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What characterizes outpatient nutrition therapy interventions for obesity? A survey of nutrition professionals in Germany

Part 2: Counseling approaches, behavior change interventions, and underlying qualifications

Janine Ehret, Nanette Stroebele-Benschop

Abstract

This survey of outpatient nutrition professionals (NPs) aims to provide indications for both the use of counseling concepts derived from various therapeutic schools and the use of behavior change interventions. The participating NPs (n = 130) reported holding numerous additional qualifications, most frequently in person centered/client centered counseling. Behavior change interventions were widely applied. Supervision played a minor role and should be established more firmly in line with quality assurance recommendations. To enable a comparable and transparent assessment of the relevance of different counseling approaches and interventions within nutrition therapy interventions, a consistent understanding of terminology should first be established among NPs.

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Introduction

The involvement of nutrition professionals (NPs) in weight loss interventions is considered one of several elements that can improve the effectiveness of such programs [1]. However, the counseling approaches used by NPs in this context are usually not described in detail [1]. According to Nußbeck, counseling approaches derived from various therapeutic schools include psychoanalytically oriented counseling, person centered/client centered counseling, cognitive behavioral therapy oriented counseling, systemic approaches, and solution and resource focused counseling. These counseling approaches give rise to methods or intervention techniques that may be specific to a given approach or applicable across different approaches [2]. Also, information on the use of such methods or interventions and the underlying qualifications are frequently lacking in studies on weight loss [e.g. 3, 4], even though they are regarded as integral components of process oriented nutrition counseling and therapy [5]. Among the key characteristics of nutrition therapy is that patients "receive support in a client centered, collaborative counseling situation that takes their competences and needs into account and is oriented toward their life situation" [6, p. 7]. In this context, evidence-based counseling methods should be used [6].

Findings from an earlier survey of NPs in Germany showed that 75% of respondents used behavioral treatment methods as part of obesity treatment. However, this study also pointed to uncertainties regarding the underly-

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ing qualifications [7]. Endres et al. further point to the use of behavior change elements from different therapeutic schools, as well as the occasional use of elements of systemic therapy, as part of the work of NPs. However, as in other cases, no further information is provided regarding their qualifications [8]. Morgan Bathke et al. specified which of the included studies incorporated behavior change components (22 of the 31 interventions delivered exclusively by NPs) but did not conduct a comparative anal-ysis regarding these components. They noted that differences in the competences of NPs may be one of several possible explanations for the substantial heterogeneity in outcomes of studies on the effectiveness of nutrition interventions. The authors recommend examining "the effects of different intervention components and strategies on effectiveness" in future studies [9, p. 1658]. The German Coordination Committee for Quality Assurance in Nutrition Counseling/Therapy and Nutrition Education *(Koordinierungskreis zur Qualitätssicherung in der Ernährungsberatung/-therapie und Ernährungsbildung)* likewise concludes that "the counseling and therapeutic process itself, as well as the problem-solving process initiated in clients/patients, is decisively shaped by the professional, counseling-methodological, and social competence of the nutrition professional" [6, p. 8].

Based on an online survey, this study aims to examine what characterizes nutrition therapy interventions (NTI) for obesity with regard to the underlying counseling concepts, counseling methods, and intervention or communication techniques, and how nutrition professionals are qualified in this respect. This study aims to illustrate the added value that a shared understanding of terminology and systematic documentation of such interventions and methods would offer in light of the required evidence of effectiveness for process-oriented nutrition therapy. In addition to Part 1 (in Ernährungs Umschau 11/2025), it will be explored whether, based on the recorded characteristics, success factors for a therapeutically relevant weight loss (>5% of initial body weight [10]) can be identified.

Methods

Recruitment took place from August 2021 to January 2022 via newsletters, email distribution lists, and the websites and social media channels of professional associations and scientific societies. In line with Part 1, and in the context of obesity as a chronic disease, the term nutrition therapy is used throughout instead of nutrition counseling, and the umbrella term nutrition therapy interventions (NTIs) is applied. NTIs include individual nutrition therapy, prevention courses, and other outpatient programs involving NPs (see Part 1). As described in Part 1, no quota sampling (e.g., with regard to employment setting) was planned during recruitment. Because this resulted in unequal group sizes, subgroup analyses are largely omitted in this part as well. NPs without a state-certified dietitian qualification or a university degree (university or university of applied sciences) with a clear focus on nutrition (n = 5), and those without a valid continuing education certificate issued by the aforementioned institutions (n = 3), were excluded from the analysis. The online survey was conducted using Unipark (Tivian XI GmbH). In addition to the parameters described in Part 1, participants were asked about their qualifications regarding counseling and communication approaches, and methods to support behavior change. Furthermore, the use of behavior change interventions recommended in the obesity prevention and treatment guideline available at the time of the survey was assessed [11]. In addition, participants were asked to what extent health and behavioral psychology as well as communication, conversation, and counseling techniques had been covered in their university studies or vocational training as well as in continuing education. The extent to which these aspects differ regarding the estimated average weight loss (in %, see Part 1) is also examined in this manuscript. Except for one open question on the most useful continuing education content, all information was collected using closed questions with an additional semi open response option ("other, please specify"). Descriptive results are presented as percentages or means with 95% confidence intervals. Pearson's Chi square tests, Fisher's exact tests, and post hoc tests (Bonferroni correction) were conducted. The significance level was set at $p < 0.05$. More detailed information on recruitment, data collection, and analysis can be found in Part 1 of this manuscript.

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Results

The sample comprised 130 NPs, of whom 26.9% were dietitians, 66.2% held a university degree in nutrition, and 6.9% reported having both qualifications (see Part 1). 66.2% were between 45 and 65 years of age, while the remaining NPs were between 19 and 44 years old. About half of the participants (54.6%) had been working in nutrition counseling/therapy for more than 20 years, 22.3% for 10–20 years, 9.2% for less than 10 years, and 13.8% for less than 5 years. The average weekly working time in nutrition counseling/therapy was 25.0 [23.0–27.0] hours, of which on average 49.8% [45.6–54.0] was spent with patients with obesity. In university studies and vocational training, approximately three quarters (73.8%) of the respondents reported that content on communication and counseling techniques had been covered, while 63.1% reported aspects of health and behavioral psychology. A total of 41.5% and 21.5% of NPs, respectively, indicated that this took place in the form of seminars/teaching units that also included experiential learning components and supervision in the area of communication, conversation, and counseling techniques (once: 13.8%; several times: 27.7%) or health and behavioral psychology (once: 9.2%; several times: 12.3%).

Within the framework of the recommended certification by professional associations and the German Nutrition Society *(Deutsche Gesellschaft für Ernährung, DGE)* e. V., a wide range of continuing education and training opportunities is offered. On average, each NP had completed six multi day courses (mean 6.18 [5.5–6.9]) in various counseling or communication approaches, and methods to support behavior change. A minority of 6.2% of participants had not yet attended any multi day training of this kind. About two thirds of NPs reported additional qualifications in person or client centered counseling, and more than half reported training in Motivational Interviewing (MI). Longer term or multi year training programs in counseling methods offered by member associations of the German Association for Counselin (*Deutsche Gesellschaft für Beratung*, DgfB), which include, among other elements, 70 or more supervision sessions, peer group supervision (intervision), and at least 50 hours of experiential learning [12, 13], had not been completed by 67.7% of respondents. The most frequently reported programs of this kind (5.4%) were systemic training courses certified by the respective German-speaking professional associations (*Systemische Gesellschaft*, SG; *Deutsche Gesellschaft für Systemische Therapie, Beratung und Familientherapie*, DGSF), or comparable institutions. Independently of such training programs in several counseling methods, 18.5% of respondents reported certification as nutrition counselor/DGE. This curriculum also includes peer group supervision (intervision) and reflection on one's own counseling behavior, although to a lesser extent. Supervision sessions are not explicitly specified [14]. In the training programs for obesity trainers (*Konsensusgruppe Adipositasschulung für Kinder und Jugendliche*, KgAS: 10.0%) and certified obesity therapists (*Arbeitsgemeinschaft Adipositas im Kinder- und Jugendalter der Deutschen Adipositas-Gesellschaft*, AGA: 5.4%), supervision is included to a lesser extent. The same applies to graduates of the training program at the Frankfurt Center for Eating Disorders (*Frankfurter Zentrum für Essstörungen*, FZE, 6.9%) [15–17]. Further details on continuing education courses and certificate programs reported by more than 5% of respondents are presented in ◆ Figure 1.

Multi year training programs in counseling methods offered by member associations of the German Association for Counseling (DgfB) [13] were completed by less than 5% of respondents for person centered counseling (2 or 3 year programs; *GwG – Gesellschaft für Personzentrierte Psychotherapie und Beratung e. V.*). Participation in multi-year training courses in counseling methods designed specifically for NPs, which include a comparable amount of supervision, peer group supervision, and experiential learning, was also reported by less than 5% of respondents for systemic-integrative nutrition therapy and counseling (Systeb®, isogm) and depth-psychological nutrition counseling (*Akademie Beratung & Philosophie GbR*, AKABP) [18, 19]. In addition, a few participants reported completion of NLP practitioner training (*Deutscher Verband für Neuro-Linguistisches Programmieren*, DVNLP), licensure as non medical practitioner for psychotherapy *(Heilpraktiker*in für Psychotherapie)*, or training as psychological counselor. Less frequently reported qualifications included completion of association-specific courses *(Zertifikatskurs Adipositas VDD [Verband der Diätassistenten e. V.])*, a university certificate in nutritional psychology (*Hochschulzertifikat Ernährungspsychologie*, University of Applied Sciences Fulda), qualifications in co-therapy, acceptance and commitment therapy, emotion focused therapy, motivational interviewing *(GK Quest Akademie GmbH)*, prof-e.a.t. trainings (prof-e.a.t ESSperts D-A-CH-I), and courses on provocation and humor in counseling, WOOP[1], and various other coaching programs. Individual respondents also reported qualifications such as burnout and stress counselor or relaxation therapist. Educational/pedagogical qualifications in the form of university degrees in adult education or medical education were likewise mentioned by a few participants. Several NPs further indicated that not all relevant training activities in this area could be listed, as

[1] Wish–Outcome–Obstacle–Plan: self-regulation technique, mental contrasting with if-then plans

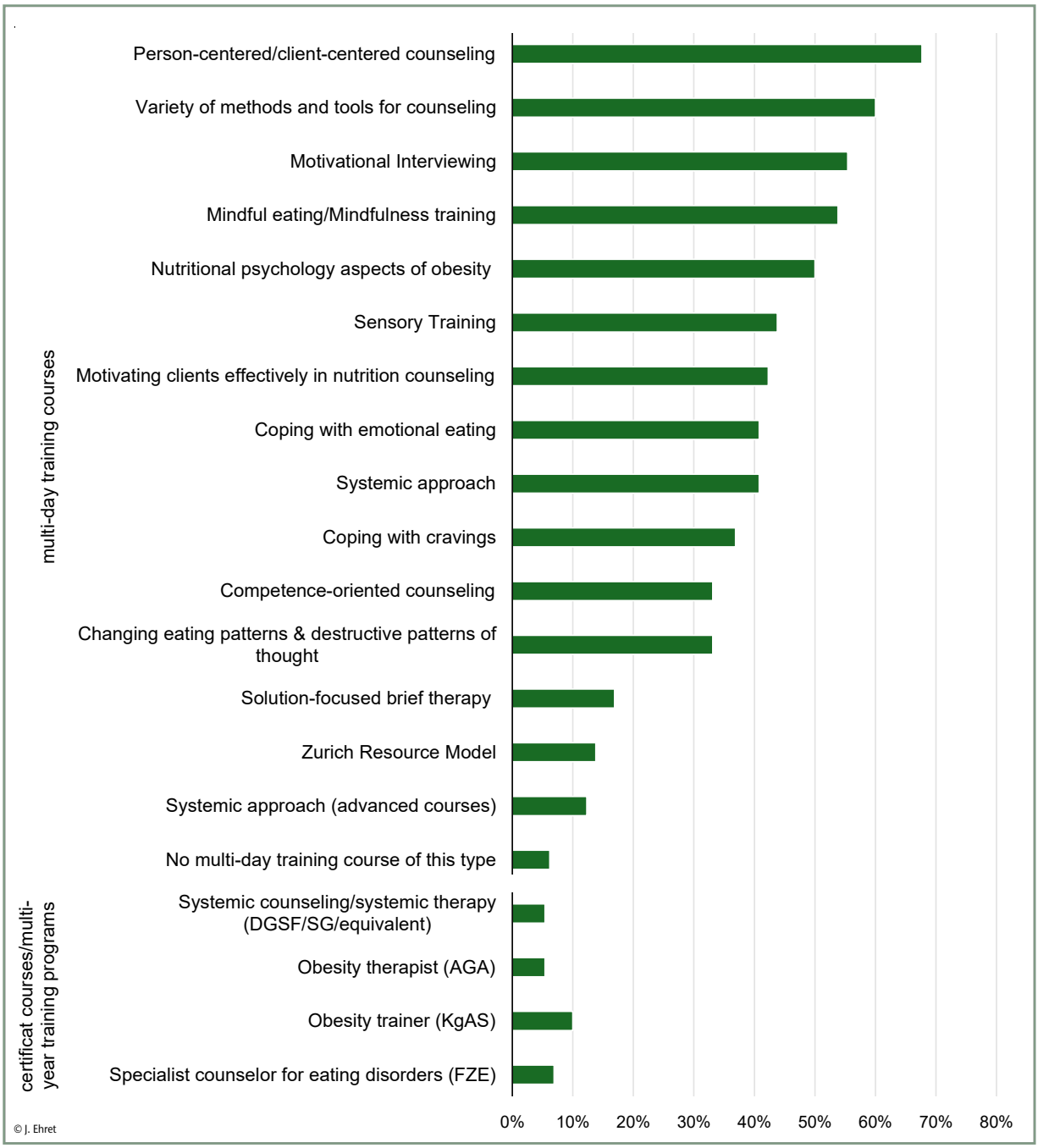

Fig. 1: **Continuing education and training in counseling and communication approaches, and methods to support behavior change (n = 130)**
AGA: Obesity Working Group in Childhood and Adolescence of the German Obesity Society (DAG); DGSF: German Association for Systemic Therapy, Counseling and Family Therapy; FZE: Frankfurt Center for Eating Disorders; KgAS: Consensus Group for Obesity Education; SG: Systemic Society

they had engaged in continuous professional development over several decades. By contrast, qualifications related to nutrition therapy for comorbidities were reported more frequently, such as diabetes counselor/assistant *(Diabetesberaterin/–assistentin DDG [Deutsche Diabetes Gesellschaft])* and lipid metabolism therapist *(Fettstoffwechseltherapeut*in AdiF [Akademie für differenzierte und integrale Fettstoffwechseltherapie])*, which were held by 8.5% and 20.8% of respondents, respectively.

The surveyed NPs reported using an average of seven behavior change interventions (mean 7.2 [6.7–7.6]; ◆ Figure 2). In open ended responses, the promotion of self care and the recognition of one's own needs were additionally highlighted as important aspects.

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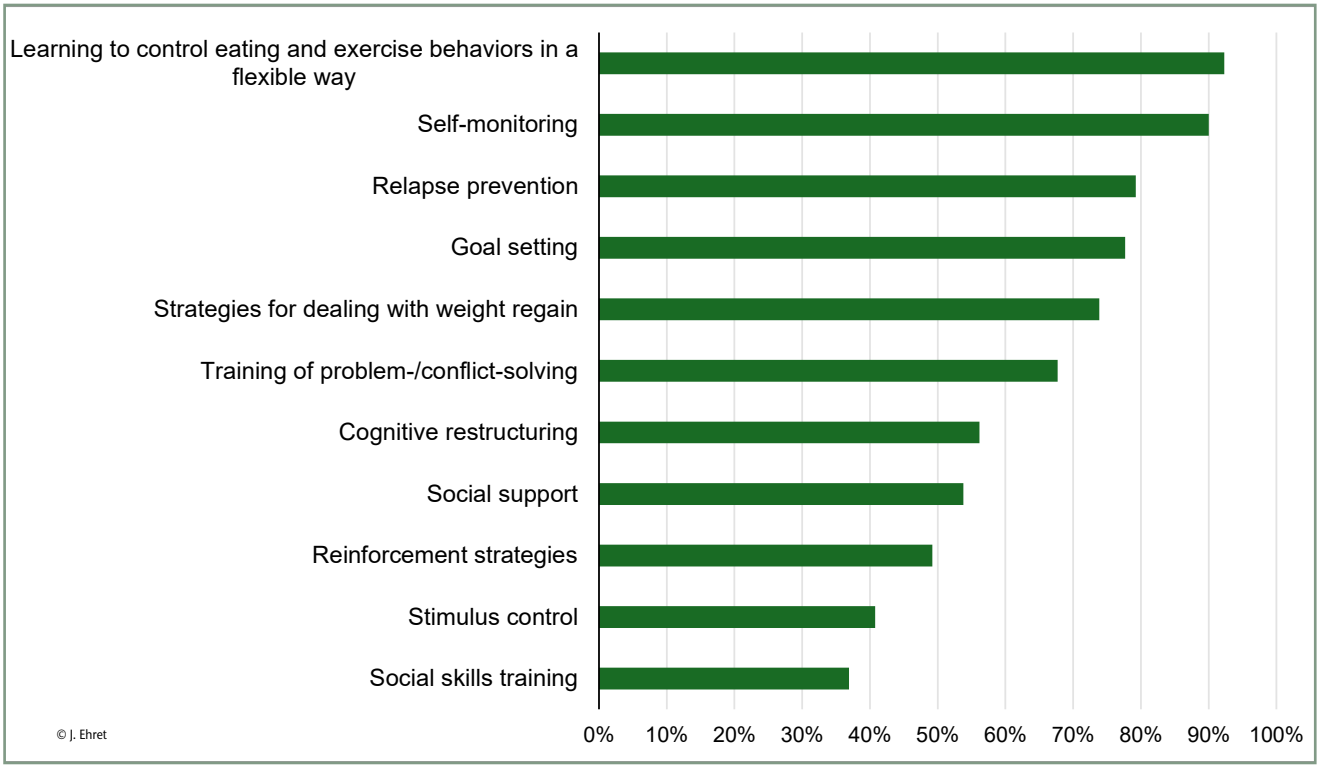

Fig. 2: **Use of guideline-recommended behavior change interventions [11] in the context of outpatient nutrition therapy interventions for patients with obesity (n = 130)**

In response to the open-ended question, "Which aspects, methods, or skills (e.g., from completed trainings and continuing education in the field of behavior change) are most useful in your work with patients who wish to lose weight?", and in addition to the counseling concepts and behavior change interventions previously queried (◆ Figures 1 and 2), respondents most frequently mentioned respectful communication, motivational support, and acceptance of the patient. In addition, NPs repeatedly emphasized the importance of their professional experience, practicality and individualization of care, empathy, and specific questioning techniques (e.g., question cards, scaling questions, miracle question).

Among the NPs working exclusively in conservative treatment settings (n = 83, 63.9%), 81.9% provided estimated values for the average percentage weight loss relative to their patients' initial body weight, as described in Part 1. With regard to the characteristics presented in Part 2, the following exploratory findings emerged: NPs who classified the average percentage weight loss of their patients as approximately 5% had significantly more often been in professional practice for less than 5 years compared to those reporting higher weight loss (66.7% vs. 11.9%).

In addition, nutrition professionals reporting higher estimated average weight loss among their patients significantly more often had training in mindfulness and a higher mean number of multi-day training courses on counseling and communication approaches, and methods to support behavior change (weight loss of less than approximately 5%: 2.8 [1.1–4.4] training courses vs. 6.0 [4.9–7.1] training courses for weight loss of approximately 5% or more). Among nutrition professionals who estimated the average percentage weight loss of their patients to be approximately 5% or higher, none reported that their vocational training or university studies had included seminars on health and behavioral psychology with supervision and experiential components. By contrast, 19.2% of those who estimated the average weight loss to be around 10% or higher reported such seminars. More detailed differences were also observed regarding the use of relapse-prevention interventions (average weight loss < approximately 5%: 44.4% vs. ≥ approximately 5%: 84.8%). NPs aged 45–65 years reported achieving weight loss of approximately 5% or higher twice as often as those aged 25–44 years (66.7% vs. 33.3%), and weight loss of approximately 10% or higher more than four times as often (80.8% vs. 19.2%).

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Discussion

How are NPs qualified regarding counseling approaches and behavior change interventions?

For most respondents, their vocational training or university studies were completed more than 10 years ago. Communication and counseling techniques, as well as aspects of health and behavioral psychology, were covered in the majority of vocational training or university studies. However, these components rarely included experiential elements or supervision. This only partly aligns with the findings reported by Whitehead et al., who identified role plays with feedback (in addition to lectures) as one of the most frequently used teaching meth-ods [20]. Knight et al., based on 31 additional studies, also report different findings: instead of traditional didactic approaches, they describe the increasing implementation of simulated consultations, which enable experiential learning and feedback [21]. The discrepancies are presumably due to the fact that vocational training and university studies were completed 10–20 years ago for three quarters of respondents, whereas the studies used for comparison were predominantly published within the last 10 years. Nevertheless, in line with the findings of this survey, there is still a lack of standardized approaches to teaching communication techniques in the vocational training and university education of NPs [21].

Compared to Fuhse et al., the annual volume of continuing education hours was higher in the present sample: 90% of participating NPs reported completing more than 20 hours per year, whereas this applied to 56% of respondents in Fuhse et al. More than 30 hours per year were reported by 59% of NPs in our sample (vs. 27% in [22]). Overall, 93.8% stated that they had completed at least one multi-day training course on counseling and communication approaches and methods to support behavior change. Whitehead et al. report such training for 74.7% of respondents, with 93.7% indicating that additional qualifications after graduation were necessary [20]. Knight et al. corroborate this need based on five additional studies [23]. One possible explanation is that the demand for comprehensive counseling skills is higher in the context of chronic disease obesity, as it more frequently requires fundamental lifestyle changes than many other conditions. This need might be reduced if regular supervision – already established in other counseling professions (e.g., social work) – would be implemented on a broad scale for NPs as well. At the same time, Fuhse et al. report an inverse pattern with regard to both employment setting and professional qualification. In the present sample, 67.5% work exclusively in self employment (see Part 1), whereas this applies to only 10% in Fuhse et al. [22]. In addition, including those with an additional university degree, around one third of respondents in our study reported vocational training as their highest professional qualification, whereas in Fuhse et al. approximately one third held a university degree in addition to vocational training [22]. Although all NPs in our sample held a certificate issued by professional associations or the German Nutrition Society (DGE), the high proportion of self-employed academics may contribute to the greater volume of continuing education hours. In contrast to dietitians, their professional title is not covered by statutory regulations governing health professions and the corresponding training and examination regulations [24, 25]. Certification therefore requires evidence of specific competencies, which, where necessary, have to be provided through additional continuing education and training undertaken in addition to the university degree [26]. It is noteworthy that NPs who reported achieving average weight loss of less than 5% were significantly more likely to have less than 5–10 years of professional experience. Imanaka et al. did not find an effect of increasing professional experience; however, their study design (digital, exclusively written and asynchronous communication with the nutrition professional) more closely resembled a digital health application than the treatment format typically described by NPs in the present survey (see Part 1) [27]. Particularly in the early years of working with patients with obesity, regular supervision and peer supervision may be especially valuable given the still limited clinical experience. In the study by Imanaka et al., regular counseling practice (defined as one [group] counseling session per week) was associated with significantly greater weight loss among participants (−1.8 kg vs. −0.4 kg) [27]. Because this definition of regular counseling practice applied to all respondents in the present sample, our data do not allow for a corresponding differentiation. Notaras et al. likewise emphasized that adequate communication skills and ongoing training are essential for effective patient care and behavior change, and they recommend peer consultation and supervision to support the sustainable further development of these skills [28].

In terms of content, NPs in the study by Whitehead et al. assigned high importance to skills in Motivational Interviewing (MI), behavior change interventions, and mindfulness [20]. This is consistent with these being the third and fourth most frequently reported areas of continuing education in the present sample. Regarding the use of MI, Spahn et al. found that participants whose treatment was supplemented with MI strategies were more likely to follow recommendations and achieved better nutrition related outcomes and greater weight loss than participants in the control groups [29]. Another review of MI in primary care reported that a reduction of at least 5% of initial body weight was achieved in up to 36% of participants; however, improvements in dietary behavior (e.g., increased fruit and

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vegetable intake) and health status outcomes (blood pressure, cholesterol levels, HDL/LDL) were observed only in a minority of studies, partly due to heterogeneous outcome measures [30]. In the present study, qualifications in mindfulness were reported significantly more often by NPs who estimated average weight loss above 5% (54.2% vs. 11.1%). Systematic reviews comparing mindfulness based interventions with other dietary, physical activity, or behavioral components in individuals with overweight or obesity report only small effects on body mass index. However, weight loss was not necessarily the primary focus of the included studies [31, 32]. Larger effects have been observed for improvements in eating behavior, quality of life, anxiety, and depression [31].

Knight et al. report that NPs use methods such as active listening, observing and responding to nonverbal cues, showing empathy, expressing genuine interest in the patient and their lifestyle, asking questions, paraphrasing, and summarizing and reflecting what has been said. In the studies examining patients' perspectives, it also became evident that patients appreciate it when NPs take time to listen and to explore what matters to them. In contrast, asking too many questions was viewed negatively, as was the absence of individualized feedback [23]. The communication skills summarized by Knight et al. largely represent cross cutting elements shared by most counseling and communication approaches that were frequently reported in the present sample. It can therefore be assumed that these skills are widely applied among our respondents and that NTIs differ less regarding these aspects than might be expected based on heterogeneous qualifications. We assume that NPs use such communication skills as a fundamental basis of their work.

What characterizes nutrition therapy interventions for obesity regarding behavior change interventions?

The behavior change interventions most frequently reported were practicing flexible control of eating and physical activity behaviors, self-monitoring of behavior and progress, goal setting, and relapse prevention. The explicit teaching of these interventions can be inferred to some extent from the descriptions of completed training courses [e.g., 33–36], but without classification according to internationally proposed terminologies such as the Behaviour Change Technique Taxonomy version 1 (BCTTv1). The BCTTv1 aims to enhance the comparability of behavior change interventions and techniques and is also available in German [37, 38]. Its purpose is to enable the "active ingredients" of interventions to be examined across diverse contexts [37]. If this classification were to be used more widely by NPs in the future, further specification would first be required to ensure unambiguous coding. For example, goal setting may refer to behavioral goals (technique 1.1 in BCTTv1) or outcome goals (technique 1.3 in BCTTv1) [37, 38]. In the context of substance use disorders, Dugdale et al. also subsume problem solving (technique 1.2) and action planning (technique 1.4) under goal setting [39]. Similarly, social support is differentiated according to whether it is unspecified (technique 3.1), practical (technique 3.2), or emotional (technique 3.3) [37, 38]. Interventions such as relapse prevention or cognitive restructuring do not correspond to a single specific technique in the BCTTv1 and therefore require a combination of techniques. For relapse prevention, these include setting behavioral goals (technique 1.1), problem solving (technique 1.2), and action planning (technique 1.4). For cognitive restructuring, they include re-attribution (technique 4.3) and framing/reframing (technique 13.2) [39].

For practicing flexible control of eating and physical activity behavior (as opposed to rigid behavioral control), both positive and negative findings have been reported [10, 11, 40]. In contrast to the guideline available at the time of the survey, the updated version no longer recommends this as a behavior change intervention [10, 11]. However, within the German Nutrition Care Process (G-NCP), flexible control continues to be recommended as a method for nutrition interventions [5]. In the updated guideline, a complexity classification was introduced for behavior change interventions, reserving three of the originally proposed interventions – modification of dysfunctional thought patterns (cognitive restructuring), training of problem-/conflict solving, and social skills training – for mental health professionals. The remaining interventions are explicitly proposed as options for other qualified professional groups [10]. While social skills training is one of the less frequently used interventions in our sample, the other two are applied by more than half of respondents. These findings are consistent with the results of Gemesi et al., who likewise reported frequent use of goal setting (85.4%), relapse prevention (63.6%), and training of problem-/conflict-solving (60.3%), whereas (in contrast to our data) 31.1% and 53.6% stated that they never or only rarely used cognitive restructuring or social skills training, respectively [7]. However, the results on interdisciplinary collaboration (Part 1) show that patients are frequently advised to initiate concurrent psychotherapy, which indicates a responsible approach and a high level of awareness among NPs regarding the limits of their own competencies. Within the G-NCP, all three interventions are currently recommended as "methods for nutrition intervention", which also include, for example, stress management. Instead of self-monitoring, self-control is recommended [5].

Overall, the evidence regarding the effectiveness of the aforementioned behavior change interventions for achieving weight loss is described as inconsistent, with var-

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iability in the strength of evidence across specific techniques and interventions [4, 29]. Hawkins et al. concluded – largely consistent with the present findings – that self-monitoring and goal setting (techniques 2.3 and 1.1 in the BCTTv1, respectively) are the most frequently reported behavior change techniques in obesity related weight loss interventions [4]. Referring to Robertson et al., they report that goal setting in combination with self-monitoring techniques led to a significant weight loss of −4.4% after 12 months compared with a control group [4, 41]. Spahn et al. likewise concluded that more consistent self-monitoring is associated with greater weight loss in behavioral weight loss programs [29]. With respect to improvements in dietary and physical activity behaviors (independent of weight change), Samdal et al. found that current evidence supports the use of goal setting and self-monitoring [42]. The use of goal setting also corresponds to patients' preferences, as reported by Wangler and Jansky [43].

Documentation and evaluation are required for objective proof of the effectiveness of nutrition therapy interventions for obesity (see Part 1). This should include information on the use of counseling and communication approaches, and behavior change interventions (both cross cutting and approach specific), as well as information on the underlying qualifications of nutrition professionals. Ideally, such documentation should be based on internationally comparable classifications and terminology or at least be consistent within the professional group and transparent and clearly comprehensible to other relevant professions in German speaking countries.

Limitations

In addition to the limitations described in Part 1, the long professional experience and volume of continuing education of the respondents indicate that this sample consists of above average experienced and highly qualified NPs. As employed NPs and dietitians are underrepresented compared with self-employed NPs and NPs with a university degree, the generalizability of the findings to all outpatient NPs may be limited. The results should also be interpreted with caution regarding NTIs for other indications. Furthermore, the findings cannot be generalized to NPs without certificates issued by professional associations or the German Nutrition Society (DGE) (see Part 1).

Moreover, the terminology used varies both across studies [30] and in profession specific recommendations and guidelines, as well as within the present sample. This applies, on the one hand, to the counseling and communication approaches actually used or underlying the interventions (e.g., Motivational Interviewing vs. motivational counseling vs. motivational support) and, on the other hand, to more fundamental terms used in the literature (e.g., person-centered care vs. person-centered counseling vs. client-centered therapy according to Rogers; behavior change interventions vs. methods for nutrition intervention). The lack of clear distinctions may hinder a shared understanding and could negatively affect the assessment of the respective potential and the reliable classification of interventions within the exist-ing evidence. Furthermore, variation in how the surveyed behavior change interventions are understood and applied cannot be ruled out. Another limitation is the incomplete assessment of cross-cutting (e.g., paraphrasing) and approach-specific methods and techniques (e.g., creating genograms or working with a timeline in systemic counseling) due to time constraints [2, 44, 45].

Conclusion

Overall, a wide range of heterogeneous additional qualifications was reported regarding counseling and communication approaches, and behavior change interventions. NTIs for patients with obesity frequently include behavior change interventions. They are therefore not directly comparable with studies that focus solely on the effectiveness of specific dietary strategies in patients with obesity and may be delivered by NPs without additional qualifications in this area. This once again highlights the fundamental importance of demonstrating effectiveness under day-to-day conditions [46].

In addition, the findings show that supervision has so far played a subordinate role among NPs working in outpatient obesity treatment. Supervision is recommended, among others, by the German Coordination Committee for Quality Assurance in Nutrition Counseling/Therapy and Nutrition Education. Together with case conferences and peer consultation (e.g., in quality circles or professional networks [e.g., 47–50]) as well as continuing and advanced training, supervision constitutes an important pillar of quality assurance and support for professional counselors [6, 51, 52].

Professional counseling is characterized by transparency regarding the methods used [51]. The German Association of Psychotherapists (*Deutsche Psychotherapeuten-Vereinigung e. V.*, DPtV) recommends the use of documentation forms that include checklists of interventions and methods [53]. Indications for such a practical

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and evaluable basis for counseling methodology could be developed by (experienced) NPs, supervisors, and teachers from the respective "therapeutic schools" in the counseling context, as well as researchers, for example, within the framework of World Cafés. Such a process should address the need for both cross cutting and approach specific interventions and methods, as well as the distinction be-tween counseling interventions and therapeutic interventions that should be reserved for psychotherapeutic settings only. A major obstacle in this regard is that documentation within outpatient nutrition therapy interventions is currently not reimbursed. Further work is therefore needed to design and implement resource efficient tools. Follow-up projects are also required to identify suitable options for the electronic documentation of corresponding interventions and methods, together with the documentation of evaluation indicators (see Part 1), while taking into account not only professional requirements but also data protection regulations.

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