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# **Anorexia Nervosa:Enhancing motivation to change with self-determination theory**

Anorexie mentale : améliorer la motivation au changement avec la théorie de l'auto-détermination.

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## **Clinical implications**

- Motivation to change is important in care management for anorexia.
- The motivational approaches frequently used by clinicians rely on a dichotomous view of motivation (intrinsic versus extrinsic).
- Self-determination theory enriches this dual approach, highlighting useful forms of extrinsic motivation and emphasizing the significance of behavioral regulation.
- Motivational approaches through the lens of self-determination theory may be the most appropriate for hospitalized patients who show little or no motivation to change.

## **Abstract**

Motivational deficits (little or no motivation to change) are often reported in patients with eating disorders, particularly anorexia nervosa. The motivational approaches frequently used by French clinicians rely solely on a dichotomous view of motivation (intrinsic vs. extrinsic). In self-determination theory, certain forms of extrinsic motivation can strengthen an individual's commitment to an activity, providing they are self-determined. This theory therefore extends and enriches the dual motivational approach by highlighting potentially useful forms of extrinsic motivation and by emphasizing the importance of behavioral regulation. Empirical work is now needed to assess how clinicians can use self-determination theory to enhance motivation to change among patients with anorexia nervosa and encourage their adherence to care management plans.

**Keywords:** anorexia nervosa; motivation; self-determination theory; change; care

## **Résumé**

Des déficits motivationnels (faible voire aucune motivation au changement) sont souvent rapportés chez les patients souffrant de troubles des conduites alimentaires, en particulier d'anorexie mentale. Les approches motivationnelles les plus souvent utilisées par les cliniciens s'appuient sur une conception dichotomique (intrinsèque vs extrinsèque) de la motivation. Selon la théorie de l'autodétermination, certaines formes de motivation extrinsèque peuvent améliorer l'investissement des individus dans une activité, à condition qu'elles soient autodéterminées. Cette théorie complète et enrichit donc l'approche motivationnelle en mettant en évidence des formes de motivation extrinsèque potentiellement utiles et en soulignant l'importance de la régulation comportementale. Des travaux empiriques sont maintenant nécessaires pour mieux comprendre comment les cliniciens peuvent utiliser la théorie de l'autodétermination pour augmenter la motivation au changement des patients souffrant d'anorexie mentale et leur adhésion à leur projet de soins.

**Mots clés :** Anorexie mentale, motivation, théorie de l'autodétermination, changement, prise en charge

## **Introduction**

Half of adolescents receiving treatment for anorexia nervosa (AN) recover, one third show improvement, 21% develop chronic disorders, and 5–6% do not survive [1]. A total of 35% of patients diagnosed with eating disorders (EDs) experience relapse after hospitalization [2]. One explanation for this high relapse rate often mentioned in the literature is the difficulty impelling motivation to change in patients with EDs, particularly AN [3]. Encouraging patients with AN to adhere to change thus poses a significant challenge in care management.

### ***Current motivational practices and their limitations***

Miller and Rollnick's motivational approach [4] is currently one of those most widely used to work on motivation to change. This approach assumes that individuals have a powerful potential for change and sufficient internal resources to achieve it. The therapist's role is therefore to foster patients' awareness of their abilities and to strengthen them. The model most commonly used in the treatment of addictions, and the one on which Miller and Rollnick's motivational approach is based, is the transtheoretical model of change [5,6]. It lists six stages that patients must go through to achieve lasting change. In Stage 1 (*pre-contemplation*), patients report no thoughts of change. In Stage 2 (*contemplation*), patients think about change. In Stage 3 (*preparation*), patients come to a decision and make plans to stop their problematic behaviors. In Stage 4 (*action*), patients actively engage in change. In Stage 5 (*maintenance*), patients make changes, but recognize that they must watch out for relapses. In Stage 6 (*relapse or termination*), patients may either relapse and engage in a new cycle of change or else cease to see their former problem behaviors as desirable.

Although these motivational approaches can be effective in the management of EDs [7], they have several theoretical limitations, particularly in how they define the different types of motivation. Drieschner and coworkers [8] have keenly criticized the definition of Miller and Rollnick (1991), arguing that intention and motivation to change behavior depend on behavioral manifestations. In other words, if there is no visible change in behavior, then there is no intention to change. However, patients with AN who have engaged in a process of change may continue to restrict their food intake.

Another criticism focuses on the definition of intrinsic versus extrinsic motivation. Prochaska and DiClemente [5] define *intrinsic motivation* as being inherent to the individual, and *extrinsic motivation* as resulting from environmental pressure. However, these definitions need to be refined, because individuals may be motivated not by *deep* reasons, but by shallow, personal ones (e.g., feeling shame and guilt in the absence of change) [9].

The fact that these early approaches did not fully conceptualize motivational processes has prevented authors from thinking about ways of applying such approaches more effectively in the management of patients with AN. In response to these criticisms, Ryan and Deci [10] developed self-determination theory, switching from a quantitative approach of motivation where only the intensity varies, to a qualitative one that considers different forms of motivation.

### **Self-determination theory (SDT)**

#### ***Definition***

Self-determination theory (SDT) is a framework developed by Deci and Ryan [10] that focuses on human motivation and its determinants. SDT posits that individuals have innate psychological needs for autonomy, competence, and relatedness in promoting intrinsic motivation and enhancing well-being. These needs are the foundation for understanding behavior and motivation, as they focus on both internal and environmental factors that influence individuals. SDT can be applied to various fields, including health [11] and food intake regulation [12]. SDT is based on a continuum that can be translated into the question, "At what point do individuals endorse their actions with a sense of choice rather than with a sense of constraint?" (See Table 1). This continuum presents motivation as something that can be regulated in a more or less self-determined way. We can thus distinguish between behaviors exerted with a feeling of pressure, regulated by a controlling force external to the individual, and behaviors exerted freely, in agreement and coherence with the self, and regulated autonomously [13]. The most *controlled* form of behavioral regulation is *external regulation*, in which the behavior is exerted to obtain a reward or avoid a punishment (carrot and stick). The second most controlled form is *introjected regulation*, which is when the behavior is exerted with a sense of pressure (e.g., shame, guilt, need to maintain a good self-image). The individual internalizes the values of others, striving for

approval or fearing disapproval (causing shame or guilt). It is therefore external forces, such as societal or peer expectations, that influence the individual's behaviors. Behaviors resulting from these two controlled forms of regulation are thus accompanied by a sense of obligation indicative of a non-self-determined motivation. By contrast, autonomous (self-determined) regulation of behavior is accompanied by a sense of volition. A behavior resulting from *identified* or *integrated regulation* reflects self-determined motivation. When individuals engage in an activity with identified or integrated regulation of their behavior, it is because they consider it important and useful to them, of interest and value to them, and freely chosen. However, this form of regulation is both self-determined and extrinsic. Thus according to self-determination theory, certain forms of extrinsic motivation can effectively promote people's investment in an activity, providing they are self-determined. Finally, the most autonomous (self-determined) form of behavioral regulation is intrinsic regulation. However, this occurs when the behavior is exerted purely for pleasure and satisfaction. As individuals cannot engage exclusively in activities that bring them pleasure, it is useful to encourage the development of self-determined extrinsic motivation, which has almost the same virtues as intrinsic motivation.

Importantly, SDT differs from the conventional approach to motivation by excluding the notion of gradual integration. Several forms of motivation can coexist within the same individual for the same activity: for instance, individuals may engage in work to earn a salary (external motivation), but this does not preclude inherent interest in their job, and this integrated motivation may even surpass the extrinsic one. From this perspective, extrinsic motivation (e.g., obligation of care) does not exclude intrinsic motivation. Rather than being considered undesirable, extrinsic motivation thus has the potential to bring about significant changes.

### ***Role of basic psychological needs in increasing self-determined regulation***

The characteristics of the social context may influence the production of behaviors based on self-determined regulation. Failure to satisfy basic psychological needs (i.e., for competence, relatedness, and autonomy) hinders the development of self-determined motivation, as it leads individuals to perceive changing activity as imposed and unrealistic [10]. Because they are not motivated by deep personal drivers, they reject continuous investment in the activity, so compromising the process of



change over the long term. It is therefore fundamental to promote contexts that allow basic needs to be met as far as possible.

The need for *competence* reflects the feeling of being effective in one's interaction with the environment. In other words, it implies a belief in one's ability to cope with specific problems and find solutions. The need for *relatedness* corresponds to a sense of belonging, of being connected and involved with others. The need for *autonomy* refers to the feeling of being in charge of one's own actions while performing an activity. To satisfy these needs, individuals act through self-determined motivation. This form of motivation is more durable than non-self-determined forms [14]. It is thus essential to focus on satisfying these basic psychological needs in order to move toward self-determined motivation, especially where mental health is concerned.

### **Application of self-determination theory to the management of anorexia nervosa**

As stated above, patients diagnosed with AN tend to be reluctant to comply with treatment and care plans [9]. Problems with motivation to change can affect the maintenance stage in this disorder, and so need to be addressed. Self-determination theory seems to be a promising approach to add to the motivational approach of Miller and Rollnick (1991) and the transtheoretical model of change [5,6]. SDT is particularly important in the early stages of motivation, because unlike conventional motivational interviewing, which emphasizes a change in discourse so that patients can move on to preparing for a change in action, SDT makes it possible to set up actions right from the early stages of extrinsic motivation to meet the basic psychological needs of the patient. Through this approach, they will perceive their own recovery as a personal choice. They will be encouraged to fulfill their needs for competence, relatedness, and autonomy, while internalizing the reasons behind their lasting change. The primary objective of psychological care should not be merely to promote intrinsic motivation, as propounded in the theories underlying the motivational approaches currently used in practice, but rather to encourage patients to appreciate and value changes in their maladaptive behaviors [9].

Despite the growing interest in this theory of motivation in the field of mental health [15], there have been very few studies in AN management. Sansfaçon et al. [16] showed that AN patients with greater levels of self-determined motivation had a better prognosis at 6 months than those with only a

controlled regulation type of motivation. Van Der Kaap, Deeder et al. [17] reported that patients with AN who received a psychological intervention to address a basic need during hospitalization displayed significant signs of recovery, such as a significant increase in BMI by the end of the intervention, and reduced intensity of their ED symptoms. They also expressed increasing willingness to address their dietary issues. Satisfaction of psychological needs may thus represent both a means to self-determined motivation and a goal to be achieved.

### ***Application to satisfying psychological needs***

Experts have recently reached a consensus on methods for working on the stages of change in SDT management, and on the quality of motivation [15]. A total of 21 actions are described (see [15] for a full description). Here we focus on a few specific dimensions that distinguish the conventional motivational interview from approaches related to psychological need satisfaction.

For the *competence* need: (i) Helping the patient identify realistic, meaningful, and achievable goals. For example, a patient may express the wish to return to "normal" food consumption (e.g., in line with what would be expected). However, as healthcare professionals, we should steer the patient towards a more modest and attainable goal (e.g., increasing the quantity of one meal a day). (ii) Supporting the patient in coping with social pressure to conform to a slimming diet. In this context, programs based on cognitive dissonance have proved their worth in bulimia nervosa [18] and binge eating disorder, and would certainly be of great help in AN. In particular, these programs enable people to get involved on behalf of others (for example, by proposing an action with a societal aim – making flyers to warn teenagers about such pressure), so reinforcing not only their sense of competence but also their ability to relate to others.

For the *relatedness* need: (i) Acknowledging a patient's ambivalence and emotions is essential to ensure a good therapeutic alliance and form a solid basis for management. (ii) Welcoming new patients to the hospital unit could be done by patients themselves, for example through a sponsorship system. This could enhance patient engagement and foster a sense of competence in their own healthcare. (iii) Patients also need to be helped to discover the various social supports available to them. Their disorder tends to isolate them from their friends and family. Family therapy, along with psycho-

education for close family and friends to facilitate dialogue is a priority in the recommendations of the French Health Authority (HAS). (iv) Various group activities enable patients to forge links with each other, but it is also advisable to help patients re-establish contacts and participate in activities outside their disorder to improve social support, and also their sense of autonomy.

For the *autonomy* need: (i) Working on patients' values seems essential to restore their autonomy. They often define themselves through their disorder, which is complicated to control. Allowing patients to refocus on the values most important to them can help them regain a sense of autonomy. This involves specifying their aspirations and values. Programs such as the KORSA workshops [19], proposed to reduce student stress and based on acceptance and commitment theories, could be adapted to this population, enabling them to reappropriate the meaning of their actions outside the disorder. (ii) Encouraging patients to take part in other activities offered by the hospital unit (e.g., occupational therapy), highlighting the new skills they have acquired, would also increase their sense of autonomy. (iii) Allowing patients to choose two or more activities in a day, along with the order in which they want to do them, can foster a sense of autonomy.

### ***Application in relation to motivation quality***

As stated above, the strength of self-determination theory, compared with conventional motivational interviewing, is that it takes the quality of motivation into account, and not just the stages of change. STD also offers perspectives of therapeutic approaches from the early stages of motivation to bring about long-lasting effects: it is important to assess patients' level of motivation. Table 1 gives indications for practitioners, but no tools devoted specifically for AN currently exist. One solution would be to adapt the Situational Motivation Scale [20]. We can also mention here the link between problems of insight and motivation. Patients suffering from anorexia report a low level of insight [21]. One way to improve motivation to change would thus be to work on the insight of these patients.

### **Conclusion and perspectives**

The motivational approaches frequently used by clinicians are based essentially on a dichotomous conception of motivation: intrinsic versus extrinsic motivation. Self-determination theory adds to this dual approach by highlighting a useful form of extrinsic motivation and by emphasizing the importance

of behavioral regulation. This approach is best suited to hospitalized patients who have little or no motivation to change, as it offers prospects for more appropriate management. Training caregivers in this type of approach would also broaden the possibilities for managing these patients. Empirical research is now needed to study how self-determination theory can be applied to improve the motivation of patients with AN to adhere to their care management plan.


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| Type of motivation          | Type of regulation           |                        | Definition   | Example  |   |
|-----------------------------|------------------------------|------------------------|--|--|---|
| <b>Amotivation</b>          | <i>No regulation</i>         |                        | No motivation  | Patient expresses no motivation to change behavior   | <b>Least self-determined</b><br><br><b>Most self-determined</b> |
| <b>Extrinsic motivation</b> | <i>Controlled regulation</i> | External regulation    | To conform to others' expectations, to obtain a reward or avoid punishment                     | Patient (e.g., teenager) hospitalized by a third party who modifies behavior to obtain activities or outings |   |
|                             |                              | Introjected regulation | Behavior exerted under pressure (diminish feelings of shame or guilt, or maintain self-esteem) | Patient attending therapeutic group activity   |   |
|                             |                              | Identified regulation  | Understands and values the importance of change to achieve an important goal                   | Patient enrolled in therapeutic activities, despite difficulties   |   |
|                             | <i>Autonomous regulation</i> | Integrated control     | Integrated into personal values and self-concept   | Patient who has grasped the importance of change, and whose changes correspond to personal values            |   |
| Internal regulation         |                              | Likes this action      | Patient derives pleasure from behavioral changes   |  |   |
| <b>Intrinsic motivation</b> |                              |                        |  |  |   |

**Table 1.** Schematic presentation of self-determination theory adapted from Deci and Ryan [16], applied to a patient with an eating disorder.