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Client Motivation for Therapy Scale: A Measure of Intrinsic Motivation, Extrinsic Motivation, and Amotivation for Therapy

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The purpose of this study was to examine the psychometric properties of a new measure of client motivation for therapy, the Client Motivation for Therapy Scale. This scale is designed to measure client's Intrinsic Motivation, four forms of regulation for Extrinsic Motivation (integrated, identified, introjected, and external regulation), and Amotivation for therapy. These subscales correspond to different forms of motivation identified by Deci and Ryan (1985) and fall along a self-determination continuum. An experimental version of the scale, along with related scales, was distributed to a total sample of 138 clients involved in therapy. The results supported the factor structure of the scale and revealed a satisfactory level of internal consistency. Correlations among the subscales revealed a simplex pattern that, in general, provides support for the self-determination continuum and the construct validity of the scale. Implications for research on client motivation for therapy are discussed.

Although there is now little doubt that psychotherapy, in general, can be beneficial for many mental illnesses and adjustment problems (Andrews, & Harvey, 1981; Landman & Dawes, 1982; Shapiro & Shapiro, 1982; Smith & Glass, 1977; Smith, Glass, & Miller, 1980), it remains true that not everyone benefits to a satisfactory degree (Lambert, Shapiro, & Bergin, 1994). For example, a sizable percentage of clients continue to drop out of therapy prematurely, fail to comply with their therapeutic regimen, and encounter difficulty in maintaining improvements effected by the therapeutic process (Garfield & Bergin, 1994; Mash & Hunsley, 1993).

An area of psychology that has particular relevance to the issues of dropout, compliance, and maintenance of change is the study of motivation. Several theoretical perspectives have been proposed to better understand motivation for therapy (see Brehm & Smith, 1994; Orlinsky & Howard, 1994). One theoretical perspective

of human motivation that has received a great deal of attention from researchers over the last decade is the theory of intrinsic motivation and self-determination proposed by Deci and Ryan (1985). This comprehensive theory holds the potential to contribute significantly to our understanding of the issues related to psychotherapy effectiveness for the following reasons. First, it distinguishes between different types of motivation that can have a distinct impact on the maintenance and integration of therapeutic changes. Second, it presents clear hypotheses regarding the therapeutic conditions that should hinder or facilitate clients' motivation to change. Third, it outlines various consequences (cognitive, affective, and behavioral) that are associated with the different types of motivation. And fourth, it addresses the issue of internalization, the process by which therapeutic changes that were initially reinforced by external sources (e.g., the therapist) become integrated within the individual to form a permanent part of his or her character. In this article, we present the results of a study dealing with the development and the validation of a measure of client motivation for therapy that can be used in future studies addressing the impact of client motivation on behavior change, psychotherapy outcomes, and client's well-being. This scale—the Client Motivation for Therapy Scale (CMOTS)—measures the different forms of motivation outlined in Deci and Ryan's Self-Determination Theory.

SELF-DETERMINATION THEORY

Deci and Ryan (1985) suggested that three basic types of motivation regulate our behavior: intrinsic, extrinsic, and amotivation. *Intrinsically motivated* behaviors are those which are engaged in purely for the pleasure and satisfaction derived from their performance. They are performed voluntarily in the absence of material rewards or external constraints. For example, an individual who decides to enter therapy purely for the pleasure derived from gaining a deeper personal understanding is seen as being intrinsically motivated toward therapy. Intrinsic motivation is thought to stem from the needs to feel competent and self-determined (Deci & Ryan, 1985). Consequently, behaviors that lead the client to experience feelings of competence and self-determination are intrinsically rewarding and are likely to be performed again.

Extrinsically motivated behaviors are those which are engaged in for instrumental reasons. That is, the behavior is not performed for its own sake, but instead to receive a reward or to avoid some punishment once the behavior has ended (Deci, 1975). It was originally thought that extrinsic motivation referred to non-self-determined behavior—behavior that could only be prompted by external contingencies. More recently however, Deci and Ryan, along with their colleagues (Deci & Ryan, 1985; Ryan & Connell, 1989; Ryan, Connell, & Deci, 1985), proposed that there are in fact different types of extrinsic motivation, some of which may be self-determined. Four types of extrinsic motivation have been proposed and are classified along a

continuum of increasing self-determination. From lowest to highest levels they are: external regulation, introjection, identification, and integration.

External regulation refers to behaviors that are controlled by external sources, such as material rewards or constraints imposed by another person (Deci & Ryan, 1985). For example, the client who enters therapy because his wife has given him an ultimatum to either deal with his drinking problem or seek out a divorce attorney is considered to be motivated by external regulation. With *introjected regulation,* the formerly external source of motivation has been internalized such that its actual presence is no longer needed to initiate a behavior. Instead, these behaviors are reinforced through internal pressures such as guilt, anxiety, or emotions related to self-esteem (Ryan & Connell, 1989). The battered woman with young children who seeks out therapy because she is overwhelmed with feelings of shame for having done nothing to improve her and her children's situation would be considered a client motivated by introjected regulation. *Identified regulation* is defined as behavior that an individual chooses to perform because it is congruent with his or her values and goals (Deci & Ryan, 1985). The behavior is still performed for extrinsic reasons (e.g., to achieve personal goals), but it is internally regulated and self-determined. The woman struggling with a difficult marriage who makes a personal decision to enter therapy because seeking professional help is congruent with her value of trying everything possible to hold a marriage together is an example of a client motivated by identified regulation. *Integrated regulation* refers to behavior that is performed not only because an individual values its significance, but also because it is consistent with other self-schemas the individual possesses; it is consistent with his or her self-identity (Deci & Ryan, 1985). This type of motivation is the most fully self-determined among the group of extrinsic motivational types. For example, the client who had previously completed therapy but now wishes to see a therapist to help him maintain the changes brought about in the course of that therapy would be motivated by integrated regulation. Endeavoring to sustain mental health has now become an integral aspect of the client's life and thus seeking out therapy is entirely consistent with his new identity.

The last type of motivation that has been identified is *amotivation.* Individuals are amotivated when they do not perceive a relationship between their actions and the outcomes that follow these actions. There is an experience of feelings of incompetence and lack of control (Deci & Ryan, 1985). This type of motivation is characterized by someone who engages in an activity without having a clear understanding of why he or she is doing it; there is no real sense of purpose. The client who enters therapy consumed with a sense of hopelessness, believing that therapy will undoubtedly prove to be a waste of time, is considered to be amotivated toward therapy.

Deci and Ryan (1985) further suggested that motivation is a dynamic concept. Thus, a client having one motivational type at a particular point in therapy may change to a different type depending on situational influences (e.g., therapist interpersonal style). Much of the research efforts regarding intrinsic motivation and

self-determination have been toward the explication of factors in the environment that induce losses of motivation and self-determination, or alternatively, factors that might enhance intrinsic motivation and self-determination. The results of this research have been formulated into the Cognitive Evaluation Theory (CET).

Determinants of Motivation and the CET

Central to the CET are the basic needs for self-determination and perceived competence. Accordingly, the theory suggests that any event that affects people's feelings of self-determination and competence can affect their intrinsic motivation (Deci & Ryan, 1985). Three functional aspects of events have been identified and are postulated to have differential effects on motivation (Deci & Ryan, 1985, 1991).

The first aspect, the controlling aspect, concerns the degree to which an event is controlling versus autonomy supportive. Controlling events are those that pressure people to feel, think, or behave in certain ways; they provide people with little sense of choice regarding what they can do or how they can do it. Autonomy supportive events, on the other hand, are devoid of such pressure and provide people with a sense of choice. With controlling events, people experience their behavior to be caused by the controlling event, and as a result, they tend to adopt a perceived external locus of causality and experience lower levels of self-determination. Conversely, events that support autonomy allow people to experience their behavior as being caused by their own motives and goals and, consequently, promote a perceived internal locus of causality and greater levels of self-determination. Thus, controlling events tend to undermine intrinsic motivation, and autonomy supportive events tend to promote intrinsic motivation.

Second, the informational aspect concerns the type of competence feedback given to an individual. Positive feedback provides information that is useful to a person in his or her attempts to interact effectively with the environment. These events are thus not experienced as attempts to control behavior, but rather as positive feedback received in a context in which a person feels a sense of self-determination with respect to the activity. As such, they promote a sense of competence and serve to enhance intrinsic motivation. Negative feedback, on the other hand, include those events that provide a person with incompetence feedback and are experienced as controlling. As a result they tend to undermine a sense of mastery and intrinsic motivation.

Third, involvement concerns the extent to which a significant other (e.g., therapist) cares and is interested in a relationship. A significant other who is involved in the relationship encourages self-determined engagement and facilitates development. Interpersonal involvement, particularly when the involvement is accompanied by autonomy support, enhances individuals' intrinsic motivation and self-determination (Deci, Eghrari, Patrick, & Leone, 1994). When individuals are denied the interpersonal involvement, they lose intrinsic motivation and the desire to integrate the activity in one's self.

The therapeutic context. An important aspect of therapy that can be classified according to these types of events is therapist intervention style. Thus, autonomy supportive, involved, and informational therapists are hypothesized to facilitate greater integration of change in their clients than controlling, noninvolved, and noninformational therapists because of the increased self-determination, perceived internal locus of causality, and perceived competence that they are likely to effect.

There is considerable evidence supporting the importance of providing choice to clients and fostering an internal locus of causality for maximizing psychotherapy effectiveness. Research focusing on client choice can be grouped into three broad categories. The first category includes those studies that have examined the effects of choosing whether to continue in therapy on the effectiveness of therapy. For example, Cooper (1980), in two analog studies with college students, found that those participants who explicitly made the choice to continue in treatment demonstrated increased approach behavior (for snake-phobic participants) and increased assertiveness (for participants initially low in assertion) compared to participants who made no such choice. Similarly, Bastien and Adelman (1984) found that adolescents who perceived having a choice for remaining at a private social rehabilitation facility showed greater treatment progress than did those adolescents who did not perceive such a choice.

A second category of studies has investigated the potential treatment benefits derived from having clients choose the type of treatment they receive. For example, Gordon (1976) compared the ratings of treatment effectiveness made by college students who participated either voluntarily or involuntarily and who either were given a choice between two relaxation treatments or were not given a choice. He found that participants who were given a choice between treatments reported the treatment to be significantly more effective than those participants who were not given a choice. However, no significant differences emerged between the choice conditions for the nonvolunteer subjects. He attributed the differing results in the participants and involuntary subjects to the fact that nonvolunteer subjects viewed having a choice to be less important. A similar study was conducted by Kanfer and Grimm (1978) in which it was found that participants for a speed-reading program increased their reading speed relative to nonvolunteer subjects. Finally, a study by Mendonca and Brehm (1983) found that children who were offered a choice among three weight loss programs lost significantly more weight than did children who were not given a choice.

The third category of studies contains those studies that manipulated the degree of choice provided to participants during treatment. Choice manipulations consisted of varying therapist interpersonal styles. In one study, participants were exposed to either a controlling therapist who exhibited "teaching" and "confronting" behaviors or an informational therapist who exhibited "facilitating" and "supporting" behaviors (Patterson & Forgatch, 1985). It was found that the controlling therapist was associated with more significant in-

creases in the likelihood of client noncompliance reactions than was the informational therapist. Similar findings were obtained in a very recent study by Miller, Benefield, and Tonigan (1993). Problem drinkers were randomly assigned to receive counseling from therapists who used either a directive–confrontational intervention style or a client-centered intervention style. Therapists employing the directive–confrontational style were instructed to confront client resistance. By contrast, therapists employing the client-centered style were instructed to respond to client statements in an empathetic fashion using the clinical skill of reflective listening. Contrary to the traditional belief that alcoholism can be best treated by a hard-hitting, directive style, their study found that the directive–confrontational style yielded significantly more resistance from clients, which in turn predicted poorer outcomes 1 year following the intervention. Thus, therapy outcome was markedly improved when a more autonomy supportive intervention style was used.

Consequences of Motivation and the CET

In addition to their hypotheses regarding the determinants of the various types of motivation, Deci and Ryan (1985) also hypothesized that various consequences are associated with different types of motivation. A number of studies have investigated the relationship among the six types of motivation previously identified (i.e., intrinsic, integrated, identified, introjected, external regulation, and amotivation) and different consequences. Because these six types of motivation are hypothesized to be on a continuum from high to low self-determination, and because self-determination is associated with enhanced psychological functioning, one would expect a corresponding pattern of consequences. That is, one might expect intrinsic motivation and integrated regulation to have the most positive consequences, followed by identified regulation. One might also expect introjected regulation, external regulation, and especially amotivation to be associated with more negative consequences.

This pattern of results has been established in studies conducted in a number of domains including education (Deci, Vallerand, Pelletier, & Ryan, 1991; Ryan & Connell, 1989; Vallerand & Bissonnette, 1992), leisure (Pelletier, Vallerand, Green-Demers, Brière, & Blais, 1995), sport (Pelletier, Fortier, et al., 1995), and interpersonal relationships (Blais, Sabourin, Boucher, & Vallerand, 1990). In general, these studies have found that the more self-determined forms of motivation can lead to enhanced learning, greater interest, increased life satisfaction, persistence, and improved health.

There is some evidence within the domain of psychotherapy that clients' motivation may be related to various consequences. For example, in reviews of the literature on treatment choice, Costello (1975) and Parker, Winstead, and

Willi (1979) concluded that providing clients with a selection of intervention alternatives (i.e., fostering autonomy) decreases dropout, increases compliance, and improves overall effectiveness of the treatment program. A study by Dienstbier and Leak (1976) tested the hypothesis that the use of rewards to promote behavior change should result in poor maintenance of these changes because rewards tend to facilitate an external perceived locus of causality. The results of their study supported this hypothesis. Participants who received monetary rewards contingent on successful weight loss were found to lose more weight in the treatment period than participants who received no payments and were not aware of the payment condition. However, during a 5-month maintenance period following the termination of payments, rewarded participants showed an average weight gain, whereas the no-payment participants continued to lose weight. Presumably, the paid participants became dependent on the rewards for losing weight, so when the rewards stopped, the behavior change stopped as well. In another study, Curry, Wagner, and Grothaus (1991) compared intrinsic (use of personalized feedback) and extrinsic (use of financial incentive) interventions in the context of self-help smoking cessation programs. They observed that both interventions increased the use of self-help materials for smoking cessation but did not increase cessation rates among users or did not prevent relapse among those individuals who managed to quit. These results, along with other findings (e.g., Nentwig, 1978), emphasize the importance of promoting a perceived internal locus of causality and self-determination in clients in order for therapy to impact positive consequences.

In summary, the conceptualization of human motivation by Deci and Ryan presents a unique framework to gain greater knowledge on the specific therapeutic conditions that may hinder or facilitate clients' motivation toward therapy as well as various consequences that may arise as a result of this motivation. Their theory has received empirical support in other domains such as education, work, sport, leisure, and interpersonal relationships. As well, compelling support for their theory is mounting within the psychotherapy literature. The primary objective of our research was to construct and validate a measure of client motivation that can be used in future studies addressing the impact of client motivation on therapy effectiveness and mental health.

METHOD

Development of the Experimental Version of the CMOTS

Development of this scale consisted of two phases. In the first phase, interviews were conducted to generate an initial pool of reasons as to why clients engage in therapy. A graduate clinical psychology student met with three groups of therapists

(averaging five therapists per group) who worked variously in hospital clinics and private practice. During a 2-hr interview, therapists were first asked to spontaneously generate as many reasons they could think of as to why people enter into therapy. Their responses were tape-recorded to permit the interviewer to interact in the discussion. When it was felt that all possibilities had been exhausted, the interviewer began the second part of the session in which the therapists were given a brief description of Deci and Ryan's (1985) theoretical model of motivation and the different forms of motivation that have been identified (i.e., intrinsic, integrated, identified, introjected, external regulation, and amotivation). Once the interviewer was certain that the model had been adequately understood, she began the third part of the session. During this third segment of the session, the therapists were asked to try to fit the various reasons that they had previously generated along the motivational continuum. In other words, they were asked to decide which type of motivation they believed each of their reasons represented. The goal of this final portion of the interview was to ensure that we had an objective classification of the reasons along the motivational continuum, as opposed to imposing the classification structure ourselves. Once again the responses were tape-recorded. Following the interviews, the most frequently reported reasons for entering therapy were formulated into formal items for the questionnaire. This first experimental version of the questionnaire consisted of 10 items for each motivational subtype.

During the second phase, the experimental version of the CMOTS was distributed, along with a battery of related scales for validity testing, to clients involved in therapy at outpatient hospital clinics, university psychological service centers, and private practices in the Ottawa region. The purpose of this phase was to reduce the number of scale items from 10 per motivational subtype to 4 by selecting those items that most reliably represent the motivation constructs.

Procedure

Directors of three outpatient hospital clinics and two university-based clinics in Ottawa were contacted and gave approval for our project to be conducted in their centers. Therapists working in these settings were sent a letter containing a brief description of the study and an explanation of their role in the study, along with several questionnaire packages. The letter asked therapists to distribute the questionnaire packages to their clients at the end of a therapy session of their choice. Enclosed in the letter was a script of instructions that we liked therapists to read to the client when giving out the questionnaire package. This script informed clients that their involvement in the study was voluntary, their responses to the questionnaires were completely confidential and anonymous, the completion of the questionnaires was to be done at home during a quiet period, and the completed questionnaires were to be mailed to the University of Ottawa in the postage-paid

envelope provided. This method of recruitment had the advantage of protecting clients' confidentiality and anonymity; therapists did not know which clients participated in the study or in what way they responded.

Sample restrictions. Clients coming from inpatient hospital clinics or clients who were taking medications for their psychological condition were not included in the sample. (Information regarding medication was solicited in the questionnaire package.) Attempts to restrict our client sample according to further inclusion/exclusion criteria, however, were being bypassed for two reasons. First, the CMOTS was intended to be a generic scale, one that can be used with a diversity of clients. We therefore needed to target a heterogeneous sample of clients during the validation process. Second, according to the theory advanced by Deci and Ryan (1985), client motivation, independent of the specific nature of psychopathology, should be a reliable predictor of psychotherapy outcome. Information regarding the nature of participants' presenting problems were collected in the questionnaire package so that a complete description of the sample could be provided. In a similar way, we were not attempting to impose restrictions on the kinds of therapists who would be involved in this stage of the research. Indeed, a wide sampling of therapists differing in therapeutic orientations, techniques, and settings was preferred because presumably it would yield greater variability in the motivational orientation of participating clients, which was desirable at this stage.

Participants

One hundred forty-four clients returned a questionnaire. Six participants were not included in the analyses because their questionnaire was incomplete or they did not meet the inclusion criteria. Of the 138 remaining questionnaires, 83 were women whose age averaged 24.8 years and 55 were men whose age averaged 28.3 years. Ninety percent had more than 12 years of education, 83% had an annual income higher than $20,000, 87% were employed, and 68% were married or living with a significant other. Clients reported being in therapy for the following reasons: low self-esteem (15), depression (16), physical abuse (5), sexual abuse (11), substance abuse (10), vocational problems (6), eating disorders (15), anxiety (7), phobias (11), adjustment to physical disabilities (5), interpersonal problems (22), obsessive–compulsive behaviors (6), personal growth and self-awareness (5), and sexual offense (4). Approximately 375 questionnaire packages were given to therapists, and 144 packages were returned to us. This represents a 38% return rate.

Measures

Each questionnaire package contained an instruction sheet explaining the purpose and procedure of the study, the experimental version of the CMOTS, a demographic

section to collect background information on clients, and several measures related to determinants and consequences of motivation, as well as constructs related to motivation. Scales used to assess motivational antecedents included four subscales assessing the therapist's interpersonal style (TIS). The TIS subscales (adapted from Pelletier, Fortier, et al., 1995) were the Autonomy Supportive (e.g., "My therapist provides me with opportunity to take personal decisions," three items; $\alpha = .86$), Control (e.g., "My therapist pressures me to do what he/she wants," three items; $\alpha = .80$), Care (e.g., "I feel my therapist cares about me," three items; $\alpha = .75$), and Competence Feedback (e.g., "The feedback I receive from my therapist is constructive in helping me make improvements," three items; $\alpha = .82$).

Scales measuring various constructs thought to represent feelings experienced by clients during their therapy sessions and therapy outcomes were Distraction (adapted from Sarason, Sarason, Keefe, Hayes, & Shearin, 1986; e.g., I am usually absorbed in the discussions I have with my therapist, 3 items; $\alpha = .73$), Tension (adapted from Ryan & Connell, 1989; e.g., I am generally an anxious client, three items; $\alpha = .81$), Positive Mood during Therapy (adapted from Ryan & Connell, 1989; e.g., I am generally in a good mood in my therapy sessions, three items; $\alpha = .84$), Future Intention to Continue in Therapy (adapted from Pelletier, Fortier, et al., 1995; e.g., I am thinking about quitting therapy, four items; $\alpha = .72$), and the Importance Clients Ascribe to Therapy (adapted from Pelletier, Fortier, et al., 1995; e.g., I'm in therapy because I feel it's very important for me to make certain changes in my life, three items; $\alpha = .78$). All of these scales were assessed on a 5-point scale ranging from 1 (*Does not correspond at all*) to 3 (*Corresponds moderately*) to 5 (*Correspond exactly*).

In addition, half of the participants completed the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985; 5 items, $\alpha = .88$); a short version of the Beck Depression Inventory (Kane & Kane, 1981; 4 items, $\alpha = .83$); and the Internality (8 items, $\alpha = .71$), Powerful Others (8 items, $\alpha = .77$), and Chance Scales (8 items, $\alpha = .76$; Levenson, 1981). The remaining participants completed the Self-Esteem Scale (Rosenberg, 1972; 10 items, $\alpha = .83$), and the Client/Patient Satisfaction Scale (Larsen, Attkinsson, Hargreaves, & Nguyen, 1979; 8 items, $\alpha = .72$). This division in the distribution of measures was intended to ensure that clients would be able to complete the battery of questionnaires within a 30-min period while permitting the evaluation of a greater number of related constructs. Participants were asked to mail their completed questionnaires to the researchers using a postage-paid envelope included in the package.

RESULTS

Items of the experimental CMOTS were submitted to an exploratory factor analysis to (a) identify which of the 10 items per subscale best represented the motivational

constructs and (b) to permit an evaluation of how each of the factors (representing the motivational subtypes) correlated with each other and with the related constructs. Following the factor analysis, two sets of hypotheses were tested. First, it was predicted that the pattern of results would form a simplex or ordered correlation structure. In a simplex structure (Guttman, 1954), variables are ordered in terms of their conceptual similarity, such that those deemed to be more similar correlate more highly than those deemed to be more discrepant. As previously described, the different types of motivation correspond to a continuum of self-determination in which the lowest type is amotivation, followed by external regulation, introjection, identification, integration, and intrinsic motivation. Thus, because intrinsic motivation can be considered conceptually more similar to integrated regulation than, for example, introjected regulation, it is expected that correlations will be higher between intrinsic motivation and integration than between intrinsic motivation and introjection.

Second, it was predicted that clients with more self-determined types of motivation would report working with therapists providing relatively more autonomy support, care and competence feedback, and less control than clients with less self-determined types of motivation. It was further predicted that clients with more self-determined types of motivation would report less distraction and tension during therapy, would experience more positive emotions during therapy sessions, would attribute greater importance to therapy, and would express greater intentions to continue in therapy than clients with less self-determined types of motivation. Finally, it was hypothesized that clients with more self-determined types of motivation (i.e., identification, integration, and intrinsic motivation) would report higher levels of perceived internal locus of control, self-esteem, client satisfaction, and life satisfaction and lower levels of depression and external locus of control (i.e., powerful others and chance) than will clients with less self-determined types of motivation (i.e., introjection, external regulation, and amotivation).

Preliminary Analyses

Prior to submitting the data to exploratory factor analyses, the data were screened for outliers among cases, multivariate normality, and linearity. An analysis of casewise residuals revealed no univariate outliers (i.e., no cases were beyond 3 standard deviations of the mean) and no multivariate outliers. Thus, the 138 participants were retained for the remaining analyses. No items possessed skewness and kurtosis values exceeding the +2.0 level of acceptance. Skewness values ranged from .02 to 1.73 (M = .67) whereas kurtosis values ranged from .10 to 1.31 (M = .87). These results were taken as an indication that the assumption of normality had been satisfied.

Exploratory Factor Analyses (EFA)

In a first step, a maximum likelihood exploratory factor analysis with oblimin rotation was performed on the full 60-item CMOTS. Because the CMOTS is designed to measure six different forms of motivation, a comprehensive investigation of the factor structure of the scale entailed a comparison of solutions in which the factor extraction criterion was set to five, six, and seven. The selection of these factor criteria followed the principle of verifying the purported structure of a scale and comparing it with factor solutions composed of one more and one less factor. Evaluation of solution adequacy was based on consideration of Cattell's Scree test and eigenvalues, chi-square divided by degrees of freedom (χ^2/df), internal consistency of the factors, and the interpretability of the solution. The latter criterion was assigned the greatest importance in the evaluation process. Given the proposed structure of the CMOTS, the six-factor solution was expected to emerge as the most appropriate model for the data. Indeed, the factorial structure of the six-factor model was more richly interpretable than the five- and seven-factor solutions. The preliminary six-factor solution for the full 60-item CMOTS was found to have six eigenvalues higher than 1.00 and to account for 51.3% of the variance. The value obtained for the $\chi 2/df$ criterion, 1.72, slightly exceeded the 1.5 cutoff. In the second step, a series of EFA was performed with the purpose of retaining the four best items for each hypothesized factor. This was accomplished by progressively eliminating, first, the items that had loadings below .30 on their hypothesized factor and, second, the items that had the lowest loadings on the hypothesized factor. The final EFA were performed using the four best items that had loadings above .30 on their hypothesized factor.

In terms of goodness-of-fit, the final six-factor solution was found to be adequate according to the χ^2/df criterion; the obtained value of 1.42 did not exceed the 1.5 cutoff. Finally, the six-factor solution was found to have six eigenvalues higher than 1.00 and to account for 65.6% of the variance. Table 1 presents the pattern of loadings from a factor pattern matrix that emerged for the six-factor solution. All factors had salient loadings (higher than .30),[1] all coming from their respective subscale items. Only one item had a cross-loading above .30. However, this was not considered a problem because the item had a loading of greater magnitude on its target factor. The levels of internal consistency for all the subscales ranged from .70 to .92 (see Table 2). In sum, the 24 items of the CMOTS adequately represented

[1]The loading of 1.03 for Item 1 on the External Regulation subscale may appear problematic. This finding is not unusual (cf. Byrne & Baron,1994) and may be an artifact of the factor analytic method chosen. We considered removing the item, but its face validity was high ("Because other people think that it's a good idea for me to be in therapy"). For this reason, and because the results of the exploratory factor analysis did not reveal any anomalies, this item was left in the solution.

TABLE 1
Results of the Exploratory Factor Analysis

	Factors					
Scale Items	*F1*	*F2*	*F3*	*F4*	*F5*	*F6*
Intrinsic Motivation						
For the pleasure I experience when I feel completely absorbed in a therapy session	.93	.27	.14	.10	−.11	.26
For the satisfaction I have when I try to achieve my personal goals in the course of therapy	.87	.21	.11	−.02	−.15	.28
Because I experience pleasure and satisfaction when I learn new things about myself that I didn't know before	.84	.12	.17	.08	−.18	.22
For the interest I have in understanding more about myself	.76	.15	.08	.16	−.07	.21
Integrated Regulation						
Because through therapy I've come to see a way that I can continue to approach different aspects of my life	−.24	.85	.33	.20	.04	.02
Because through therapy I feel that I can now take responsibility for making changes in my life	−.15	.79	.14	.15	−.06	.10
Because I feel that changes that are taking place through therapy are becoming part of me	−.21	.78	.27	.05	.12	.17
Because I value the way therapy allows me to make changes in my life	−.27	.77	.27	.15	−.18	.13
Identified Regulation						
Because I would like to make changes to my current situation	−.19	.10	.82	.28	.04	−.22
Because I believe that eventually it will allow me to feel better	−.08	.27	.61	.29	.14	−.01
Because I believe that therapy will allow me to deal with things better	−.10	.37	.41	.19	.01	−.11
Because I believe it's a good thing to do to find solutions to my problem	−.06	.26	.36	.21	.05	−.10
Introjected Regulation						
Because I would feel guilty if I were not doing anything about my problem	−.06	.11	.14	.95	.26	−.12
Because I would feel bad about myself if I didn't continue my therapy	−.10	.16	.19	.71	.17	−.19
Because I should have a better understanding of myself	−.06	.11	.20	.36	.21	−.22
Because it is important for clients to remain in therapy until it's finished	−.09	.24	.28	.35	.05	−.24
External Regulation						
Because other people think that it's a good idea for me to be in therapy	.24	−.07	.08	.12	1.03	.24
Because my friends think I should be in therapy	.15	.06	.24	.24	.76	.24

TABLE 1 *(Continued)*

	Factors					
Scale Items	*F1*	*F2*	*F3*	*F4*	*F5*	*F6*
Because I don't want to upset people close to me who want me to be in therapy	.08	.07	−.13	.24	.71	.16
To satisfy people close to me who want me to get help for my current situation	.03	.14	.12	.18	.42	.21
Amotivation						
Honestly, I really don't understand what I can get from therapy	−.25	−.06	.17	.23	.21	.92
I wonder what I'm doing in therapy; actually, I find it boring	−.26	−.16	.02	.07	.21	.76
I don't know; I never really thought about it before	−.28	−.17	−.14	.09	.28	.64
I once had good reasons for going to therapy, however, now I wonder whether I should quit	.05	.23	.19	.22	.26	.44
Eigenvalues	6.35	5.11	5.67	5.23	1.49	3.18
Percentage of variance explained	14.5	13.0	14.1	13.2	4.4	6.4

Note. Only loadings above .30 are underlined. The data are derived from a factor pattern matrix.

TABLE 2
Internal Consistencies (Diagonal), Pearson Correlations (Above Diagonal), and Factor Correlations (Below Diagonal) Among the Client Motivation for Therapy Subscales

	1	*2*	*3*	*4*	*5*	*6*
Intrinsic Motivation (1)	(.92)	.57	.37	.20	−.17	−.28
Integrated Regulation (2)	.36	(.91)	.49	.24	−.28	−.34
Identified Regulation (3)	.20	.32	(.82)	.28	−.11	−.26
Introjected Regulation (4)	−.03	.13	.18	(.75)	.05	−.10
External Regulation (5)	−.24	−.24	−.07	.11	(.70)	.17
Amotivation (6)	−.35	−.33	−.17	.08	.12	(.91)

Note. Pearson correlations of .10 and above are significant at $p < .05$ ($N = 138$).

the variance in the data while displaying a satisfactory factorial structure corresponding to the six proposed types of motivation.

Assessment of the Construct Validity

Assessment of the construct validity of the CMOTS was performed in three ways through correlations: (a) among the six CMOTS subscales, (b) between the CMOTS

subscales and motivational antecedents, and (c) between the CMOTS subscales and motivational consequences. These results are presented in the following sections.

Correlations among the six CMOTS subscales. To test for the self-determination continuum postulated by Deci and Ryan (1985), Pearson correlations were computed among the six subscales. As indicated earlier, support for this self-determination continuum would be obtained through the display of a simplex pattern where adjacent subscales (e.g., Integrated and Identified Regulation) have high positive correlations and the subscales at the opposite ends of the continuum (e.g., Amotivation and Intrinsic Motivation) have the most negative correlations.[2] The factor correlations (below the diagonal) and the Pearson correlations (above the diagonal) between the subscales of CMOTS are presented in Table 2. It can be seen that, in general, the results supported the presence of a self-determination continuum. For example, adjacent subscales generally showed higher Pearson correlations (e.g., Intrinsic Motivation and Integration, r = .57) than subscales farther apart (e.g., Intrinsic Motivation and Introjection, r = .20, or intrinsic motivation and amotivation, r = –.28). It should be noted that some deviations from the simplex model were observed. These deviations involved the external regulation and amotivation subscales. Both subscales had more negative correlations with the integration subscale (r = –.28 and –.34, respectively) than the intrinsic motivation subscale (r = –.17 and –.28, respectively). However, these deviations could be considered minor when compared to the global pattern of correlations between subscales.

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[2]Following a suggestion from an anonymous reviewer, each scale's average Pearson correlation with two most adjacent scales and two most distant scales were also calculated. The average correlation for Intrinsic Motivation with two most adjacent scales (Integrated and Identified Regulation) and two most distant scales (External Regulation and Amotivation) were .47 and –.22, respectively; the average correlation for Integrated Regulation with two most adjacent scales (Intrinsic Motivation and Identified Regulation) and two most distant scales (External Regulation and Amotivation) were .53 and –.31, respectively. The average correlation for Identified Regulation with two most adjacent scales (Integrated Regulation and Introjected Regulation) and two most distant scales (External Regulation and Amotivation) were .33 and –.17, respectively. The average correlation for Introjected Regulation with two most adjacent scales (Identified Regulation and External Regulation) and two most distant scales (Intrinsic Motivation and Amotivation) were .17 and .15, respectively. The average correlation for Amotivation with two most adjacent scales (External Regulation and Introjected Regulation) and two most distant scales (Intrinsic Motivation and Integrated Regulation) were .13 and –.31, respectively. Overall, each scale's average correlation with two most adjacent scales is positive, and their average correlation with two most distant scales is negative. Only the Introjected Regulation scale has an average correlation with two distant scales (.15) that is inconsistent with the global pattern suggested by the self-determination continuum.

Correlations between the CMOTS subscales and motivational antecedents. Correlations were also computed with perceptions of therapists' interpersonal behaviors. These correlations appear in Table 3. It was predicted that clients with more self-determined types of motivation would report working with therapists providing relatively more autonomy support, care, and competence feedback and less control than clients with less self-determined types of motivation. It can be seen that the predictions were globally supported. In agreement with CET (Deci & Ryan, 1985), when clients perceived that therapists provided opportunity to take decisions, cared for their client's improvement, provided constructive feedback, or did not pressure clients to do specific activity, clients reported being more intrinsically motivated and self-determined toward therapy. It is also interesting that higher levels of amotivation were observed when therapists were perceived as controlling and not providing support for autonomy, providing low levels of care for the relationship, and providing low levels of competence feedback about clients' improvements.

Correlations between the CMOTS subscales and motivational consequences. Clients also completed several scales assessing various motivational consequences (distraction, tension, and positive emotions during therapy, importance ascribed to therapy, client satisfaction, and future intentions to persist in therapy) and constructs associated with psychological functioning (self-esteem, locus of control, depression, and life satisfaction). Because the various forms of motivation are hypothesized to lie on a continuum from high to low self-determination, and because a higher level of self-determination is associated with enhanced psychological functioning (Deci & Ryan, 1985), we should expect a corresponding pattern between the CMOTS subscales and various consequences. As can be seen in Table 3, the hypotheses were globally supported with all the outcome variables. Positive consequences associated with the therapy session (positive emotions during therapy, importance of therapy, client satisfaction, and intentions to persist in therapy) and constructs associated with positive psychological functioning (self-esteem, internal locus of control, and life satisfaction) were correlated positively with the more self-determined forms of motivation and negatively with the less self-determined forms of motivation. Correlations between the CMOTS subscales and negative consequences associated with the therapy session (distraction and tension during therapy) and negative psychological functioning (depression, powerful others, and chance loci of control) demonstrated the opposite pattern.

Taken together, these results offer consistent support for the construct validity of the CMOTS as well as the self-determination continuum. In line with other research using scales to measure similar constructs in various life domains (Pelletier, Fortier, et al., 1995; Ryan & Connell, 1989; Vallerand et al., 1992, 1993), the present correlational analyses also provide support for our hypotheses regard-

TABLE 3
Client Motivation for Therapy Subscales Correlations With Motivational Antecedents, Motivational Consequences, and Psychological Constructs

	Types of Motivation					
	Intrinsic Motivation	*Integrated Regulation*	*Identified Regulation*	*Introjected Regulation*	*External Regulation*	*Amotivation*
Therapists' interpersonal behaviors[a]						
Autonomy support	.21	.28	.25	−.19	−.23	−.31
Control	−.20	−.34	−.27	−.02	.22	.39
Care	.20	.38	.21	.13	−.04	−.62
Feedback of competence	.31	.45	.39	.12	−.14	−.61
Distraction[a]	−.18	−.17	−.28	.06	.12	.22
Tension[a]	−.24	−.19	−.08	−.01	.16	.21
Positive mood[a]	.42	.23	.14	.05	−.05	−.24
Importance of therapy[a]	.26	.41	.38	.26	−.29	−.32
Client satisfaction[c]	.17	.33	.40	.13	−.11	−.76
Intention to persist[a]	.21	.25	.30	.03	−.25	−.44
Locus of control[b]						
Internal	.26	.10	.11	.01	−.12	−.11
Powerful others	−.11	−.37	−.21	.19	.41	.32
Chance	−.17	−.24	−.20	.05	.10	.27
Self-esteem[c]	.21	.19	.09	−.07	−.19	−.22
Depression[b]	−.22	−.15	−.18	−.01	.14	.25
Life satisfaction[b]	.13	.19	.26	−.01	−.13	−.18

[a]Based on 138 participants, $r > .10$. $p < .05$. [b]Based on 71 participants, $r > .20$, $p < .05$. [c]Based on 67 participants, $r > .20$, $p < .05$.

ing, on one hand, associations between clients' levels of self-determination and therapists' interpersonal behaviors and, on the other hand, between clients levels of self-determination and various therapy related outcomes.

DISCUSSION

The primary objective of this study was to construct and validate a brief measure of patient motivation for therapy that could be used in future studies addressing the impact of patient motivation on psychotherapy effectiveness and mental health. The development of the 24-item CMOTS was based on the theoretical perspective of human motivation proposed by Deci and Ryan (1985), who postulated the existence of six different types of motivation that are classified along a continuum of increasing autonomy: amotivation, four types of extrinsic motivation (external, introjected, identified, and integrated regulation), and intrinsic motivation.

Results suggest that the CMOTS possesses a satisfactory structure corresponding to the different types of motivation postulated and adequate internal consistency (alpha values were between .70 and .92). Correlations among the motivation subscales form a simplex pattern that, in general, provides support for the continuum of self-determination. In addition, correlations between the motivation subscales and the related psychological constructs yielded a pattern of results generally supportive of our predictions derived from Deci and Ryan's theory. Specifically, when clients perceived their motivation for therapy to be more self-determined, they were more likely to experience less tension, less distraction, and more positive moods during therapy; they considered therapy to be more important, reported higher levels of satisfaction with therapy, and had stronger intentions of continuing in therapy. Conversely, when clients perceived their motivation to be less self-determined, they showed the opposite pattern of associations. As well, the more self-determined clients evidenced higher levels of self-esteem and life satisfaction and lower levels of depression than did less self-determined clients. Also, the higher forms of self-determination (intrinsic motivation, integrated and identified regulation) were associated to the Internal Locus of Control subscale, whereas the powerful others subscale was associated with the lowest forms of motivation on the self-determination continuum (external regulation and amotivation), and the Chance subscale was associated with the Amotivation subscale. Consistent with the theorizing of Deci and Ryan (1985), different reasons for engaging in therapy were associated with different characteristics of therapists' interpersonal behaviors. Higher levels of self-determination were positively correlated with higher perceptions of therapists' behaviors that were autonomy supportive, caring, and competence feedback providing, whereas non-self-determination was associated with the perception of a more controlling climate. In sum, our results indicate that the

structure of the CMOTS is sound and that its subscales correlate with related constructs in the predicted manner.

However, as is the case with all steps of scale development, a complete assessment of the psychometric properties of the CMOTS will necessitate additional research, particularly in terms of establishing external validity. One important issue that would need to be addressed in future research includes establishing client motivation as a reliable predictor of psychotherapy outcome (e.g., attrition rates, compliance, maintenance of change). For instance, the CMOTS could be used at different points in time during the therapy session in order to better understand circumstances in which clients' motivation may drop. The CMOTS could also be of great help in quality of services evaluation endeavors where researchers and practitioners are interested in assessing the motivational changes produced by the provision of psychological services. Changes in motivation could be linked to compliance with therapists' requests, maintenance, or integration of change into clients' lifestyle. Further research on these issues is needed as it should further knowledge on the relations between motivational orientation and psychotherapy effectiveness.

Another important issue that would need to be addressed involves examining the impact of therapist intervention behaviors on client motivation and improvements in mental health. It would be interesting to better understand how therapists' behaviors or behaviors associated with various therapeutic approaches (e.g., cognitive, behavioral) affect clients' motivation. Along this line, it could also be interesting to verify some assumptions about client attributes–treatment interaction research in clinical settings. Dance and Neufeld (1988), in a review of client variables associated to differential treatment responsiveness, proposed that clinicians, when facing the most effective treatment for their clients, should consider the possibility that some clients do better in treatments that emphasize self-control rather than therapist control. More specifically, using the CMOTS, therapists could identify clients with high as opposed to low levels of self-determination for therapy and verify the possibility that high self-determined clients react better in treatment that emphasize self-control, whereas low self-determined clients respond better in treatments that emphasize therapist control. Further research along these lines would therefore appear promising.

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