioners who appear to lead their practice following the *scientific-selective* strategy. For example, Bernhard, who works as a managing partner at an executive search and leadership consultancy, feels strongly about type tests, like Management Drives, DISC, and other variations of the MBTI personality tests that are based on Jung's typology. He calls them the "*kleur terreur*, the terror of color" (Bernhard, 131) and adds that he wouldn't use the MBTI as it labels people. He explains that it is not useful for developmental reasons to use "color as an alibi for not being developed" (Bernhard, 136–137)—a point made by other professionals who frame their practices as *scientific-selective*. Bernhard believes that the practice of labeling people actually hinders development. However, he also acknowledges that many of the type tests are popular due to their "enormous good marketing" (Bernhard, 141) and because they are "easy to understand" (Bernhard, 143). However, for his own practice, Bernhard prefers to be selective and only chooses instruments that have a strong scientific foundation.

Bea, a senior consultant at the same executive search and leadership consultancy as Bernhard, is generally open to employing a variety of tests in her practice because she uses them "to start a reflection process with people, and

to open a dialogue, and to see what does this mean for you and how does that work for you" (Bea, 66–68). Bea would not base a development center decision purely on a personality test result. The test, as she confirms several times, is the "starting point of a discussion" (Bea, 71), and she is accredited to offer various personality tests. Bea explains her preference in test selection by saying, "I like the Big Five. I'm not so much a type questionnaire person" (Bea, 83–84). When working with type tests, Bea feels limited in the discussions she can have, as type tests do not allow her to conduct deep conversations about what the results mean for the test taker and what their behavior looks like in practice. When a client asks Bea to use a type test like MBTI or Insights, Bea tries to accommodate the request as much as she can. "It depends a little bit on what they want me to do with that" (Bea, 179–180). However, Bea also explains that she will often find a "good reason" (Bea, 180) why the company should rather do the intervention using a different tool, one that Bea recommends. That way, Bea can keep her selectivity on tools, and she can also uphold integrity with what tests she approves as scientific.

In a similar way, Dana likes the Hogan as "it is more in depth, and I think helps people to really understand on a deeper level, because people are always multifaceted" (Dana, 72–74). Dana works as a senior HR director at an industrial equipment company, where she prefers Hogan assessments that portrait people as "multifaceted" (Dana, 74); this is in comparison with other profiling tools that can be "a bit superficial" (Dana, 74–75). In the past, she has used other tools with teams, for example the team management profile (TMP), and she remembers that eight of nine people came back as the same type, which did not help to explore difference and agree team development opportunities. "It basically just said, we are all the same; you should get along and work well together" (Dana, 83–84). Dana concludes that the success of an intervention has to do with the quality of the tool that is used. Dana confirms that she finds the depth and accuracy of the Hogan assessments positive. However, she also sees some downsides to the tools in terms of portraying "negatives" or aspects that can be viewed as negative by the test taker. This is quite different from the TMP or MBTI, in which the describing categories are rather broad and always positive.

Emma, the head of talent development at an industrial equipment company, clarifies that in her view, a "person is never equal to the assessment" (Emma, 255). She explains that "human beings are much more diverse and rich and unpredictable and varied and wonderful, and we can never ever capture everything that is you as a person in an assessment" (Emma, 255–257). What the personality test can do is to give the team a "recognized language...in logical terms" (Emma, 258–259) that explains "what makes our personalities and how...we interact as social beings with other human beings" (Emma, 259–260). Emma believes that test criticism is valid and an HR business partner should always make sure there is enough time to give feedback "because otherwise it just becomes one of those things that HR pulls out of the drawer and then we think everything's fine and it may not be" (Emma, 268–270). This statement shows that Emma reflects about her professional practice and that she can articulate the limits of a personality test when used in development contexts. Emma adds that "learning is not necessarily going to be nice and linear, and smooth and sexy" (Emma, 383–385) and explains that participants could be learning the most when they are allowed to experience being outside the comfort zone, which can be triggered by personality tests or other developmental tools.

3.3 | Cautious-avoiding

As a third strategy, we experienced that some professionals are quite cautious about their use of personality assessments, thus avoiding or minimizing the use of personality tests in developmental contexts. Overall skepticism stems from negative personal experiences with some tools. A perceived high risk of pigeonholing leads to cautious behavior around personality tests.

In our data, we identified two HRD practitioners who seem to conduct their practice following the *cautious-avoiding* strategy. Sophie, a learning and development (L&D) adviser who works in public administration, experienced the use of personality tests in a negative way in that she "found the model limiting and misused" (Sophie, 399). Sophie explains the situation that she was in:

"I thought of another method that I experienced in my last job that was of the Insights model which divides people into four types/colors...I was typed a blue type and therefore my manager really stereotyped me. By this, I mean that he told me several times (in meetings or face-to-face) that I should try to be more of a different color because I would make the working situation more difficult or less pleasant. He was bright yellow and wanted people to try to be as positive and less organized" (Sophie, 388–389; 395–399).

This negative experience has influenced Sophie's professional practice, and she now avoids the use of personality tests in her work in L&D.

Also using the *cautious-avoiding* strategy, Hans understands that personality tests can be used in the wrong way and states that "we need to be very careful, because people can take the result of the assessment (as) a negative sign for them, for their career" (Hans, 199–201). Hans, who works as an HR business partner at an industrial packaging company, refers back to an incident he witnessed in which a manager looked at the feedback report during a development discussion and said, "Look, I don't understand how you are able to work with all of that. We need to fix it urgently" (Hans, 198–199). Hans was shocked by this statement and decided to adjust his professional practice accordingly. He now prefers to take a softer approach when looking at areas of development based on the test results; he believes that employees otherwise develop a "very defensive attitude" (Hans, 207), which then makes the conversation "just offense and defense" (Hans, 208).

When asked about personality test choice, Hans talks about the DISC test and how he finds it unsuitable for developmental purposes: "In general, a DISC test for me is not a reliable source of information because it changes over time and it depends on the mood the candidate was feeling, during filling the questions" (Hans, 38–40). Hans's negative experiences seem to have influenced his professional practice, and Hans approaches this subject area with much more caution than other HRD professionals who were interviewed in this study.

3.4 | Cautious-embracing

A variation of the previous approach, the fourth strategy—named *cautious-embracing*—describes a "light-use" adoption of personality tests in the workplace. Different from the *cautious-avoiding* strategy, having more positive experiences with personality tests—or a turnaround from negative to positive experiences—fuels this approach. The personality test is not seen as a test or assessment in this approach; it is rather a conversation starter and a learning instrument that fosters self-awareness.

In our data, we identified four HRD practitioners who appear to lead their practices based on the *cautious-embracing* strategy. Katie, a professional development adviser in higher education, has experienced the use of personality tests in a similar negative way to Sophie and Hans, as described in the previous section. At some point in her career, Katie was part of a team-coaching session with MBTI that was handled badly in Katie's view. The external consultant took sides by revealing her own profile, therewith polarizing the group even further. "The outcome was that the others were completely the opposite of me or if there was one letter difference...They were highly introverted, whereas I was highly extroverted" (Katie, 109–112). The team coach positioned herself with all the other colleagues on the one end of the spectrum, and Katie felt stigmatized because her personality test result was different from the majority of the group. "I was just very upset. I said, 'I can see perfectly well why I don't fit in here' but the consultant I think she never should have revealed that she was also ISTP²" (Katie, 143–144). Later on, Katie became a management development coach herself and has since tried to support "preference minorities" better in her own workshops. Katie's own experience has shaped the way she introduces and uses personality tests in her professional practice; she uses an approach that emphasizes test results less and works more with the dynamics of the team. About the use of personality tests, she summarizes, "I do it light" (Katie, 409). Katie's account explains how her negative experience has led her to become extremely cautious about personality test use and how she has managed to reframe her own practice by following a light-use approach.

Bob, the vice president of organization development at a technology services company, equally expresses caution in situations when people "sing about something" (Bob, 265) that matches exactly what they wanted to hear

rather than embracing something that helps them change and adapt. Bob acknowledges that some people love psychometrics so much that it almost becomes "a gospel" (Bob, 245) to them to the extent that they start being "evangelical" (Bob, 245) about their test feedback. Bob has worked with groups who are more pragmatic and who actually feel strongly against the people who do get evangelical about it: "If you get a leader running around saying, 'I'm ENTJ³,' you look at him and go, 'Stop talking crap.' Talk to me like you're a real person" (Bob, 273–275). Bob feels that he himself falls into that category of people who cannot easily tolerate those who are evangelical about personality tests, and he, therefore, follows the *cautious-embracing* strategy in his own practice.

Reeta, who works as head of HR at an industrial wood products company, points out the importance of selecting the right person to deliver the personality test feedback. She explains that managers can sometimes take the test result as "absolute gospel" (Reeta, 138) and that the tendency has two sides: On the one hand, it is great to see that people can identify with the test result. On the other hand, managers might "start performing perhaps even more in an extreme version of themselves" (Reeta, 140–141), a tendency that Reeta examines critically and requiring of a skilled facilitator. Reeta summarizes, "critical reflection is good but again is down to the skill of the person giving feedback and how they deliver this to ensure the best possible environment" (Reeta, 161–162).

Reeta brings up another interesting aspect when she warns professionals that they "really have to watch for people pigeonholing themselves" (Reeta, 57–58). What she means by self-pigeonholing is the situation when test takers take MBTI or TMP feedback from the personality test too literally. Instead, Reeta encourages people to look beyond the immediate test outcome, and she also stresses the fact that personality tests measure preferences, not actual behavior. Because of its openness of scales, she likes the occupational personality questionnaire (OPQ), as it doesn't "really come out as one 'right or wrong' type" (Reeta, 60–61). Reeta believes that a tool is a "conversation starter with a value and purpose," (232–233) which defines how she uses the personality test in a *cautious-embracing* way.

3.5 | User friendly-pragmatic

Professionals who pursue the fifth strategy frame personality tests as simple tools that should be easy to understand, are user-friendly, and have high test-taker acceptance. Test feedback that makes it easy for participants to recognize themselves is valued more highly than overly scientific or complex tools. Scientific evidence or test qualities are rarely mentioned as decision-making criteria in test selection. The orientation in this approach is practical rather than theoretical. Its decision-making logic is deeply pragmatic, focusing on choosing tools that are user-friendly and work best from the test-taker perspective.

In our data, we found three HRD practitioners who seem to conduct their practices following the *user friendly-pragmatic* strategy. Jackie, an L&D manager at a research center, encountered the MBTI as her first personality test. She remembers that she connected with the tool quite well because "I was really looking at myself, probably for the first time ever, really honestly. What I got back reflected me" (Jackie, 45–46). Jackie has continued using the MBTI, and she has added a couple of other tools to her portfolio, including the TMP and OPQ. When dealing with criticism from test takers, Jackie explains that the decisive factor is how well a profile describes a person. "If they think it's accurate, then they don't mind too much being put in a box. If they don't think it's accurate, then often that's when they resist it" (Jackie, 383–385). With the MBTI, for example, Jackie appreciates that test takers can work out what is a better fit for them in comparison with the self-reported type they receive after completing the questionnaire. She explains that this is not the case for the Insights or TMP assessments, in which the test taker receives a "lovely, printed report, which is nice if that reflects how you see yourself; but actually, if you get something else back, then that's when. I think, the resistance often sets in" (Jackie, 388–390).

Saskia, the HR director at a consumer good company, follows the same pragmatic approach. Before moving to the corporate office, she worked as an HR business partner at a manufacturing site where she used to administer different tests, such as My Motivation, MBTI, and Management Drives. When comparing different personality tests, Saskia finds that My Motivation is accessible for everyone while MBTI is "too sophisticated," which in her view makes it harder for participants from a manufacturing environment to grasp it. Participants find the color test the

easiest as they can implement that concept into their daily language: "Look at your Blue today" or "We need more Red" (Saskia, 145). Saskia finds that the colors help depersonalize the feedback, which makes it easier to give that feedback. Saskia reflects on different tools and why she uses them: The MBTI, despite it being the more research-supported and "clearly more valid test" (172), does not always work effectively, for example, in factory environments. That's why her team decided to use My Motivation with the focus on encouraging dialogue among people, giving and receiving feedback, and reflecting on own behavior. Saskia confirms that "the color test worked the best, because people find it easiest to talk about colors" (Saskia, 143–144), a statement that confirms the *user friendly-pragmatic* approach that Saskia is taking.

3.6 | Knowledgeable-accommodating

Finally, comprehensive knowledge of the testing industry characterizes the sixth strategy, including knowledge of products, professional organizations, and standards. Awareness of ethical guidelines exists, and this approach allows for some flexibility when playing "according to the rules." For example, HRD practitioners pursuing this strategy find it permissible to break testing guidelines occasionally when required in a given situation or demanded by a client. Their reasoning is that a certain degree of flexibility is needed when it comes to accommodating client needs—a focus that shows strongly in this strategy. For example, a professional who generally does not use the MBTI might reason that it is okay to accommodate a client's need to use the tool despite the professional not being accredited for it.

In our data, we identified two HRD practitioners who appear to lead their practices following the knowledgeableaccommodating strategy. Nathan, an independent consultant who has been working in L&D across different industries for just under 20 years, is an insider within the personality-testing industry as well as being knowledgeable about its numerous tools. Nathan warns how easily a tool could be overrated and what that could lead to, giving an example of the airline company he used to work for: "They want to do it with lots of teams because they see it as the panacea for everything. You have to be really careful. You have to stick to your disciplines and why you want it...If you're not careful, people will treat it a bit like (astrological) star signs or something" (Nathan, 24-28). In this way, Nathan is knowledgeable about personality tests and their limits. When selecting tools for a specific client project, Nathan first asks the client to identify the goal. He then checks what has been done so far. He explains that many companies want to do refreshers of personality profiles that they had done in the past or they want to explore certain development areas further. For example, they might want to look at how a person "comes across" (Nathan, 172) and what his or her "blind spots" (Nathan, 172) are. Nathan's task is to find the right tool that fits with the intervention the client is looking for, because "that makes the conversations easier" (Nathan, 174). Although Nathan is not accredited, he has also run some Myers-Briggs sessions because the clients had asked him to. Nathan did not feel comfortable doing them at first. "I said, 'You do know I'm not trained in it.' They say, 'Oh yes, but you are trained in [the psychological school of] Jung, aren't you?' I thought, 'I've read his books, if that counts'" (Nathan, 138-141). Nathan explains that he can facilitate his way through anything "if you have to" (Nathan, 142), showing that he accommodates clients' wishes even if he is not accredited in that specific personality test—an example of the knowledgeable-accommodating strategy.

3.7 | Strategy clusters

Looking at the six strategies, we observe a divide between two strategy clusters:

Cluster 1-2-3: Ethical-protective, Scientific-selective, and Cautious-avoiding

Cluster 4-5-6: Cautious-embracing, User friendly-pragmatic, and Knowledgeable-accommodating

When comparing years of experience across the two strategy clusters, we find that HRD practitioners in Cluster 1–2–3 have on average two and a half more years of test experience in comparison with practitioners who employ a strategy from Cluster 4–5–6. We did not find a discernible difference between (internal) HR practitioners and

(external) consultants as to how their work environment had influenced the choice of strategy cluster. Within Cluster 4–5–6, we notice that all internal HR practitioners follow the 4. Cautious-embracing and 5. User friendly-pragmatic strategies, in comparison with consultants who could be found to follow more the 6. Knowledgeable-accommodating approach.

4 | DISCUSSION

The aim of this article was to explore how individual meaning-making and organizational sensemaking theories help to explain the widespread and sustained use of personality tests in developmental contexts among HRD professionals. Interviews with 18 HRD professionals were conducted, from which individual meaning-making and organizational sensemaking structures were distilled based on grounded theory and inductive analysis. Through pattern analysis, six strategies were established that describe professionals' practical approaches in personality test use. These strategies illustrate professionals' approaches when introducing a test, when administrating it, and when dealing with test criticism and concerns, thus depicting the professionals' action theories. We find that HRD professionals form their "strategy as pattern" model (Mintzberg, Lampel, Quinn, & Ghoshal, 2002), where an approach to test use is realized and recognized over time rather than being planned or intended. Our findings align with the "strategy as practice" concept that describes a situated and socially negotiated activity where practitioners shape their strategy "through who they are, how they act and what practices they draw upon in that action" (Jarzabkowski, Balogun, & Seidl, 2007, p. 6).

We note that the Cluster 1–2–3 describes professional practice that holds a critical stance toward test use. For example, type-based tests are more frequently challenged, and reasons for using alternative trait-based tests are clearly presented. It seems that all three strategies in Cluster 1–2–3 are highly reflective and rooted in cognition and beliefs, similar to the qualities of *double-loop learning* (Argyris & Schön, 1974, 1996) whereby professionals are willing to change mental models to adapt their decision-making rules. Practitioners who practice one of these three strategies have on average more years of experience in the field and an educational background in psychology. Also, this cluster of strategies relates to deeper personal experiences and more complex meaning-making structures in personality testing, including the reflection on critical incidents with test takers. The focus in these strategies leans toward "doing the right thing"—a principle strongly anchored in all of these three strategies—with a higher use of trait tests in their practice. These findings are in line with Furnham and Jackson's (2011) survey results that had revealed evidence that age and educational qualifications positively influenced the perceived usefulness of psychological tests in general.

In comparison, the remaining three strategies in Cluster 4–5–6 tend to be less critically reflective on test use and professional practice in general. The individuals' reasoning and construction of meaning is more similar to *single-loop learning* (Argyris & Schön, 1974, 1996) in which professionals take certain test limitations for granted without questioning, through individual or collective inquiry, their work tools or their use in HRD (Fenwick, 2003). These "less reflective" strategies focus on perfecting test practice or "doing things right"—whether this is in relation to spending less money or creating more value for organizational stakeholders. In line with what might be considered best practice encountered in Cluster 4–5–6, professionals use a sociolinguistic meaning perspectives that depict personality tests as conversation starters and instruments for personal discovery. The use of language here is remarkable; it seems as if the word "test" would provoke unpleasant reactions with test takers and organizational stakeholders, so this word is better avoided: "This is not a test." These strategies stand out as a cluster, as it is more common to actively defend one's own practice by constructing acceptable reasons to continue doing what these professionals have done in the past. For example, reasons were articulated why it is okay to keep applying simplified type-based tests (while knowing there were alternative tools available) or why it is permissible to administer a specific test once in a while without being accredited (while acknowledging that ethical practice is important for HRD professionals).

The entanglement between practitioner and tool seems tight in comparison with the lower intensity of interaction that can be observed in the first strategy cluster.

4.1 | Cognitive dissonance in test use

This entanglement and the professional tools observed in Cluster 4-5-6 seem at first jarring; however, they might be explained by Festinger's (1962) theory of cognitive dissonance, which details how individuals are motivated to remove dissonance in situations where two inconsistent beliefs provoke feelings of discomfort. In the case of 6. Knowledgeable-accommodating strategy, a professional who is aware of ethics guidelines in personality test use is put into a dilemma when asked by his or her boss to deliver a workshop involving a test for which this professional is not accredited. As a noncredentialed professional, the individual ought not to execute that task. At the same time, the thought of saying no to the boss creates a feeling of discomfort, also referred to as "cognitive dissonance" (p. 17). This unpleasant tension motivates the professional to reduce the dissonance by adding or subtracting cognitions. The professional could also change his or her behavior to reduce the inconsistency; however, social group membership, especially when working internal to an organization, might inhibit behavioral change due to the power of normative influence (Matz & Wood, 2005). In the case of this professional, he or she agrees to administer the test, supported by the cognition that the boss has endorsed the decision ("It must be okay—he is my boss"), or eased by the thought that it will be a one-off activity ("It can't be too bad if I do it only once"). The theory of cognitive dissonance might thus explain why professionals move from a 2. Scientific-selective to a 5. User friendly-pragmatic strategy when confronted with dissonance that can more easily be resolved by changing a previously held belief. It could be proposed that cognitive dissonance influences the choice of strategies and hence the interrelatedness of professionals with colleagues, organizational structures, and tools of practice. To check whether this proposition is true, we need to understand how professionals move among different available strategies. Are professionals who embrace personality tests in a highly cautious way (4. Cautious-embracing) more likely to move to 3. Cautious-avoiding when confronted with dissonance in the form of test criticism? Also, do less-experienced and/or less-educated professionals generally tend to be more accommodating, pragmatic, and embracing as they might have been when confronted with less-challenging cognitions? Our findings indicate a certain tendency that confirms this proposition; however, we also note that some professionals were younger in age (Sophie) or had "only" a bachelor's degree (Stephanie) and that these individuals still exhibited a critical mind-set and a great concern with current test use while employing 2. Scientific-selective (Stephanie) and 3. Cautious-avoiding (Sophie) strategies.

4.2 | Alternative lens: Paradox in organizations

The "paradox in organizations" perspective gives an alternative lens for interpreting organizational sensemaking findings that may seem irrational and counterintuitive. According to Lewis and Smith (2014), "a paradox perspective shifts a fundamental assumption in organizational theory. Traditional theory relies on rational, logical and linear approaches, whereas a paradox perspective emerges from the surprising, counterintuitive and tense" (p. 143). Our starting point was to find out how HRD professionals construct meaning from and make sense of their personality test-use practice despite the tests' known shortcomings—an apparent paradox that motivated us to conduct this research. According to our findings, more internal HRD professionals, such as HR business partners, choose the 4. Cautious-embracing and 5. User friendly-pragmatic strategies, which might suggest that organizational actors narrow their attention to factors under their control and, therefore, will embrace and implement tests in a more pragmatic way. They administer tests that are more within their understanding; consequently, they collaborate more closely with colleagues, consultancies, and test publishers that apply a similar narrow and tool-based focus. In their drive toward cognitive consistency (Festinger, 1962) and influenced by members of their social group (Matz & Wood, 2005), organizational actors also strive for simplicity (Miller, 1993) by focusing more narrowly on a single theme or approach, or in our case, on a single personality test.

In our study, HRD professionals who tend to follow the 4. Cautious-embracing, 5. User friendly-pragmatic, or 6. Knowledgeable-accommodating strategies seem to feel that type tests are more under their control and within their understanding in comparison with more elaborate or complex trait tests. As these practitioners cling to their preferred priorities—in close entanglement with the tools they know best—HRD professionals who tend to follow the 1. Ethical-protective, 2. Scientific-selective, or 3. Cautious-avoiding strategies illustrate the opposite polar in this field of professional tension as they clearly differentiate themselves from those who are perceived as less ethical, scientific or cautious in their test use. Hence, the paradox perspective gives us a foundation to understand that psychologists versus nonpsychologists and trait-based versus type-based tests are "socially constructed polarities that mask the simultaneity of conflicting truths" (Lewis, 2000, p. 761).

So what could be these parallel, conflicting truths in our case of personality test use in developmental contexts? Maybe it's true that the "terror of color" (Bernhard) coexists with the "ENTJ gospel" (Bob), that "non-linear learning" (Emma) complements "depersonalized feedback" (Saskia) and that ethical guidelines (Lila) accompany flexible approaches (Nathan) in test administration. It would be too easy to say that that one strategic approach of test use is right and the other is not, but we need to acknowledge that HRD professionals are challenged by cognitive dissonances and paradoxical situations in their organizational practices on a regular basis.

4.3 | Research limitations

We acknowledge several research limitations of this study. The relatively small sample size (N = 18) allowed us to conduct an exploratory study that future research studies can build on. We also note that our strategies were not confirmed through statistical analysis. Because of the qualitative nature of this article, the findings on strategies were constructed based on the parameters available "by hand," not involving factor analysis. Hence, the strategies described here are the result of an exploratory approach that runs the risk of being overlapping, incomplete, or leaving out detail.

HRD professionals who were highly engaged with personality tests in their practice were interviewed in this study. As this was one of the sampling criteria, it is not surprising that all participants interacted with personality tests to some degree and that only a small number of professionals displayed *cautious-avoiding* as their strategy due to our systemic sampling preference.

Finally, the first author's positionality and insider bias to the personality-testing industry has most likely influenced the way interviews were conducted and data were analyzed (Anderson, 2017). In addition, we are aware that the countries of location of the research team in the Western world will have influenced the analytical outcomes and interpretations of the findings. Therefore, we systematically and consistently scheduled peer-debriefing sessions, during which the other two authors would challenge and critically evaluate the logic applied to the research and analysis process as well as question the member-checking procedure that was followed. Through these measures as well as the peer-review process, we hope to have successfully managed the intersubjectivity in conducting this study and in presenting its findings.

4.4 | Future research

We encourage follow-up studies to stimulate further debate among HRD professionals on how individual meaning-making and organizational sensemaking structures influence their strategic choices when it comes to personality testing in developmental contexts. For example, one could look into the practitioners' key drivers or investigate further the implications of personality test use in developmental settings, for instance, from the viewpoint of the test taker.

Another important area of future research stems from the fact that HRD professionals with active personality test practices were interviewed, but those who had never used those tests or who had ceased to use such tests were not included in the study. In a comparative analysis, users and nonusers could be juxtaposed along the question of how meaning-making and sensemaking theories influence the decision of a specific tool to use.

Although the sample comprised participants with a range of (mostly Western) nationalities, further research to examine the issue in other national contexts, for instance, if and how personality tests are applied in Asia, may be appropriate.

Finally, future studies could take the same theoretical foundation and apply it to HRD tool use outside personality tests. For example, a future study could investigate how individual meaning-making and organizational sensemaking influence the use of 360° feedback and self-review tools among different HRD professionals.

4.5 | Practical implications

How can our findings help improve this specific practice of using personality tests in developmental contexts? First, by becoming more aware of their own meaning-making structures and organizational dynamics in test use, HRD professionals can broaden their approaches and make more conscious decisions when it comes to personality test use in developmental contexts. Second, for client organizations that receive management development services from external consultants, our findings give encouragement to probe these consultants in terms of how they reflect on their practice *in* and *on* action, how they deal with uncertainties and limitations of selected tests, and how they manage cognitive dissonances and paradoxes that exist in organizations. Finally, for test takers and those who encounter personality tests as participants of management development or team-coaching sessions, this is a good reminder to remain open, curious, and critically reflective about tools and practices that they encounter in managerial life.

5 | CONCLUSION

In proposing six strategies, we acknowledge an inherent risk of overgeneralizing and hence pigeonholing professionals' approaches into predefined categories. Aside the emergent nature of these approaches, this is not the intent here; laying out strategies is rather an attempt to make visible those tendencies in personality testing that can be seen in HRD practice, with the aim of making sense and constructing meaning to explain the widespread and sustained use of personality tests in developmental contexts among HRD professionals. After all, this is not a test—but an exploration of meaning-making and sensemaking structures designed to illustrate different and perhaps paradoxical approaches to personality testing in HRD.

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ENDNOTE

¹For a list of personality test acronyms and their descriptions, see reference Table A1 in Appendix A.

²ISTP in the MBTI stands for: Introvert (I), Sensing (S), Thinking (T), and Perceiving (P).

³ENTJ in the MBTI stands for: Extravert (E), Intuition (N), Thinking (T), and Judging (J).

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APPENDIX A Table A1 Personality assessment abbreviations

	Abbreviation	Personality test description	Category
1	NEO PI-R	Neuroticism, extraversion, openness personality inventory (revised)	Trait
2	OPQ	Occupational personality questionnaire	Trait
3	Hogan	Hogan personality inventory (HPI); Hogan development survey (HDS); motives values preferences inventory (MVPI)	Trait
4	FIRO-B	Fundamental interpersonal relations orientation—behavior	Trait
5	Big Five	Reflector Big Five	Trait
6	Drives	Management drives	Type
7	MBTI	Myers-Briggs type indicator	Type
8	TMP	Team management profile	Type
9	DISC	Dominance (D), inducement (I), submission (S) and compliance (C)	Type
10	Insights	Insights discovery preference evaluator	Type
11	My motivation	My motivation insights, also referred to as spiral dynamics	Type
12	Belbin	Belbin team roles	Other

APPENDIX B: INTERVIEW GUIDE

Thank you for participating in this interview. I am interested in your professional experience with personality tests in HRD.

- Where and when do you use them for development in your organization?
- Do you use any personality tests specifically? Why these?
- Who are at the receiving end of these personality tests? Who are your test takers?
- How do you acquire those personality tests? (⇒ Publishers and intermediaries; factors that influence decision making)
 - Do you use intermediaries, like coaches or trainers who are accredited in administering those tests? Or: Do you work directly with publishers?
 - How do test publishers and intermediaries influence you in choosing and using a specific test?
 - What role does the _____ professional organization play in your decision making? (Check interview form)
- When you use these personality tests in HRD, how would you describe the main purpose? (⇒ Purpose, implementation success. satisfaction/dissatisfaction)
 - How do you reason the use of a psychometric test?
 - How do you know that you have achieved this purpose?
 - How satisfied are you with the use of personality testing in this context?
- 4. Personality tests are often criticized for supporting "pigeonholing" rather than critical reflection and development. How do you see them? (⇒ Criticism; dealing with criticism; reasons of nonuse; repurposing)
 - What are your concerns when using personality testing in HRD?
 - · How do you negotiate these concerns/dilemmas?
 - Have you ever had a "difficult" test taker who argued the use of these tests? How did you respond?
- What other "tools" do you use to encourage (self-)reflection in the workplace? (⇒ Other tools; purpose; concerns)
 - When and where do you use these other tools?
 - And with what purpose?
 - What needs, concerns and dilemmas do you have using those tools?
- 6. Is there anything else that you would like to add?