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Why it is so hard to lose weight? An exploration of patients' and dietitians' perspectives by means of thematic analysis

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Abstract

The present paper is aimed at understanding the importance of motivation (perceived qualitatively) in ensuring the success of the dietary change process. This study expands on previous research by confronting the perspective of persons dieting to lose weight with the perspective of professionals providing support (dietitians). We interviewed 13 respondents (six patients, seven dietitians) and performed a thematic analysis. The study's results show that understanding motivational mechanisms is a prerequisite for a consistent narrative in the patient–dietitian dyad. The research results could help in developing effective dietary interventions that could facilitate effective and permanent dietary change.

Keywords

dietary change, dietitians' and patients' perspective, motivation, self-determination theory, thematic analysis

Introduction

According to the Food and Health Survey (The International Food Information Council [IFIC], 2020), trends from the last decade show that the number of people dieting to lose weight is constantly rising. Weight loss remains the top motivator of dietary change, while other motives, such as feeling better, having more energy, protecting long-term health, or preventing weight gain, are less frequently indicated. Though the need to lose weight is very common, the majority of people fail when they attempt to do so. When dieting, a common scenario is that, after losing 10% of their body weight, a person will regain most of it within 1 year, and all of it within 5 years (Green et al., 2009).

Previous reports indicate that efforts to reduce and/or maintain body weight are often ineffective and unaccompanied by the internalization of the principles that can support dietary change (Anderson et al., 2001; De Ridder et al., 2014; Hall and Kahan, 2018; Loveman et al., 2011; Meule et al., 2012; Williams et al., 1996; Wing and Phelan, 2005; Wu et al., 2009). Furthermore, people in the process of change tend to lack or lose motivation, cease efforts to change their eating habits, and return to their old habits while losing any progress that was made (Buchanan and Sheffield, 2017; Byrne et al., 2004; Polivy and Herman, 2002). Although the reasons why diets fail have been addressed in many studies, the question "Why is it so hard to lose weight?" remains valid (Engber, 2019). Motivation is one of the challenges requiring further study (Hall and Kahan, 2018; Sand et al., 2017). A glance into Google search engine results for the query "lack of motivation to lose weight" shows the immense scale of this problem displaying as many as 36,600,000 records. Taking above data to consideration, this study revisits the importance of motivation in successful weight reduction, focusing on diet changes in people who are currently dieting. The term "dieting" in this article is defined as "the intentional and sustained restriction of caloric intake for the purpose of reducing body weight or changing body shape" (Yanovski, 2000: 2582).

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More and more often, losing weight involves seeking the assistance of a healthcare professional (dietitian, diet coach, or nutrition trainer) rather than relying on information from the internet. Literature reports (Kłósek, 2015) show that people who have repeatedly tried to lose weight are convinced that they will not achieve success without a dietitian's care. Although various studies (Moller et al., 2017; Naldi et al., 2014; Wolff et al., 2008) have indicated that the presence of a health professional in this process is effective in terms of the number of lost kilograms (at least with reference to people dieting without professional support), the mean change in weight (and BMI) due to the dietitian intervention found in the meta-analyses (Sun et al., 2017; Williams et al., 2019) "is relatively small and of limited clinical significance" (Williams et al., 2019: 19). In their literature review, Teixeira et al. (2012) concluded that dietitian intervention does not guarantee any degree of success that could result in a lasting change in eating habits and the maintenance of the desired weight. According to Powell et al. (2007), most obesity interventions are effective as long as the patient remains in treatment. Foregoing professional help results in a return to old eating habits. Therefore, developing permanent change requires continuous care (Powell et al., 2007), which is not cost effective and cannot be implemented on a large scale (Teixeira et al., 2012). Furthermore, it forces the healthcare professional to exercise control over the patient rather than facilitate the patient's change and internalization of healthy eating habits. In accordance with the postulates of Ryan and Deci (2000), healthcare professionals should prompt their patients to develop their own self-motivated reasons to change instead of strengthening their dependence on external support or supervision.

Helping patients shift their locus of motivation from weight loss alone to intrinsically meaningful areas requires an understanding of their needs and an agreed-upon narrative about the change shared by the dietitian and the patient. It should be emphasized that previous studies focused mainly on patients' motivations, while mostly ignoring dietitians' perspectives (Buchanan and Sheffield, 2017; Chapman and Ogden, 2009). However, successful dietary change depends on effective interactions between healthcare professionals and patients undergoing treatment (Endelvelt and Gesser-Edelsburg, 2014). It is crucial that the ultimate goal of the process be defined jointly by both parties (Ryan and Deci, 2000; Teixeira et al., 2012).

Therefore, the approach undertaken in the present study attempts to go beyond the single perspective of the patient or dietitian. We aim to confront both perspectives, observing the antagonisms rooted in the two different perceptions of the change (Buchanan and Sheffield, 2017). Insight into the motivational processes responsible for making and adhering to change can help dietitians better understand and manage their patients and determine the causes of their successes and failures, which have a motivational basis.

"Why is it so hard to lose weight?" is an open-ended question that can be addressed using qualitative methods (Green et al., 2009: 998). A research approach based on qualitative methodology (Creswell, 2020) is also proposed in the present study. This type of approach provides an interesting alternative to quantitative measurement methods. Understanding different motivational facets is important for ensuring successful dietary change. It can also lead to the development of better and more effective intervention procedures.

In our study, we drew attention to the qualitative aspects of motivation, basing our analyses on the theoretical framework of Deci and Ryan's self-determination theory (SDT) (Deci and Ryan, 1985; Ryan and Deci, 2000). SDT emphasizes the importance of personal autonomy, assigning it a dual role as both a need and a motive for undertaking an activity (Ryan and Deci, 2000). In the former approach, autonomy is an innate and universal human psychological need, complementing other needs, such as competence and relatedness with others. In the latter approach, autonomy is related to the perceived origin of one's action or its locus of causality, which allows researchers to recognize the motivation qualitatively. This approach takes into account both the content of goals or aspirations (e.g. physical attractiveness and social connectedness) and different regulatory styles (Teixeira et al., 2012). The authors of SDT include these aspects in the form of a motivational continuum, as decribed in the organismic integration theory (OIT), a subtheory of SDT (Ryan and Deci, 2000) (see Figure 1).

Amotivation is observed at one end of the continuum. It is defined as a kind of learned helplessness accompanied by a sense of incompetence and a lack of control over a given situation (Vansteenkiste and Deci, 2003). Intrinsic motivation is found at the other end of the continuum, understood as leading to behavior, which is active, directed toward learning and development, and regulated by the needs for autonomy, competence, and relatedness (Ryan and Deci, 2000). A characteristic feature of intrinsic motivation is that it allows the activity itself to be a source of satisfaction, which stimulates greater perseverance and facilitates the achievement of better outcomes (Ryan and Deci, 2000; Sheldon et al., 1997). Regarding extrinsic motivation, the source of satisfaction comes from the potential benefits of an activity rather than the activity itself. Unlike intrinsic motivation, which occurs in only one form, extrinsic motivation has four main forms that depend on regulatory style and the perceived locus of causality (Ryan and Deci, 2000). These include: *external regulation, introjected regulation, identified regulation*, and *integrated regulation*.

External regulation is a type of motivation that leads individuals to pursue an activity to obtain external benefits and/or because of pressure from their environment. It is associated with an external locus of control and, thus, with the perception of actions and their results as independent of one's own standards of behavior (De Charms, 1968).

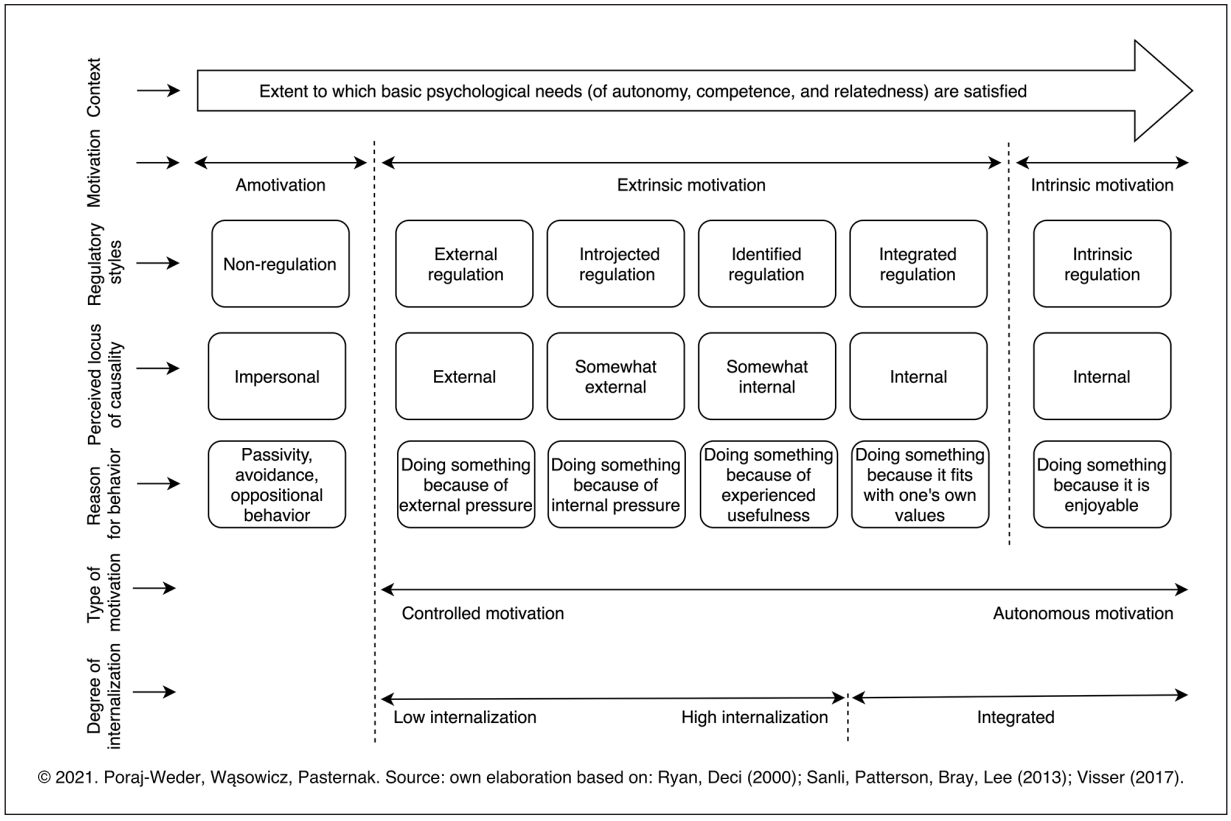

Figure 1. Schematic representation of self-determination theory.

Introjected regulation leads individuals to undertake activities that stem from internal pressure; the individual's goal is to reduce anxiety/guilt or maintain feelings of worth (De Charms, 1968). Their behavior, though motivated intrinsically, is nevertheless associated with an external locus of causality and only a partial acceptance of the standards governing the behavior. In accordance with SDT (Deci and Ryan, 2000), *external* and *introjected regulation* are both associated with pressure, the difference being in whether that pressure is external or comes from within. However, both types of motivation involve an external locus of causality. Because of these similarities, some researchers have combined the two types of motivation into a more general *controlled motivation composite* (Williams et al., 1996). The justification for combining both regulation styles into one generalized composite was found in the present study. It is noticeable in patient statements that the impulse to change comes from within and serves to protect the self, which is a feature of *introjected regulation*. However, the attitude toward change as a process and the way benefits are defined adhere to the definition of *external regulation*.

Identified regulation is related to activities with a higher degree of autonomy and is strongly motivated by the self. The individual accepts the values and standards that govern the given behavior and imbues them with important personal significance. Nevertheless, the behavior is still treated as a means to an end rather than as a desired behavior on its own.

Integrated regulation is the most autonomous form of extrinsic motivation. Behavior which is integrated with the self, though close to intrinsic motivation, is still treated as externally oriented because its purpose is to obtain external benefits (creating or confirming one's identity). With increasing internalization of the standards underlying an activity and their integration with the structures of the self, the individual experiences a growing autonomy of action, leading to lasting dietary change.

The process of passing through the motivational continuum has its own individually characterized dynamics, which additionally depend on the quality of the support obtained. This explains why insight into the qualitative assets of motivation is so important in understanding the determinants of success and failure in the process of individuals changing their eating habits (Buchanan and Sheffield, 2017).

Current study

Our study aims to understand the importance of motivation (perceived qualitatively) in successful dietary change. In particular, we aim to enrich the understanding of the six regulatory styles by developing their contextual definitions

Table 1. Sample structure: patients changing their diet ($N = 6$).

Interviewee	Gender	Age	Dietitian support
Anna	Woman	29 years old	Current
Maria	Woman	25 years old	Current
Emma	Woman	29 years old	Former
Thomas	Man	29 years old	Former
Ian	Man	27 years old	Former
Claire	Woman	34 years old	Current

Table 2. Sample structure: dietitians ($N = 7$).

Interviewee	Gender	Age	Profession
Eva	Woman	36 years old	Dietitian
Arthur	Man	32 years old	Personal trainer, diet coach
Ben	Man	32 years old	Personal trainer, diet coach
Alison	Woman	29 years old	Dietitian
Victoria	Woman	30 years old	Dietitian, yoga instructor
Carolyn	Woman	28 years old	Clinical dietitian
Marc	Man	31 years old	Personal trainer, diet coach

(embedded in the dietary change context). The original definitions formulated by the authors of SDT are generic and general. Encapsulating them with the specific context of changing dietary habits will allow deeper insight into the motivational mechanisms underlying dietary change and provide a better understanding of the basis for success and failure.

We also analyze the perspectives of the patient and the dietitian to determine whether these perspectives share a common narrative about dietary change. This narrative would be formed during the processes of goal setting and cooperation regarding the motivational issue.

Methods

Participants

We examined two homogenous groups of participants. The first group (further referred to as patients) consisted of individuals who were dieting to lose weight at the time of the study ($N = 6$). All of them worked with health care professionals for a minimum of 3 months, three at the time of the study, and three before the study began. The sample included four women and two men, aged 20–35 years, all of whom were professionally active university or college graduates (Table 1). Pseudonyms were used in the study description.

The participants in the second group were health care professionals (further referred to as dietitians) ($N = 7$). Each participant in this group had nutrition counseling private practice. The sample included persons with varied professional experience (Table 2). Pseudonyms were used in the study description.

The sample size for this study was determined with reference to Clarke et al. (2015) and Guest et al. (2006), according to whom such a number of participants is sufficient to achieve thematic saturation. A purposive sampling approach was used (Guest et al., 2006). A professional market research agency recruited participants for the study the week preceding the interviews.

Procedure

The study was conducted in accordance with Standards for reporting qualitative research (SRQR) guidelines (O'Brien et al., 2014) and the Declaration of Helsinki (World Medical Association [WMA], 2001). The research ethics committee of the Faculty of Psychology at the University of Warsaw approved the protocol. All study participants provided informed consent.

Data were collected from December 2017 to January 2018. Interviews were conducted in Polish by an experienced qualitative researcher in a specially designed environment (a focus room). All respondents were informed that the interviews would be recorded and received incentives for their participation in the study.

After completion of the data collection stage, a professional service agency transcribed all the interviews. Transcripts were prepared in accordance with the guidelines formulated by Clarke et al. (2015). All transcripts can be found in the Research Data section.

Measures

We conducted semi-structured, open-ended, in-depth interviews (IDIs) (Angrosino, 2010; Kvale, 2010). The scenario

was divided into thematic areas corresponding to the objectives of the study. The interview consisted of main and auxiliary questions always asked in the same order. Each topic was discussed until saturation. Study participants were asked auxiliary questions only if their responses to the initial question did not encompass certain fields of interest (Guest et al., 2006). Topic guides for the interviews can be found in the Supplemental Material section.

Data analysis

The data collected from both groups formed the basis of the analysis. The thematic analysis (TA) method was used, which is an accepted qualitative research method in health psychology (Buchanan and Sheffield, 2017). A deductive approach was used that "views the data through a theoretical lens so that existing theoretical concepts inform coding and theme development" (Clarke et al., 2015: 225). The process of identifying codes and themes was based on a theoretical framework derived from SDT and OIT (Deci and Ryan, 1985; Ryan and Deci, 2000).

Separate analyses were carried out for the patient and dietitian groups. The data analysis process consisted of reading and rereading the subsequent transcripts, creating codes, and then creating themes. Due to the complexities involved in the motivation to diet and the frequent tendency of the participants to mix and change themes a line-by-line method was used in the data coding process. This allowed for comprehensive coverage of thematic areas without fear that some of their components would be omitted. The analysis process allowed for the adoption of a more interpretive rather than descriptive approach to the data.

Results

After coding the data, a list of themes was developed to describe how dietary change is experienced by patients and dietitians. Next, the generic definitions of the six regulatory styles were revisited and expanded on using the themes found in the analysis (Figure 2).

For clarity, our findings are presented sequentially, referring to the six regulatory styles. The definitions of the extracted themes and the perspectives of the patient and dietitian were integrated into the descriptions of the subsequent regulatory styles.

It should be emphasized that none of the patients participating in the study presented a specific type of motivation on their own. Only the motivational profile was observable, that consisted of a compilation of various types with a dominant feature (e.g. introjective). This observation is consistent with theoretical assumptions (Deci and Ryan, 1985; Ryan and Deci, 2000). According to Ryan and Deci (2000), the boundaries between the regulatory styles are not firmly defined. The process of a patient passing through the motivational continuum has its own individually characterized dynamics. These dynamics also depend on the quality of support obtained from the dietary professional.

Amotivation (non-regulation)

Extracted themes: Powerlessness, reluctance, lack of responsibility for dietary change effects, hopelessness regarding success ("I'll be fat anyway" rhetoric).

Due to the character of the recruitment process, none of the patients exhibited an amotivational state. All participants in the study wanted to change their eating habits and had made more than 10 attempts to lose weight in the period preceding the interviews, either under professional supervision or on their own.

Dietitians' perspective: The interviewed dietitians declared that they sometimes work with people who come to them for help but don't want to change, feeling that such change is impossible to implement and will only end in yet another failure. According to dietitians, the most change-averse groups of patients are those who are about to undergo gastrectomy and those in their recovery period after undergoing surgery. They present a motivational status that combines amotivation and external regulation (Deci and Ryan, 2000). Both before and after the gastrectomy, the patients were placed under the obligatory care of a dietitian and psychologist. Thus, they participate in the process of changing their diet as if by force and (often) without hope of success. Weight loss surgery, being an external, mechanical interference, relieves patients of a sense of responsibility for change, and as a result, the patients lack the encouragement to make an effort to shape and maintain their dietary changes.

External and introjected regulation

Extracted themes: Perceiving healthful eating as unpleasant, restrictive, imposed, and temporary ("being on a diet" rhetoric). Frequent deviations from dieting and irrational filters. Entitlement mentality regarding their dietitian (transferring responsibility for effects onto dietitian).

Because of the similarities between *external* and *introjected regulation*, researchers often combine these two types of regulation into a more general *controlled motivation composite* (Williams et al., 1996). The justification for combining the two types into one regulatory style was also found in the present study. It is noticeable in the patients' statements that the impulse to change comes from within and serves to protect the self (*introjected regulation*), but the attitudes toward change as a process and the ways benefits are defined are forms of external regulation.

Patients' perspective of *external* and *introjected regulation* are associated with their perceptions of dietary change (usually referred to as a diet) as imposed from the outside, temporary, restrictive, unpleasant, and requiring many sacrifices. When perceiving the change in such a way,

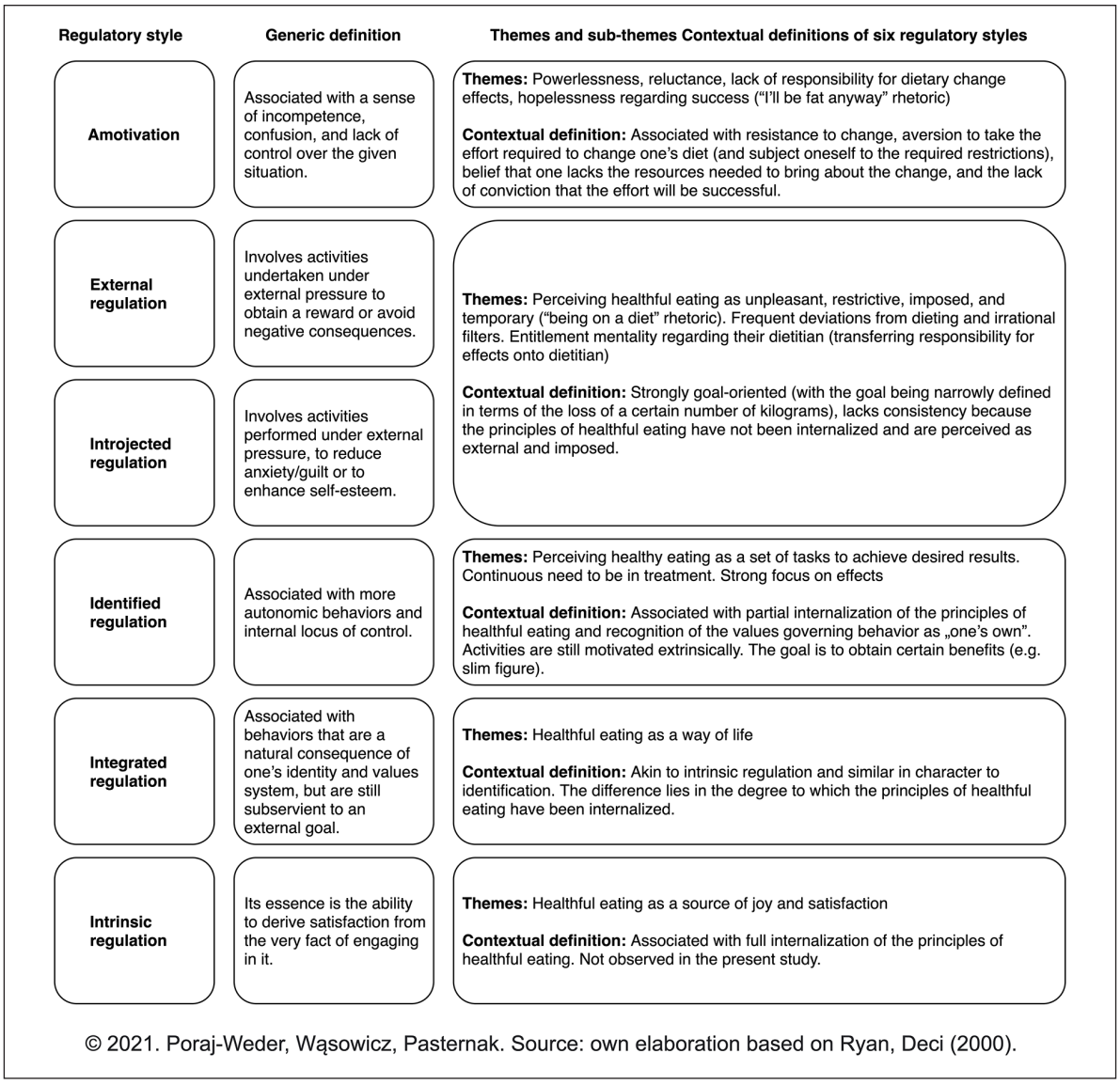

Figure 2. Generic and contextual definitions of the six regulatory styles and a summary of the identified themes.

individuals tend to break their dietary regimes, making their efforts toward body weight control ineffectual or, at best, short-lived. These wasted efforts demotivate patients further and weaken their resolve to continue with the diet. The diets are clearly temporary—when they end, the patients return to their old eating habits rather than form better nutritional foundations. The example of Emma (29 years old) illustrates the described mechanisms:

Emma remained under a dietitian's care for 4 months and also tried various diets before that, but without lasting effects. She decided to seek professional nutritional advice in order to lose 10 kg and improve her appearance. She was able to lose a few kilograms, but suffered constantly due to the restrictions imposed by her diet. She constantly broke them as a result, justifying her behavior.

Emma: "You suffer so much in life, how can you deny yourself a bread roll?"; "Just one cookie, no big deal . . .." She felt that the dietitian's recommendations were too restrictive to be followed over the long term. Because the results of the diet turned out to be unsatisfactory, she stopped seeing her dietitian and abandoned her healthy diet in favor of her old eating habits. Emma was visibly overweight on the day of the interview.

This study shows that people who exhibit the *controlled motivation composite* (Williams et al., 1996) often selectively adopt their dietitian's recommendations; for example, they tend to skip meals, do not eat meals at regular times, and introduce unhealthful and high-calorie products into their diet (donuts, pork chops, chips, etc.) instead of healthy ones, rendering the diet ineffective. Frequent deviations from the diet testify to the lack of internalization of the principles that form its basis. Failure to internalize the principles of healthy eating also means that new nutrition standards pass through a filter of personal opinion. These opinions are often irrational and provoke behaviors that may lead to the fast, short-term loss of kilograms, but prove to be ineffective in the long run:

Maria has been under a dietitian's care for 2 years. She wants to lose weight and improve her appearance (she always feels "too fat"). Currently, she has a diet plan but uses it selectively and fails to heed most of its recommendations.

Maria: "The dietitian orders me to eat five meals per day. . . I tell her 'no' and eat only three. I'll lose weight faster this way. My weight has to go down by New Year's Eve by a lot. That's why I won't eat any more than three meals per day (. . .) I eat my first meal after 11 am. The dietitian suggests 8 am, but my friend read that's when most calories are burned—so it's like eating and losing weight at the same time (. . .) During the week I tend to stick to the plan, it doesn't work out for me on days off (. . .) I also have a dieting problem because I drink beer. My dietitian told me to quit. I told her I wouldn't. That's enough, I follow other restrictions. I drink, maybe not every day, but let's say every other day."

Dietitians' perspective: In a discussion, the dietitians claimed that the external regulation style engenders an entitlement mentality ("I pay and expect you to make it happen that I lose weight. . .," Alison, dietitian). This, in turn, encourages the patient to shift responsibility for the effects of the diet (or lack thereof) to the dietitian:

Marc, personal trainer, diet coach: "Some people think that merely by seeing me they will avoid the need to change anything (. . .) They think that the visit itself will help and refuse to acknowledge that a lot of work is required, that they have to change their [current eating] habits—and this is hard work, daily effort to improve oneself."

Identified regulation

Extracted themes: Perceiving healthy eating as a set of tasks to achieve desired results. Continuous need to be in treatment. Strong focus on effects.

Patients' perspective: One of the defining features of *identified regulation* is result-oriented self-motivation. Here, perceiving effects from the change motivates the patients to follow the plan, while a lack of observable effects demotivates the patients. This pattern can be seen in individuals who try to lose weight on their own and give up after a while, because the diet turns out to be ineffective (it produces no visible effects). Result orientation and external reasons for change cause the following to occur: "whenever results do not meet initial expectations, take too long, etc. (. . .) people find themselves missing a good reason to continue their healthful eating efforts" (Teixeira et al., 2012: 4). The described relationship is illustrated by the following example of 29-year-old Anna, one of the study participants:

Anna has been under the care of a personal trainer and diet coach for less than 2 years. She wants to lose weight and improve her appearance. She has managed to change her diet and lose 6 kg by working with a dietitian. She expects to lose three more kilograms over a 1-year period. When she first started dieting, she had moments of discouragement; her efforts didn't lead to any visible results.

Anna: "The faster you start seeing effects, the more motivated you get. But the effects are better [more visible] at the beginning, and less so later on. (. . .) In my case the effects became visible during the first month of my diet. Then (. . .) they were practically unnoticeable."

Moderator: "And what happened after that?"

Anna: "I became demotivated."

An analysis of the data collected in the study also shows that if behavior is regulated through identification, the objective of losing weight or maintaining the desired condition becomes integrated with thoughts about healthy eating. This gives the objective an "operant character," meaning that the individuals will think about dietary change in terms of tasks that must be performed in order to reduce or maintain their desired body weight:

Anna: "You definitely have to cut sugar out of your diet in order to eat healthfully. You also have to get rid of any alcohol- and tobacco-related habits. . . it's difficult, but necessary if your plan is to lose weight."

Moderator: "You keep mentioning weight loss. Is it really so important in the context of diet change?"

Anna: "Yes, at least in my mind. These are equivalent issues: if you don't want to put on weight, you have to eat well."

The study also indicates that if healthy eating is treated as a set of activities or tasks, the balance of dietary change may suffer significantly. This is because this mindset imposes a certain timeframe within which the goals must be achieved. In this way of thinking, nothing is required that extends beyond this timeframe. Healthful eating is not considered by the patient to be a life plan, but merely a path to achieve one's desired result.

Dietitians' perspective: Dietitians have noted that some patients experience a need to continue seeing the dietitian even after their defined goals have been achieved. In addition, some patients return after a few months because they have gained weight. The urge to remain in touch with the dietitian after achieving one's objectives can be explained by the superficial nature of the change resulting from an incomplete internalization of its underlying principles. The patient still needs external control and mobilization and requires subsequent tasks to perform:

> **Arthur, personal trainer and diet coach:** "I have patients who have been seeing me for over a year (. . .) Of course, there are patients among them who managed to slim down, stopped coming for half a year, and then came back saying, 'Damn, I'm back. I'll do it; please help me again."

Integrated regulation

Extracted theme: Healthful eating as a way of life.

Patients' perspective: The essence of integration is the harmony between behavior and the values that individuals believe in. Greater internalization of the principles of healthful nutrition allows individuals to maintain the motivation to change, which eventually becomes the status quo:

> **Claire:** "I think that if you adopt a certain lifestyle, after six months you will be completely immersed in it. You no longer revert to old bad habits."

The approach to healthy eating becomes less operant in character when the principles and values of healthful diet are internalized. Healthy eating is treated as an integral and important component of a healthy lifestyle (in addition to physical exercise). It is understood systemically as a way of life rather than a temporary diet.

Dietitians' perspective: The dietitian's goals are to ensure that the principles of healthy nutrition are internalized within the patient and that the patient's dieting self-efficacy (and, therefore, the ability to adhere to a healthy diet) is nurtured. The level to which these goals are achieved is how dietitians gauge success in their work with patients.

> **Moderator:** "How do you measure your clients' success?"
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> **Eva, dietitian:** "Success? One of my patients recently told me that she felt satisfied because she had a well-conceived diet. She concluded that she didn't need to lose any more weight (she initially wanted to lose three kilograms), she just knew how to eat right. . ."

Intrinsic regulation

Extracted theme: Healthful eating as a source of joy and satisfaction.

Intrinsic regulation was not observed in the group of patients that were studied. All patients in the study exhibited extrinsic motivation, which was associated with result-oriented activity. However, the results of our study show that the motivational status of a person seeking help may (but need not) evolve during the process under the influence of the dietitian and the internalization of the principles of healthy nutrition.

Striving toward a change in the patient's motivational status

The study also shows that internal motivation, in its isolated form, is rarely associated with the decision to change one's eating habits. It is even less common for internal motivation to compel a person to seek a specialist's help. The key motivational factor that inclines an individual to seek professional help and be ready to bear the financial and psychological costs is the need to reduce weight and the desire to improve one's appearance (external benefits). According to the dietitians, seeking out a specialist's support is prompted by the following:

> (1) patients' past failures in creating their own diets, (2) the lack of perceived effects (e.g. during intensive training), and (3) experienced health problems. Thus, motivation to start the change process is external in most cases. Although this motivation takes on different forms and is associated with different levels of autonomy (a function of one's regulation style), it is mainly a result-oriented activity:
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> **Eva, dietitian:** "In my opinion, weight loss is the main reason people contact dietitians; this is how I sense it (. . .).

Health problems also occur more and more often.

Marc, personal trainer and diet coach: "It is clear that people are frustrated with their appearance, as well as with a lack of success when implementing different diets. I often hear from patients: 'I have probably adhered to all the diets out there. . .and nothing worked, what should I do?"

In this context, changing the patient's motivational status from external to internal seems imperative to the process's effectiveness. According to SDT (Ryan and Deci, 2000), only intrinsic motivation and the internalization of healthful eating principles can bring lasting and long-term results. People in the process of dietary change should therefore focus on changing their regulatory style and reformulating their goals and expected benefits. Dietitians play a key role in this motivational field.

Our study confronts the perspectives of both the patient and the dietitian to determine whether they share a common narrative about dietary change. According to the assumptions of SDT (Deci and Ryan, 1985; Ryan and Deci, 2000), patients experiencing positive effects from their diet should modify their attitudes to change their eating habits. On the other hand, a dietitian, while (re)defining for their patient the goals and benefits of implementing new nutritional standards, should reach beyond the patient's current motivational stage. The study's results show that the process of helping patients change their regulation type doesn't proceed in a model that is consistent with theory. The (re)definition of goals and benefits first consists of diagnosing the patient's current motivational status, which, according to SDT, should set the particular path of the patient's treatment. An analysis of dietitians' statements reveals that the goals set for patients, regardless of whether they are motivated internally or externally, are usually long term and focused on implementing a comprehensive change in eating habits. In view of this study's results, it is precisely in this motivational field that interventions often turn out to be ineffective. Even when nutritional recommendations are perfectly personalized to a patient (considering their energy demands, individual taste preferences, health, and endurance of their body, etc.), failure to adapt the goals to the patient's style of regulation may result in their inability to implement and internalize the changes.

Alison, dietitian: "(. . .) I always tell my patients that kilograms themselves aren't what is most important for us."

Moderator: "And if a person just wants to lose weight?"

Alison, dietitian: "I keep repeating this over and over: 'Weight loss is just a positive side effect of what we introduce into our lives.' I say this every time . . . I say this to nearly every patient that you'll lose these kilograms. But they aren't the most important thing. The most important thing for us is our health and well-being."

A message formulated in such a way, although correct in light of SDT, does not motivate everyone. It may be ineffective, especially for people who attribute causality to external factors. In this context, a healthcare professional may refer to regulation mechanisms that are completely alien to patients. These factors discourage the patient from adhering to the dietitian's recommendations or internalizing the new standards necessary for change. Moreover, this message can provoke patients to deviate from their goal of achieving real effects in the form of weight reduction.

Maria: "I just felt fat. When I started working with a dietitian, I didn't think about changing the 'philosophy of nutrition and well-being'. . . I had no such need. I just wanted to lose weight and see the results. To fit into pants—that was the goal that motivated me."

Discussion

The aim of this study was to explore the importance of motivation in successfully implemented dietary change. The analysis was based on data collected from patients who were dieting to lose weight and from dietitians helping patients achieve their goals. The theoretical framework for analysis was provided by SDT and OIT (Ryan and Deci, 2000). In this framework, a patient's motivation style is a function of their regulatory style, locus of causality, and specific goals. This study's analysis of the identified themes allowed for the contextual definition of the six regulatory styles encompassed by OIT (Ryan and Deci, 2000). Due to the lack of sharp distinctions between the various motivational stages (Ryan and Deci, 2000), *external* and *introjected regulations* were analyzed together as a generalized *controlled motivation composite* (Williams et al., 1996). The analysis also considered the perspectives of patients and dietitians.

The results of this study show that when autonomous motivation is greater, the chance of success also increases. Here, success is defined as the patient's internalization of the principles of heathy eating. The more external the patients' motivations are to change their eating habits, the less interest they will have to achieve the goal. In addition to less commitment, the patient will have less persistence and a greater tendency to attribute failure to external factors. This result is consistent with the findings of other researchers (Stotland et al., 1991).

Intrinsic motivation determines the success of change and the internalization of values that underpin it. According to the assumptions postulated by Ryan and Deci (2000), the stimulation and maintenance of intrinsic motivation depends on the type of support received. Awards, assessments, and deadlines for task completion intensify the external regulation of internal control and provide a sense of freedom of choice (Deci et al., 1999). This means that the more autonomy patients have in the change process, the greater the chances that their planned activities will be effective. However, the results of the present study show that the same behavioral goals can be achieved with external, partially internalized, or intrinsic regulatory styles (Teixeira et al., 2012). Each type of motivation underlying a patient's formulated goals requires different approaches and work methods on the part of the dietitian. According to the present research, discrepancies in the way healthcare professionals and patients define goals can cause patients to terminate their contract with their dietitians or to achieve only short-term effects without any permanent changes taking place.

Similar conclusions apply to the definition of success. The interviewed dietitians tended to define patient success in terms of self-efficacy in adhering to a healthy diet. Although a change in eating habits should follow such a course, the study shows that self-efficacy as a measure of success may be irrelevant for externally regulated people. Therefore, effective intervention should not only be limited to the behavioral sphere (Endelvelt and Gesser-Edelsburg, 2014); it should also relate to the cognitive sphere, which requires dietitians to gain additional knowledge and the appropriate tools. Dietary interventions should therefore be designed to create conditions that foster patient internalization of the new behavioral schemes, since this is the only way to implement deep and lasting change. This requires a deeper understanding of the individual components that constitute a patient's motivation, including their regulatory style, perceived locus of causality, reasons for their behavior, and degree of internalizing of principles that form the core of the change (Gagné et al., 2015; Ryan and Deci, 2000).

Autonomy in self-determination theory has a dual status. It is understood both as a need and as a motive or regulatory focus (Deci and Ryan, 2000). The need for autonomy changes as a patient passes through the subsequent stages of the motivational continuum. The type of motivation characteristic of a given patient at any given moment in the process should determine a dietitian's purpose and work methods. During the change process, the dietitian should work with the patient to change the patient's regulatory style. Then, based on how the patient's regulatory style is progressing, they should also redefine the patient's goals toward self-efficacy, integration, and intrinsic motivation. Understanding motivational mechanisms is a prerequisite for a consistent narrative in the patient–dietitian dyad, which in turn has important practical implications.

Limitations of the present research

The limitations of the present study result from the shortcomings of the applied research strategy. In accordance with the qualitative approach, the data collected during individual in-depth interviews formed the basis for our analysis and inference. These were conducted by one moderator on a small sample of people, consisting of those providing support (seven dietitians) and those receiving it (six patients). The inference, although carried out in a methodical and compliant manner (Clarke et al., 2015), is based on the content of the patients' statements. "It is possible that these accounts would have changed if participants were interviewed by a different researcher or in a different setting" (Chapman and Ogden, 2009: 1240), resulting in different emergent themes. It should also be emphasized that dyads were not tested. This limits the possibility of inferring the quality of cooperation and communication between the patient and dietitian but also suggests possibilities for further studies.

The presented results are only a starting point for further research and analyses. They indicate the need to further investigate SDT and OIT, especially in the context of their practical applications. Future studies should be carried out on larger samples, optimally, with the use of a mixed-method approach.

Author contributions

MPW and GW contributed to the conception and design of this study. MPW conducted in-depth interviews and performed qualitative analysis. MPW and GW wrote the first draft of the manuscript. All authors (MPW, GW, and AP) contributed to manuscript revision, and read and approved the submitted version.

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Ethical statement

The study was conducted in accordance with the SRQR guidelines (O'Brien et al., 2014) and the Declaration of Helsinki. The Research Ethics Committee of the Faculty of Psychology, University of Warsaw approved the protocol. All participants provided informed consent.

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Supplemental material

Supplemental material for this article is available online.

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