

RESEARCH
ARTICLE**Development and Psychometric Validation of the Motivation for Recovery from Addiction Scale: A Psychometric Study in Light of Self-Determination Theory****Benammar Nawel**

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Addiction, Recovery, Motivation, Self-Determination Theory, Psychometric Validation.

Abstract

This research aims to develop and validate a scale for measuring motivation for recovery from drug addiction, grounded in Self-Determination Theory (SDT). A 36-item scale was developed, distributed across six dimensions reflecting the basic psychological needs (autonomy, competence, and relatedness), types of motivation (intrinsic and extrinsic), and psychological well-being. The study sample comprised 92 participants from Al-Waseet addiction treatment centers in western Algeria. The psychometric properties of the scale were assessed through reliability analysis (Cronbach's alpha coefficient and split-half reliability) and validity analysis (content validity, discriminant validity, and internal consistency). The results indicated acceptable reliability, with a Cronbach's alpha coefficient of ($\alpha = 0.864$) and a Guttman split-half coefficient of (0.874). Furthermore, the discriminant validity of the scale was verified using an independent samples t-test, with results indicating statistically significant differences ($p < 0.001$) between groups of individuals with high and low motivation. Additionally, correlation coefficients between the scale items and dimensional scores supported its internal consistency. These findings suggest that the Motivation for Recovery Scale possesses good psychometric properties in terms of reliability and validity, making it a promising tool for assessing motivation for recovery in the field of addiction. Practitioners can utilize this scale to gain a deeper understanding of individuals' motivations for recovery, thereby contributing to the development of effective individualized treatment plans and enhancing the therapeutic alliance by designing strategies tailored to their motivations.

Citation

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1. Introduction

Amidst the significant global increase in drug use rates among youth, the latest report by the United Nations Office on Drugs and Crime (UNODC) for the year 2024 indicates that approximately 300 million individuals worldwide use drugs, a figure that is projected to rise. The rate of substance misuse has increased by 20% in the last decade (UNODC, 2024). With this continuous increase, it is imperative to find optimal ways to manage these cases. To this end, understanding the complex relationship between motivation, desire for treatment, and recovery is crucial, as is the design of reliable scales to measure motivation for treatment among individuals with addiction.

Addiction is a chronic disorder characterized by psychological and physical dependence on a specific substance or behavior, such as drugs, alcohol, or gambling, leading to continued compulsive use despite adverse consequences on physical, psychological, and social health (American Psychiatric Association, 2013; Groshkova, 2010; Goodman, 1990). It is also defined as a disorder involving brain changes, particularly in reward circuits such as the dopaminergic system, rendering the individual unable to control their urges naturally (Volkow et al., 2016). This condition transcends mere excessive consumption to become a behavioral pattern that dominates the individual's life, affecting their relationships, work, and social life (APA, 2013).

Individuals with addiction face numerous obstacles when attempting treatment, as the recovery process necessitates radical changes in behavior and lifestyle. In this regard, motivation emerges as a critical factor in successful recovery. Motivation is defined as the psychological process that energizes an individual to make specific decisions and directs their behavior toward achieving particular goals (Ryan & Deci, 2000). It plays a crucial role in an individual's readiness to engage in and persevere with treatment programs and is divided into intrinsic motivation, stemming from an individual's internal desire for change, and extrinsic motivation, which relies on factors such as social pressure or rewards. Studies have demonstrated that intrinsic motivation is more effective and enduring (Bulut & Bozkurt, 2019; Mancini, 2008; Richards et al., 2020).

As Miller and Rollnick (2013) noted, motivation is the primary driver of behavioral change, whether it is intrinsically or extrinsically generated. Motivation is not merely a transient desire but a complex process influenced by the psychological, social, and environmental factors surrounding the individual. Motivation is considered an essential element in the addiction recovery process; it is the internal force that impels an individual to change their behavior and adhere to treatment (Shahrabadi et al., 2020; Gregoire & Kennedy, 2009). Conversely, a lack of motivation can lead to treatment failure and an increased likelihood of relapse. Therefore, enhancing motivation is a necessary step to ensure successful recovery and achieve lasting positive change (Ryan, 2017). Furthermore, DiClemente et al. (2004) concluded that patients who demonstrated greater readiness to change were less prone to relapse during the first-year post-treatment. This indicates that motivation not only influences treatment initiation but also plays a critical role in its continuation. However, motivation remains a complex construct that is difficult to measure accurately without reliable instruments that account for its multifaceted dimensions, such as intrinsic and extrinsic motives and basic psychological needs.

To elucidate this role, Self-Determination Theory (SDT) offers an integrated theoretical framework focusing on three basic psychological needs: autonomy (the feeling of control over one's decisions), competence (confidence in one's ability to achieve goals), and relatedness (supportive social connections). The theory posits that satisfying these needs enhances intrinsic motivation, which is most influential in behavioral change.

Therefore, this study aims to:

- Develop a new scale for motivation for recovery: based on Self-Determination Theory.
- Validate the scale: by examining its psychometric properties (such as validity and reliability) to ensure its trustworthiness and soundness.
- Support research and practice: by providing a precise scientific instrument that researchers and practitioners can use to improve the understanding of motivation and develop more effective treatment programs.

The significance of this study also lies in providing a reliable instrument to measure a complex attribute, namely motivation for recovery. Furthermore, it opens avenues for future studies to explore the psychological, social, and cultural factors influencing recovery, thereby enhancing the standing of psychological research.

Self-Determination Theory (SDT) by Deci and Ryan:

Self-Determination Theory (SDT), developed by Edward L. Deci and Richard M. Ryan in the 1970s, is a comprehensive framework for understanding human motivation, personality development, and psychological well-being. The theory posits that individuals have innate psychological needs which, when satisfied, foster optimal functioning and growth. This overview explores the core concepts of SDT, focusing on the three basic

psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 1985, 2000, 2017). Chan et al. (2019) emphasized that individuals' psychological needs play a crucial role in substance use behaviors and recovery processes.

Core Concepts of Self-Determination Theory:

Autonomy: Refers to the need to feel in control of one's actions and decisions. According to Deci and Ryan (2000), when individuals experience autonomy, they willingly engage in activities and feel a sense of volition. This contrasts with externally regulated motivation, which is driven by external pressures or rewards. Research indicates that fostering autonomy can lead to increased intrinsic motivation and enhanced performance (Ryan & Deci, 2000; Vansteenkiste et al., 2006).

Competence: The need for competence lies in the desire to master skills and achieve goals. Individuals are motivated to engage in activities where they feel effective and capable (Ryan & Deci, 2017). Studies have shown that environments supporting competence can enhance intrinsic motivation (Vallerand et al., 1997).

Relatedness: Refers to the need for social connections and a sense of belonging. People are motivated to form meaningful relationships and feel connected to others (Baumeister & Leary, 1995). Research by Ryan and Deci (2000) has shown that satisfying this need is crucial for overall psychological well-being.

The satisfaction of these basic psychological needs allows individuals to feel a sense of control over their choices, thereby promoting self-directed behavior, which is essential for effective engagement with treatment (Herchenroeder et al., 2024; McMillan, 2023).

Intrinsic and Extrinsic Motivation:

It is essential to distinguish between intrinsic and extrinsic motivation. The former originates from within the individual, linked to personal satisfaction and interest in the activity itself (Ryan & Deci, 2000). In contrast, extrinsic motivation is influenced by external factors, such as rewards or recognition. Deci and Ryan (1985) identified different types of extrinsic motivation, ranging from external regulation (associated with rewards) to integrated regulation (where external goals align with personal values).

Research suggests that environments supporting intrinsic motivation lead to better outcomes, including enhanced creativity, perseverance, and psychological well-being (Ryan & Deci, 2000; Vansteenkiste et al., 2006; Smith, 2017). Numerous studies have demonstrated the effectiveness of applying Self-Determination Theory in enhancing motivation for addiction recovery. For example, a study by Wild et al. (2006) found that individuals who received strong social support in outpatient treatment programs were more committed to recovery and less likely to relapse, highlighting the importance of relatedness. Another study by Chan and Mak (2019) indicated that individuals who felt their needs for autonomy and competence were met showed higher levels of intrinsic motivation and perseverance in rehabilitation programs. Furthermore, research by Vallerand et al. (1997) confirmed that intrinsic motivation is closely associated with treatment satisfaction and success in achieving long-term recovery goals.

Scale Development Methodology:

The researcher developed the Motivation for Recovery from Addiction Scale by following these steps:

- Development of the preliminary version of the scale.
- Verification.

The researcher developed the Motivation for Recovery from Addiction Scale by following these subsequent steps:

Scale Development Steps of the psychometric properties of the scale, as detailed below:

1. Development of the Initial Version of the Scale:

The researcher undertook the following:

Review of the theoretical framework: In designing this scale, the researcher relied on Ryan and Deci's Self-Determination Theory (SDT), as previously discussed, to define the

Preparation of the initial draft of the scale.

Preparation of the preliminary version of the scale.

Verification of the psychometric properties of the scale: This was conducted as follows:

1.1 Preparation of the Initial Draft of the Scale: The researcher undertook the following:

Review of the theoretical framework: In designing this scale, the researcher relied on Self-Determination Theory (SDT) by Ryan and Deci, as previously discussed dimensions of the scale.

Review of existing scales addressing the concept of motivation, including:

- The "Motivation for Psychological Treatment Scale based on Self-Determination Theory: Psychometric Properties in Dutch Out., 2014).
- The Treatment Entry Questionnaire - Short Form, based on Self-Determination patients," adapted and validated by Jochems et al. (2014).
- The "Treatment Entry Questionnaire - Short Form based on Self-Determination Theory" by Walji et al. (2022).
- The Treatment Self-Regulation Questionnaire (TSRQ), developed to measure motivation for responsible drinking (Richards et al., 2020).
- The "Treatment Self-Regulation Questionnaire (TSRQ)," developed to measure motivations for responsible drinking (Richards et al Drawing from the theoretical framework, previous studies, and existing scales, the dimensions of the current scale were defined as follows: 2020).

Drawing from the theoretical framework, previous studies, and existing scales, the dimensions of the current scale were identified as follows:

- **Dimension 1: Autonomy:** The feeling of freedom and responsibility in making treatment decisions.
- Dimension 2: Competence:** Confidence in the ability to achieve recovery goals.
- **Dimension 3: Relatedness:** Social support from family and friends.
- **Dimension 4: Intrinsic Motivation:** Engagement in treatment for internal reasons.
- **Dimension 5: Extrinsic Motivation:** Engagement in treatment for external reasons social support from family and friends.
- **Dimension 6: Psychological Well-being:** The feeling of psychological and physical improvement as a result of reasons.

Based on the foregoing, the researcher formulated the initial version of the scale, which was prepared for submission to expert reviewers.: Psychological Well-being: The feeling of psychological and physical improvement as a result of treatment.

in light of the foregoing, the researcher has finalized the formulation of the preliminary version of the scale, which is now prepared for submission to the esteemed reviewers. This initial draft comprises 40 items, allocated across six dimensions. The first dimension consists of six items, the second dimension encompasses seven items, the third dimension includes six items, the fourth dimension contains nine items, the fifth dimension comprises six items, and the sixth dimension also features six items.

2.2 Preparation of the Preliminary Version of the Scale:

The researcher conceptualized 40 items across six dimensions, with each dimension containing several items (including both positively and negatively worded items). After submitting the scale based on Self-Determination Theory. Its initial version consisted of 40 items, divided into six dimensions, the scale to nine expert reviewers—comprising psychiatrists specializing in addiction, university professors, and psychologists with field experience—the with each dimension containing several items (including both positively and negatively worded items). After submitting the scale to a panel of 9 expert reviewers—comprising psychiatrists specializing in addiction, university professors, and psychologists with field experience—the scale was revised scale was revised to consist of 36 items, distributed as follows:

Autonomy Dimension (6 items): Positively worded: 1, 13, 25, 34; Negatively worded: 7, 19.
Competence Dimension (6 items): Positively worded: 2, 14, 26, 32; Negatively worded: 8, 20.
Relatedness Dimension (6 items): Positively worded: 3, 15, 27, 35; Negatively worded: 9, 21.
Intrinsic Motivation Dimension (7 items): Positively worded: 4, 16, 28, 31, 33; Negatively worded: 10, 22.
Extrinsic Motivation Dimension (5 items): Positively worded: 5, 17, 29; Negatively worded: 11, 23.
Psychological Well-being Dimension (6 items): Positively worded: 6, 18, 30, 36; Negatively worded: 12, 24.

Responses are scored on a 5-point are scored on a 5-point Likert scale as follows:

- **Strongly Agree:** 5 points for positively worded items and 1 point for negatively worded items.
 - **Agree:** 4 points for positively worded items and 2 points for negatively worded items.
 - **Neutral:** 3 points for both positively and negatively worded items.
 - **Disagree:** 2 points for positively worded items and 4 points for negatively worded items.
- Likert scale (from 1 to 5) as follows:

- **Strongly Agree:** 5 points for positively worded items and 1 point for negatively worded items.

Scoring Scale: The maximum score on the scale is (180), and the minimum score is (36). A higher score indicates a higher motivation for recovery.

Subdimensions	Items	Score Range
Autonomy	1 - 7 - 13 - 19 - 25 - 34	6-30
Competence	2 - 8 - 14 - 20 - 26 - 32	6-30
Relatedness	3 - 9 - 15 - 21 - 27 - 35	6-30
Intrinsic Motivation	4 - 10 - 16 - 22 - 28 - 31 - 33	7-35
Extrinsic Motivation	5 - 11 - 17 - 23 - 29	5-25
Psychological Well-being	6 - 12 - 18 - 24 - 30 - 36	6-30

3. 3 Psychometric Properties of the Scale:

a) Sample and Procedure:

To verify the psychometric properties of the studied scale and ascertain its validity and reliability, a sample of 92 participants was selected from Al-Waseet addiction treatment centers in the provinces (wilayas) of Oran and Tlemcen, in addition to a private clinic specializing in addiction treatment in Tlemcen. Participants were selected using a purposive sampling method. The sample included individuals currently undergoing various addiction treatment programs. The mean age of the participants was 29 years, and all were male. The scale's questionnaires were distributed to participants at the treatment centers and the private clinic after explaining the study's objectives, ensuring data confidentiality, and obtaining voluntary informed consent. Data were collected during the period from December 2024 to February 2025.

b) Validity of the Scale: To examine the validity of the scale, we relied on expert validity, discriminant validity (by conducting an Independent Samples t-Test), and internal consistency. SPSS version 27 was utilized to calculate these coefficients.

1. Expert Validity: The researcher submitted the initial version of the scale to 8 expert reviewers to assess its content validity. These reviewers were comprised of: 6 university professors in psychology and 2 psychologists. They were requested to evaluate the scale's items by determining whether each item measures what it is intended to measure, does not measure it, or requires modification and rephrasing. After calculating the percentage of agreement, items with an agreement rate exceeding 80% were retained, and modifications were made based on the reviewers' feedback. Consequently, the scale was refined to consist of 36 items. The following tables illustrate the percentage of agreement for each item and the modifications made based on the reviewers' observations.

Table (1): Percentage of Agreement Among Reviewers on the Items

Item No.	Dimension	Agreement Rate	Item No.	Dimension	Agreement Rate
1	Autonomy Dimension	100%	21	Relatedness	100%
2	Competence	90%	22	Intrinsic Motivation	90%
3	Relatedness	100%	23	Extrinsic Motivation	100%
4	Intrinsic Motivation	60%	24	Psychological Well-being	90%
5	Extrinsic Motivation	100%	25	Autonomy Dimension	100%
6	Psychological	100%	26	Competence	80%

	Well-being				
7	Autonomy Dimension	100%	27	Relatedness	100%
8	Competence	100%	28	Intrinsic Motivation	50%
9	Relatedness	100%	29	Extrinsic Motivation	100%
10	Intrinsic Motivation	90%	30	Psychological Well-being	100%
11	Extrinsic Motivation	100%	31	Intrinsic Motivation	100%
12	Psychological Well-being	100%	32	Competence	100%
13	Autonomy Dimension	100%	33	Intrinsic Motivation	100%
14	Competence	100%	34	Autonomy Dimension	100%
15	Relatedness	100%	35	Relatedness	90%
16	Intrinsic Motivation	90%	36	Psychological Well-being	70%
17	Extrinsic Motivation	90%	37	Relatedness	90%
18	Psychological Well-being	100%	38	Extrinsic Motivation	70%
19	Autonomy Dimension	100%	39	Psychological Well-being	90%
20	Competence	100%	40	Intrinsic Motivation	100%

Table (2): Item Revisions Based on Reviewer Feedback

Item No.	Initial Wording	Revised Wording
1	I feel free to choose the treatment methods appropriate for me.	I have the freedom to choose the treatment methods appropriate for me.
3	I feel supported and appreciated by the important people in my life.	My family appreciates my participation in addiction treatment.
6	I feel a deep sense of satisfaction with my life since I began the treatment journey.	I feel satisfied with myself since I began the treatment journey.
7	I feel compelled to follow the treatment plan.	My decision to seek treatment was influenced by my family.
9	I often feel lonely and misunderstood by others during my treatment journey.	My family does not understand the episodes that occur due to drug cravings.
20	I doubt my ability to overcome the overwhelming urge to use.	I am afraid of my inability to control the overwhelming urge to use.
30	I have been living a healthier and more satisfying life since I decided to start the treatment journey.	I have been living a healthy life since the beginning of treatment.
32	I am ready to face any challenge that comes my way in treatment.	I try to keep myself busy with activities that distract me from the thought of using.
35	I am the sole decision-maker in choosing my treatment program.	I plan to achieve some personal goals after recovering from addiction. (To avoid redundancy)

2. Discriminant Validity: To verify discriminant validity, an Independent Samples t-Test was conducted. We compared the low scores on the scale with the high scores on the scale. The following table shows the results obtained:

Table (3): Results of the t-Test between the Mean of Low and High Scores

Scores	N°	Mean	Standard Deviation	t-value	p-value	Statistical Significance
Low Scores	30	114.6333	3.81000	-18.662	.000	Statistically Significant
High Scores	30	144.7667	7.98137			

It is evident from the data in Table (3) that the mean of the high scores (144.7667) with a standard deviation of (7.98137) is higher than the mean of the low scores (114.6333) with a standard deviation of (3.81000). Furthermore, the t-test value was (-18.662) with a probability value of (.000), which is less than the significance level of (0.05). Therefore, we conclude that there are statistically significant differences between the low scores and the high scores on the scale. This indicates that the scale possesses discriminant validity, as it can distinguish between respondents with low scores and those with high scores.

3. Internal Consistency Validity: Internal consistency validity was verified by calculating Pearson correlation coefficients between the scores of each item within the six dimensions and the total score of the dimension to which the item belongs, using SPSS version 27. The following tables show the correlation coefficients between each item of the six dimensions and the total dimensional scores.

Table (4): Correlation Coefficients between Each Item Score and the Total Score for Dimension One (Autonomy)

Item No. for Autonomy Dimension	Correlation Coefficient	Significance Value
1	.502**	.000
7	.619**	.000
13	.549**	.000
19	.447**	.000
25	.645**	.000
34	.445**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

The results from the preceding table show that all Pearson correlation coefficients between the items of the first dimension and the total score for this dimension are statistically significant at the 0.01 significance level. The minimum correlation coefficient was .445, while the maximum was .645. Therefore, all items of the first dimension are internally consistent with the dimension to which they belong, which confirms the internal consistency validity of the items of the first dimension.

Table (5): Correlation Coefficients between Each Item Score and the Total Score for Dimension Two (Competence)

Item No. for Competence Dimension	Correlation Coefficient	Significance Value
2	.680**	.000
8	.631**	.000
14	.635**	.000
20	.718**	.000
26	.820**	.000
32	.708**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

The results from the preceding table show that all Pearson correlation coefficients between the items of the second dimension and the total score for this dimension are statistically significant at the 0.01 significance level. The minimum correlation coefficient was .631, while the maximum was .820. Therefore, all items of the second dimension are internally consistent with the dimension to which they belong, which confirms the internal consistency validity of the items of the second dimension.

Table (6): Correlation Coefficients between Each Item Score and the Total Score for Dimension Three (Relatedness)

Item No. for Relatedness Dimension	Correlation Coefficient	Significance Value
3	.516**	.000
9	.394**	.000

15	.628**	.000
21	.295**	.004
27	.571**	.000
35	.763**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

The results from the preceding table show that all Pearson correlation coefficients between the items of the third dimension and the total score for this dimension are statistically significant at the 0.01 significance level (except item 21 which is significant at $p=.004$, still highly significant). The minimum correlation coefficient was .295, while the maximum was .763. Therefore, all items of the third dimension are internally consistent with the dimension to which they belong, which confirms the internal consistency validity of the items of the third dimension.

Table (7): Correlation Coefficients between Each Item Score and the Total Score for Dimension Four (Intrinsic Motivation)

Item No. for Intrinsic Motivation Dimension	Correlation Coefficient	Significance Value
4	.575**	.000
10	.526**	.000
16	.669**	.000
22	.438**	.000
28	.733**	.000
31	.670**	.000
33	.618**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

The results from the preceding table show that all Pearson correlation coefficients between the items of the fourth dimension and the total score for this dimension are statistically significant at the 0.01 significance level. The minimum correlation coefficient was .438, while the maximum was .733. Therefore, all items of the fourth dimension are internally consistent with the dimension to which they belong, which confirms the internal consistency validity of the items of the fourth dimension.

Table (8): Correlation Coefficients between Each Item Score and the Total Score for Dimension Five (Extrinsic Motivation)

Item No. for Extrinsic Motivation Dimension	Correlation Coefficient	Significance Value
5	.316**	.002
11	.578**	.000
17	.359**	.000
23	.465**	.000
29	.372**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

The results from the preceding table show that all Pearson correlation coefficients between the items of the fifth dimension and the total score for this dimension are statistically significant at the 0.01 significance level. The minimum correlation coefficient was .316, while the maximum was .578. Therefore, all items of the fifth dimension are internally consistent with the dimension to which they belong, which confirms the internal consistency validity of the items of the fifth dimension.

Table (9): Correlation Coefficients between Each Item Score and the Total Score for Dimension Six (Psychological Well-being)

Item No. for Psychological Well-being Dimension	Correlation Coefficient	Significance Value
6	.751**	.000
12	.498**	.000
18	.788**	.000
24	.521**	.000

30	.630**	.000
36	.789**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

The results from the preceding table show that all Pearson correlation coefficients between the items of the sixth dimension and the total score for this dimension are statistically significant at the 0.01 significance level. The minimum correlation coefficient was .498, while the maximum was .789. Therefore, all items of the sixth dimension are internally consistent with the dimension to which they belong, which confirms the internal consistency validity of the items of the sixth dimension.

Consequently, through the internal consistency demonstrated in the preceding tables, the validity of the study instrument (the scale) is evident, exhibiting a high degree of validity across its clinical dimensions.

b) Reliability of the Scale: To verify the reliability of the scale, we relied on Cronbach's alpha coefficient and the split-half method, using SPSS version 27.

1. Reliability Coefficient using Cronbach's Alpha:

Table (10): Cronbach's Alpha Reliability Coefficient for the Study Instrument (Scale)

N° of Items	Cronbach's Alpha Coefficient
36	.864

It is evident from the table above that the Cronbach's alpha coefficient is .864, which indicates that the scale possesses a high degree of reliability, as the Cronbach's alpha value is greater than 0.70.

2. Split-Half Method:

Table (11): Results of the Reliability Coefficient using the Split-Half Method

N° of Items	Correlation Coefficient	Split-Half Reliability Coefficient (Guttman)
36	.784	.874

From the results in the table, it is evident that the study instrument (the scale) possesses high reliability. The correlation coefficient was .784, and the reliability coefficient corrected with the Guttman formula is .874, which is a high value, indicating that the results of the scale can be trusted during application.

Discussion:

The study results showed that the Motivation for Recovery Scale possesses good psychometric properties in terms of validity and reliability. Content validity was verified through a comprehensive expert review process, and the scale demonstrated discriminant validity through its ability to distinguish between groups of individuals with high and low motivation. The internal consistency of the scale was also confirmed through correlation coefficients between items and dimensions. Furthermore, the scale demonstrated high reliability through Cronbach's alpha coefficient and the split-half method.

These findings are consistent with previous studies that have emphasized the importance of motivation in the addiction recovery process (DiClemente et al., 2004; Miller & Rollnick, 2013) and the role of Self-Determination Theory in understanding motivation in this context (Chan et al., 2019; Herchenroeder et al., 2024). The current scale is distinguished by being grounded in a well-established theoretical framework and measuring multiple dimensions of motivation relevant to recovery, including basic psychological needs, types of motivation, and psychological well-being. The current scale also adds value to the existing instruments in this field.

Study Limitations and Recommendations for Future Research:

Despite the encouraging results, certain limitations of this study should be considered. The study was conducted on a limited sample of participants in western Algeria, which may restrict the generalizability of the findings to other geographical and cultural regions. Furthermore, the sample was confined to individuals receiving treatment at Al-Waseet centers and private clinics; the application results might differ with other samples, such as individuals at different stages of recovery or those who have not yet entered treatment.

Based on these limitations, the study recommends the following:

1. **Expand the Scope of Application:** Conduct future studies to apply the scale to larger and more diverse samples of participants in different geographical and cultural regions. This would enhance the generalizability of the results and verify the scale's validity in varied contexts.
2. **Develop Therapeutic Interventions:** Utilize the scale in applied research to develop and evaluate the effectiveness of therapeutic interventions aimed at enhancing motivation for recovery, based on the principles of Self-Determination Theory.
3. **Study Dimensions Separately:** Conduct future studies to analyze the sub-dimensions of the scale independently and understand the relative role of each dimension in the recovery process. This could aid in designing more tailored therapeutic interventions.

Conclusion

This research presents a new and validated scale for motivation for recovery from addiction, grounded in Self-Determination Theory. The scale is characterized by good psychometric properties, making it a promising tool for researchers and practitioners in the field of addiction. The use of this scale can contribute to a better understanding of individuals' motivations for recovery, the development of more effective treatment programs, and the enhancement of the quality of services provided to individuals with addiction.

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Appendix

Motivation for Recovery from Addiction Scale (Developed by the researcher)**Scale Instructions:**

This instrument consists of thirty-six (36) items. Each item is accompanied by five (5) response options. You are kindly requested to read each item meticulously and select the response that most accurately reflects your current situation. It is imperative to respond to all items; no item should be left unanswered. Responses to the items on this scale are not evaluated as correct or incorrect; rather, they serve as an inquiry into your subjective psychological experience. Consequently, you are requested to respond with utmost sincerity, reflecting your genuine feelings

No.	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I have the freedom to choose the treatment approaches appropriate for me.					
2	I am confident in my ability to achieve my recovery goals.					
3	My family appreciates my participation in addiction treatment.					
4	I participate in therapeutic activities because they are enjoyable and interesting.					
5	I seek treatment to become a better and more successful person.					
6	I have felt satisfied with myself since I began the treatment journey.					
7	My decision to pursue treatment was made by my family.					
8	I often doubt my ability to continue with the treatment.					
9	My family does not understand the episodes that occur due to the need for the drug.					
10	I often feel bored and weary of following the treatment program.					
11	I want to undergo treatment to please others and avoid their criticism.					
12	I often feel frustrated and hopeless due to the difficulties of treatment.					
13	I take responsibility for making my treatment-related decisions.					
14	I possess the necessary skills to cope with any problem that may arise during treatment.					
15	I have supportive relationships that help me continue with treatment.					
16	I consider treatment an opportunity for self-development and discovering my capabilities.					
17	I abstain from substance use to achieve material or social gains.					
18	I have become more optimistic and happier since starting treatment.					
19	I feel that my recovery decisions do not stem from my genuine convictions.					

20	I fear my inability to control the strong urge (craving) to use substances.					
21	I feel that others do not understand my struggles on the recovery journey.					
22	I find it difficult to enjoy the treatment process.					
23	My improvement significantly depends on rewards and praise from others.					
24	I often feel stressed and anxious about my future in the treatment journey.					
25	I believe that my treatment decisions stem from my personal will.					
26	I trust my ability to maintain long-term sobriety (abstinence from substance use).					
27	I find my relationships with others to be a source of strength and inspiration.					
28	I genuinely enjoy my treatment process and self-discovery.					
29	I participate in the treatment process because I desire the appreciation and respect of others.					
30	I have been living a healthy life since the beginning of treatment.					
31	I feel pride and a sense of accomplishment when I make any progress in treatment.					
32	I try to occupy myself with activities that distract me from the thought of using substances.					
33	I look forward to the process of change and improvement I will achieve in treatment.					
34	I plan to achieve some personal goals after recovering from addiction.					
35	I am grateful for the support of my family and friends during my treatment.					
36	Since starting treatment, I have begun to take care of myself and my appearance.					