Toward a Motivational Model of Couple Happiness

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The present study had two major objectives. The first was to investigate the validity of a motivational model of couple happiness based on self-determination theory. The second objective was to test the postulated simplex structure and the generalizability of the 6 forms of motivation proposed by this theory. Both members of 63 couples individually completed the Couple Motivation Questionnaire as well as measures of perceived couples' adaptive behaviors and of dyadic happiness. Results revealed that the proposed model of couple happiness was supported through significant path analyses explaining 61% and 55% of the variance of men's and women's relationship happiness, respectively. Empirical support was also provided for the postulated simplex structure. Results highlight the importance of autonomy-driven processes as opposed to controlling and amotivated processes in the development and maintenance of the quality of couples' relationships.

Several propositions have been presented in the past decade to explain the enhancement or the deterioration of the quality of couples' relationships. Empirical work has focused on the identification of interpersonal behaviors that influence relationship quality such as social skills, communication style, and problem-solving style (e.g., Gottman, 1979). Recent studies have also investigated the role of personality processes in order to better understand the determinants of these intimate relationship behaviors. For example, researchers have examined personality dispositions such as marital locus of control (Miller, Lefcourt, Holmes, Ware, & Saleh, 1986), empathy (e.g., Davis & Oathout, 1987), private self-consciousness (Franzoi, Davis, & Young, 1985), relational competence (e.g., Hansson, Jones, & Carpenter, 1984), and social cognitive style (deTurk & Miller, 1986). Some of these studies have empirically substantiated mediating models showing linkages between personality, social behavior, and measures of couple satisfaction (Davis & Franzoi, 1986; Davis, Franzoi, & Wellinger, 1985; Davis & Oathout, 1987; Franzoi & Davis, 1985; Franzoi et al., 1985). Specifically, they have demonstrated that whereas social behaviors will directly influence dyadic happiness, certain personality or individual difference variables can be important determinants of these social behaviors and thus play a significant role in explaining dyadic happiness.

Recent studies have also assessed the role of motivation in close relationships. The construct of motivation, relating to the direction and energy of behavior, should represent an important antecedent of the choice of a particular partner, of the quality of day-to-day relational behaviors, and of the development or the rupture of the relationship (e.g., McAdams, 1984; Pittman & Heller, 1987; Rempel, Holmes, & Zanna, 1985; C. Seligman, Fazio, & Zanna, 1980). Among the different motivational approaches, the intrinsic-extrinsic motivation conceptualization would appear to be a promising avenue for the study of dyadic happiness. Indeed, the usefulness of this conceptualization of motivation has been extensively demonstrated in other domains over the past 20 years (see Deci & Ryan, 1985), and recent studies have shown its pertinence to close relationships.

The first objective of this article is to present and test a motivational model of couple happiness based on self-determination theory (Deci & Ryan, 1985). This theory presents a more extensive and refined theoretical base than previous intrinsicextrinsic motivation conceptualizations. The second objective was to make a first empirical test of the validity of the full range of motivational styles proposed in self-determination theory as well as to test its generalizability in the close relationships domain.

A Motivational Model of Couple Happiness

In this model, we argue that the motivational styles of each partner for engaging or maintaining his or her relationship with

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Figure 1. Motivational model of couple happiness.

his or her spouse¹ is an individual difference variable of crucial importance to understanding the quality of the couple's relationship. The motivational foundation of this model is firmly grounded in self-determination theory and posits that more self-determined types of motivational orientation will trigger more adaptive behaviors and eventually more positive affective reactions.

The model is presented in Figure 1 and can be summarized in three basic propositions. First, the individual's motivational style to maintain the relationship should influence his or her various ongoing intimate relationship behaviors. Second, both partners' relationship behaviors should influence perceptions of the couple's adaptive behaviors. Third, these individual perceptions should then have a direct impact on personal happiness with the relationship. The rationale and available empirical evidence for each proposition of the model are presented below.

Motivation and Behavior in Intimate Relationships

In a recent review on social motivation, Pittman and Heller (1987) underscored the potential contribution of distinguishing between intrinsic and extrinsic types of motivation in close relationships. Intrinsic motivation refers to activities engaged in because the process of performing the activity is a chosen and satisfying end in itself (Deci & Ryan, 1985; Kruglanski, 1978). When intrinsically motivated, one is involved in the intimate relationship for the pleasure of day-to-day couple activities. For example, a man maintains the relationship because he has lots of fun and pleasurable intimate moments with his partner. On the other hand, extrinsic motivation refers to activities engaged in for instrumental purposes, such as to obtain positive consequences or to avoid negative outcomes. The process of the relationship is a means to an end. For example, a man might live with his partner because she provides him with all the luxuries he wants.

Two recent studies by C. Seligman et al. (1980) and Rempel et al. (1985) have demonstrated the value of this motivational perspective in the area of close relationships. These studies indicated that intrinsically motivated couples report greater feelings of love and faith in their relationship than extrinsically motivated couples. Interestingly, the extrinsically motivated partners in the C. Seligman et al. (1980) study were less likely than the intrinsically motivated partners to expect to eventually marry their partner.

Intrinsic and extrinsic motivation have traditionally been viewed as antipodes, with the former related to positive consequences and the latter related to more negative consequences. However, Deci and Ryan (1985) have recently refined this dichotomous view of motivation by distinguishing different types of extrinsic motivation that would correspond to distinct levels of experienced self-determination/autonomy, and also by proposing the concept of amotivation. Their proposed extension to the intrinsic-extrinsic conceptualization is embedded in self-determination theory. This theory makes specific propositions regarding the nature of different motivational styles, their antecedents, and their consequences. Its unique theoretical framework of human motivation offers the potential for a more differentiated understanding of the quality of couples' relationships than the original intrinsic-extrinsic conceptualization. According to self-determination theory, the greatest levels of self-determination would be experienced under intrinsic motivation. Furthermore, four different forms of extrinsic motivation are conceptualized and represent different levels of experienced self-determination toward a specific regulation. From lowest to highest levels of self-determination, these types of extrinsic motivation are external regulation, introjected regulation, identified regulation, and integrated regulation. External regulation refers to the traditional view of extrinsic motivation whereby the person engages in the activity to obtain external rewards or to avoid punishments (material or social). For example, a man maintains the relationship for the financial security, the luxuries, or the social recognition that his spouse is providing him.

The second form of extrinsic motivation, introjected regula-

¹ The terms *spouse* and *partner* will be considered equivalent in this article. As well, we use the term *couple* to refer to couples that have an ongoing relationship and are living together. We are therefore including both cohabiting and married relationships in our present use of the term *couple*.

tion, refers to the first level of internalized self-regulation (or self-control) whereby behaviors are initiated and regulated by internally controlling imperatives. For example, a woman maintains the relationship because she would feel too guilty to separate or because she feels a personal obligation (i.e., "I have to") to maintain the relationship. Imperatives such as "I must . . ." and other "self-pressure" mechanisms are often used under this motivational orientation, generating intrapersonally controlling events and thus leading to a relatively low level of experienced self-determination (Ryan, 1982).

Identified regulation consists of a form of extrinsic motivation based more on choice. The source of regulation comes not only from within the person but is conducted in a self-determined way whereby the person values or "identifies" with the activity in which he or she engages. One example would be a man maintaining the relationship because he feels it enables him to participate in different chosen activities.

The most self-determined form of extrinsic motivation is *integrated regulation*. Here, the person not only identifies with the regulation but has also integrated it with other aspects of his or her life. It is consistent with the person's self-concept. With this type of motivation, the activity is highly chosen and endorsed by the person. For example, a woman maintains the relationship because it provides a satisfying context for raising a family, which is really what she desires to do at the present stage of her life. She fully endorses this activity even if it requires that she invest to a lesser degree in other important life projects.

The lowest level of self-determination would be experienced under *amotivation*. Amotivation refers to the absence of intentional action and is likely to be in evidence when there is either a perceived noncontingency between intentions and outcomes or an inability to obtain contingent outcomes. It is akin to learned helplessness (M. E. P. Seligman, 1975). Under such a motivational orientation, individuals experience uncontrollability over different events in their relationship. An example of amotivation is a woman who does not know why she is still living with her spouse and who feels that nothing can be done to improve the hopeless relationship. In sum, self-determination theory distinguishes six different forms of motivations that should lie along a self-determination continuum.

Results from recent studies in the education and prosocial domains support the notion that some of the different forms of motivational style, represented in Deci and Ryan's (1985) conceptualization, can be assessed with acceptable levels of reliability and validity (Grolnick & Ryan, 1987; Ryan & Connell, in press; Vallerand, Blais, Brière, & Pelletier, 1989). Namely, these studies have shown empirical support for the existence of a self-determination continuum by confirming a simplex structure in the pattern of correlations among the different motivational scales. Furthermore, they have demonstrated that the motivational styles are associated with important and diverse behavioral, cognitive, and affective outcomes. Specifically, the more self-determined the motivational orientation, the greater the quality of the experience and the greater the persistence with the activity in the absence of external contingencies.

It would therefore be reasonable to expect that people's motivational styles with regard to maintaining their couple relationship would affect their relational behaviors. Self-determined sources of regulation, being chosen and endorsed, set the conditions for greater interest (Harackiewicz, 1979; Ryan, Mims, & Koestner, 1983), more positive affects (Garbarino, 1975; Rempel et al., 1985; C. Seligman et al., 1980), more spontaneous behaviors (Koestner, Ryan, Bernieri, & Holt, 1984), greater cognitive flexibility (McGraw & McCullers, 1979), enhanced creativity (Amabile, 1983), and longer persistence (Deci & Ryan, 1985). These are important resources that can facilitate adaptive problem solving and enhance the quality of day-to-day couple relationships.

When relational behaviors are self-determined, partners may tend to see relationship problems (which are inevitable) more as challenges than as hassles and may be less distressed by such events. They would be more inclined to adopt various adaptive behaviors necessary to meet the inevitable problem situations that arise in a couple's life. Self-determined partners should also be more open to learn and improve their social competencies than would partners under less self-determined motivational styles (i.e., amotivation, external regulation, and introjection). In these latter forms of motivation, couple members are motivated by external or internal pressures and controls, which tend to produce conflicts and greater experience of tension and anxiety (Deci & Ryan, 1985). As a result, one would expect that under such forms of motivation the individuals would be more "rigid" and vulnerable to less adaptive problem-solving responses (Rusbult, Johnson, & Morrow, 1986).

Role of Both Partner Behaviors in Individual Perceptions of Couple Adaptive Behaviors

A second postulate of the motivational model is that each partner will form a broad and general perception of his or her own behaviors toward his or her spouse as well as an overall perception of those emitted by the spouse toward him- or herself. These two groups of perceptions eventually blend to take the form of an overall appraisal of behaviors generally emitted in the relationship. Such perceptions may serve several functions: maintaining self-images (Ross & Sicoly, 1979), gaining personal control (Kelley, 1967), hypothesis testing (Snyder, 1984), and comparing couple behaviors with various types of standards (Kelley & Thibaut, 1978). Explicitly accounting for each member's individual perceptions also opens the possibility of recognizing different levels of convergence (or divergence) between partners' perceptions of the couple's functioning. Consequently, each member could have different affective experiences because of different individual perceptions of the same objective event. It has been well documented that the quality of the relationship is not as much a function of actual behavior as it is a function of how behavior is experienced by the individual (Bradbury & Fincham, 1987; Markman, 1979; Miller et al., 1986; Schaefer & Burnett, 1987).

Role of Perceptions of Couple Adaptive Behaviors in Dyadic Happiness

Partners who perceive that their couple behaviors correspond globally to what they expect out of a relationship could be more likely to experience greater relational happiness than those perceiving that behaviors do not meet expectations. Several authors have reported substantial correlations between

various perceptions of the spouse's adaptive behaviors and dyadic satisfaction (e.g., Franzoi et al., 1985; Kurdek & Schmitt, 1986; Miller et al., 1986). However, many of these studies have used measures of dyadic adjustment to assess dyadic satisfaction even though these two constructs are distinct and should be measured separately (for a discussion on this issue, see Fincham & Bradbury, 1987; Sabatelli, 1988). In light of the present model, we argue that dyadic adjustment, as assessed by the frequently used measures of the Dyadic Adjustment Scale (DAS; Spanier, 1976) and the Marital Adjustment Test (Locke & Wallace, 1959), reflects perceptions of adaptive couple behaviors rather than couple happiness or satisfaction per se. For example, the first three dimensions of the DAS evaluate perceptions of various adaptive behaviors (i.e., areas of agreement, cohesive behaviors, and affectionate behaviors) and the items of the fourth dimension, labeled "dyadic satisfaction," appear to represent perceptions of various specific adaptive behaviors rather than actual dyadic satisfaction. For example, the items "Do you confide in your partner?" "How often do you and your partner quarrel?" and "How often do you and your mate 'get on each other's nerves?" " taken from the "satisfaction" subscale, illustrate perceptions of different couple behaviors but not satisfaction or happiness. Of the 10 items of this satisfaction scale, only one appears to assess directly the satisfaction construct. As a final point on this issue, we do expect that dyadic adjustment and dyadic happiness will be associated, but not because they measure the same concept; rather, they will be associated because dyadic adjustment, representing perceived couple adaptive behaviors, is an antecedent of dyadic happiness. Distinguishing among the nature, the antecedents, and the consequences of dyadic happiness is central in order to promote theory development in this area.

There are some studies that have not confounded dyadic adjustment and satisfaction, and that have used more direct and global measures of dyadic satisfaction. Their results indeed support the linkage between the two distinct constructs of perceived couple or spouse adaptive behaviors and dyadic satisfaction (Davis & Oathout, 1987; Schumm, Barnes, Bollman, Jurich, & Bugaighis, 1986). For example, significant associations were found between dyadic satisfaction and perceptions of insensitivity, untrustworthiness, possessiveness, warmth, even temper, and positive outlook in the relationship (Davis & Oathout, 1987). Marital satisfaction was also found to be related to the perception of spouses' quality of self-disclosure (Schumm et al., 1986). In short, we believe that not only should perceptions of dyadic adjustment and dyadic satisfaction be distinguished from one another, but, more important, that the former are an important causal link with the latter.

The Present Study

The present study had two major objectives. The first was to conduct an initial test of the model through path analysis. As a first verification, we decided to examine the links among three key components of the model—the motivational styles to maintain the relationship, perception of the couple's adaptive behaviors, and dyadic happiness. From the preceding discussion, we first hypothesized that the more self-determined the motivation to maintain the relationship, the greater the perceptions of couple adaptive behaviors. Second, we hypothesized that the greater the perception of the couple's adaptive behaviors, the higher the level of couple happiness. We hypothesized that the path model would explain a substantial portion of the variance in each partner's self-report of couple happiness.

Actual behaviors were not assessed in this study for two reasons. First, because this was a first verification of the proposed model, the three components mentioned above could provide us with sufficient information as to the viability of the model. Second, it is postulated that happiness is more a function of perceived behaviors than actual behaviors. The inclusion of the behavioral component was therefore reserved for future studies pending the empirical support provided from this study.

The second objective was to conduct a first empirical test of certain aspects of the validity and the generalizability of self-determination theory. To the best of our knowledge, no study has tested the postulated simplex structure with the full range of motivational styles proposed in this theory. Also, studies that have tested the validity of some of the proposed motivational styles have used children, adolescents, and young adults (college students) as subjects. The recent propositions of self-determination theory have yet to be tested with older adult populations. Furthermore, the theory has not yet been tested in the domain of couple relationships.

We hypothesized that the six different types of motivation postulated would yield a correlation pattern in line with the self-determination continuum. That is, self-determined types of motivation (i.e., intrinsic motivation, integrated regulation, and identified regulation) were predicted to be inversely related to less self-determined types of motivation (i.e., amotivation, external regulation, and introjection). Correlations among these types of motivation were hypothesized to be greater and positive between constructs theoretically closer on the self-determination continuum, but negative between constructs farther apart on the continuum. In sum, a simplex structure was expected to provide initial construct validity for the six motivational styles (Ryan & Connell, in press; Vallerand et al., 1989). Second, we also hypothesized that the six types of motivation would be related to different aspects of the quality of couple relationships in accord with their respective level on the self-determination continuum. In line with self-determination theory, it was expected that constructs reflecting higher levels of self-determination should be more positively associated with positive indices of relationship quality (i.e., perceptions of couple adaptive behaviors and couple happiness). The opposite was predicted with respect to lower levels of self-determined forms of motivation.

Method

Subjects

One hundred twenty-six subjects from 63 heterosexual couples volunteered to complete a series of questionnaires assessing (a) their different motivations to live together, (b) their perception of adaptive and nonadaptive behaviors in their relationship, and (c) their level of couple happiness. Subjects were all French-speaking residents of the province of Quebec, Canada, and were recruited from the Consultation Services at the University of Montreal. The mean ages for female and male subjects, were 37.2 and 39, respectively. Subjects were either legally married couples (77.4%) or nonmarried cohabiting couples (22.6%) that had been living together for an average of 12.6 years (SD = 8.3). The couples had an average of 1.87 children (SD = 1.5). Female and male subjects had an average of 14.6 years and 15.7 years of education, respectively. The mean total income for couples was \$38,416 Canadian (\$9,764 and \$28,652 for women and men, respectively) and corresponded, at the period of testing, to middle- and upper-middle-class couples.

Questionnaires

Couple Motivation Questionnaire. The Couple Motivation Questionnaire² was developed to assess the six types of motivation postulated by self-determination theory within the couples' relationship domain. When responding to the Couple Motivation Questionnaire, individuals are required to rate the extent to which each item corresponds to one of the reasons why they presently live with their spouse. Responses are rated on a Likert scale ranging from *not at all* (1) to *exactly* (7). Items on the questionnaire were developed in a two-step process. First, open responses were collected in a pilot study with 48 married/ cohabiting undergraduate students. These subjects were asked to answer the question, "Why do you presently live with your spouse?" Second, items were constructed by using the results of the content analysis of these open responses and by applying the conceptual meaning of the different forms of motivation.

The items generated were evaluated for face validity by two graduate students who knew the conceptual distinctions of the different forms of motivation the Couple Motivation Questionnaire was intended to assess. Furthermore, two experts in the field of couple therapy verified the ecological relevance of the different items. Each scale consisted of four items with the exception of external regulation and introjected regulation, which had two and three items, respectively.

In line with self-determination theory, the Couple Motivation Questionnaire assesses amotivation (e.g., "I don't know; I feel helpless to the fact that sooner or later we are going to separate"; standardized Cronbach's alpha = .88), external regulation (e.g., "Because people who are important to me [e.g., children, family, friends] are proud of our relationship and I would not want to disappoint them"; 2 items, intercorrelation = .33), introjected regulation (e.g., "Because my relationship with him/her is a commitment that I have to hold"; Cronbach's alpha = .58), identified regulation (e.g., "Because our life as a couple is one of the ways I value to participate in new activities."; Cronbach's alpha = .72), integrated regulation (e.g., "Because I feel free to commit myself with my partner to achieve future projects that I hold dearly"; Cronbach's alpha = .67), and intrinsic motivation (e.g., "Because I love the numerous crazy and amusing moments that I have with my partner"; Cronbach's alpha = .82).

Perceptions of the couple's adaptive behaviors and dyadic happiness. Three questionnaires were used to assess perceptions of couples' adaptive behaviors. First, three of the four subscales of the Dyadic Adjustment Scale (DAS) were used (Spanier, 1976; French-Canadian validation by Baillargeon, Dubois, & Marineau, 1986; Sabourin, Lussier, Laplante, & Wright, in press). The first dimension, dyadic consensus, evaluates the perception of agreement within the couple on different aspects of the relationship (e.g., "amount of time spent together" and "making major decisions"). The second dimension evaluates dyadic cohesion. Subjects are asked, for example, to evaluate how often they "laugh together," "work together on a project," and "have a stimulating exchange of ideas." The third dimension assesses affectional expression by asking subjects to indicate the extent to which both members agree on items such as "demonstration of affection." The fourth dimension of the DAS, the satisfaction subscale, was not used in order to make a clear conceptual distinction between the cognitive component (i.e., perception of adaptive behaviors) and the affective component (i.e., dyadic happiness) of the model. The total score of all items of the three dimensions was used for the analyses, and the standardized Cronbach's alpha was .84.

The second questionnaire used was the Potential Problem Checklist (PPCL; Patterson, 1976; French-Canadian version by Gendreau & Wright, 1981). This instrument assesses the degree of agreement and disagreement in 26 areas of a couple's relationship (e.g., "financial and monetary planning [budget, credit, savings, important expenses]" and "sexuality [contraception, frequency, type of behavior preferred and received]") and, thus, extends further the evaluation of dyadic consensus assessed in the DAS. The standardized Cronbach's alpha for this scale was .90.

Finally, two dimensions of the Marital Ways of Coping questionnaire (Fleishman, 1984; French-Canadian version by Laporte, 1985) were used: positive comparisons (e.g., "How do you compare your marriage to that of most other people like yourself?") and passive acceptance (e.g., "How often do you wait for time to remedy the difficulty?"). The internal consistency coefficients for these scales were, respectively, .66 and .64.

Personal happiness toward the relationship was assessed through the Marital Happiness Scale (Azrin, Naster, & Jones, 1973; French version by Sabourin & Wright, 1985). This measure assesses, on a scale of 1 to 10 (completely unhappy to completely happy), the level of marital happiness in nine different aspects of marital relationships (e.g., sex and communication), and also includes a global assessment of marital happiness with the relationship. The internal consistency coefficient for this scale was .87. Finally, demographic questions such as age, gender, duration of relationship (living together), number of children, and income were included in the total questionnaire package.

Procedure

Questionnaires were administered to one couple at a time in a small room in a university setting and were completed individually. The instructions provided to the subjects prior to completing the questionnaire focused on establishing a rapport with them, on minimizing social desirability, on stressing confidentiality, and on giving clear instructions for answering the questionnaire.

Results

Couple Motivation

Couple Motivation Questionnaire. The mean item ratings for the amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation scales were, respectively, 1.79 (SD = 1.25), 2.38 (SD = 1.25)1.37), 2.60 (SD = 1.23), 4.20 (SD = 1.23), 4.25 (SD = 1.3), and 4.41 (SD = 1.39). A 2 (Gender) \times 6 (Type of Motivation) multivariate analysis of variance (MANOVA) with repeated measures on the motivation variable was conducted to test for main effects due to gender and type of motivation as well as a possible interaction between these two variables on the different motivation scales. A main effect for type of motivation was found, F(5,113) = 33.54, p < .0001. More specifically, Newman-Keuls analyses revealed that the nonself-determined types of motivation (i.e., amotivation, external regulation, and introjected regulation) had significantly lower ratings than the self-determined forms of motivation (i.e., identified regulation, integrated regula-

² The Couple Motivation Questionnaire is presently in an experimental French-Canadian version and is available from Marc R. Blais.

Table 1
Correlation Matrix Among the Motivation Scales
of the Couple Motivation Questionnaire

Scale	1	2	3	4	5	6
1. Amotivation		.43	.21	28	45	57
2. External regulation			.55	17	20	35
3. Introjected regulation			_	.10*	.07*	11*
4. Identified regulation				—	.74	.59
5. Integrated regulation						.66
6. Intrinsic motivation						

* Nonsignificant, p > .05.

tion, and intrinsic motivation) (p < .05). Furthermore, the average rating of amotivation was significantly lower than that of external regulation and of introjected regulation (p < .05). These latter two motivational styles were not significantly different from one another (p > .05). The 2 × 6 analysis also revealed that neither the gender factor nor the interaction term was significant.

Correlations among the Couple Motivation Questionnaire scales. In order to verify the existence of a self-determination continuum, the correlations between the Couple Motivation Questionnaire scales were computed. The correlations for men and women were very similar. Therefore, only correlations from the full sample will be presented. The pattern of correlations (see Table 1) supports the hypothesized simplex structure. The self-determined forms of motivation related in the same direction among themselves and in an opposite direction with the less self-determined types of motivation. Furthermore, stronger coefficients (in the same direction) are found between motivational styles that are adjacent to one another on the continuum.

Concomitant Variables of Couples' Motivational Styles

Table 2 presents the correlation coefficients between the six types of motivation and the different indices of the quality of couples' relationships.³ The pattern of correlations is consistent with predictions in two ways. First, it reveals that indices of the quality of couples' relationships are all positively correlated with self-determined types of motivation and negatively correlated with self-determined forms of motivation. Second, in several cases, it demonstrates that the more self-determined the type of motivation, the higher the positive coefficient. Furthermore, the less self-determined the type of motivation, the greater the negative coefficient. The inverse of this pattern is demonstrated for the passive acceptance scale. This finding was expected, as the passive acceptance scale measures a non-adaptive form of relational behavior (Fleishman, 1984).

The Motivational Model of Couple Happiness

The model tested consisted of three major components: motivational styles to maintain the couple's relationship as reflected by a self-determination index (e.g., Connell & Ryan, 1986; Grolnick & Ryan, 1987, 1989), the perception of the couple's adaptive behaviors, and dyadic happiness. The self-deter-

mination index consisted of a summation of specifically weighted total scores of each of the six motivation scales of the Couple Motivation Questionnaire. This index was used to integrate the information from the six scales under one score and thus facilitate interpretation of results from the path analyses. In line with previous studies using the index, weights were assigned to each motivational scale's total according to their respective placement on the self-determination continuum (Grolnick & Ryan, 1987, 1989). Intrinsic motivation, integrated regulation, and identified regulation, because they are considered self-determined forms of motivation, were assigned the weights of +3, +2, and +1, respectively. On the other hand, amotivation, external regulation, and introjection, because they are conceptualized as less self-determined forms of motivation, were assigned the following respective weights: -3, -2, and -1. Connell and Ryan (1986) have presented extensive support for the construct validity of such a composite index in the education domain. The internal consistency (i.e., standardized Cronbach's alpha) of this index, as represented by the six scales, was .80 and .75 for male and female subjects, respectively. All six totals were transformed into standardized scores for this reliability analysis.

The second component also consisted of a composite index. Subjects' perceptions of their couple's adaptive behaviors involved the summation of three standardized scores. The first was the total score of the dyadic consensus, cohesion, and affectional expression subscales of the Dyadic Adjustment Scale. The second composite measure consisted of the total score of the Potential Problem Checklist. The last summated score was the total score of the positive comparisons and of the passive acceptance subscales of the Marital Ways of Coping instrument. Reverse scoring was applied to the latter subscale because it reflects nonadaptive behaviors. The standardized Cronbach's alpha coefficients of the perception of the couple's adaptive behaviors were .85 and .84, respectively, for men and women. Finally, the third component of the model was operationalized by means of the Marital Happiness Scale. In sum, three conceptually and operationally distinct variables were used to assess the motivational, cognitive, and affective components of the proposed model.

The model was statistically verified by means of two fully recursive path analyses using the multiple regression technique (Pedhazur, 1982). There were two integrated path analyses for the male subjects and their corresponding female partners (see Figure 2). The first path analysis tested the model with respect to men's reports of couple happiness using four multiple regressions. In the first multiple regression analysis, four predictors were entered in the following order: men's motivation (i.e., selfdetermination index), corresponding partners' motivation, men's perceptions of their couple's adaptive behaviors, and their corresponding partners' perceptions of their couple's adaptive behaviors. The criterion variable was men's rating of dyadic happiness. This analysis was conducted to verify the hypothesis

 $^{{}^{3}}T$ tests were conducted on all of these indices to verify for a gender effect, and none were significant (p < .05). The data of both genders were therefore combined for the analyses.

Scale	Amotivation	External regulation	Introjected regulation	Identified regulation	Integrated regulation	Intrinsic motivation
Dyadic adjustment Potential problem	47***	30***	30***	.26***	.23***	.43***
checklist	49***	25**	23**	.22**	.25**	.47***
Positive comparison	55***	26**	11	.13	.23**	.45***
Passive acceptance	.35***	.23**	.12	17*	16*	35***
Marital happiness	49***	25**	25**	.17*	.18*	.40***

Table 2 Correlations Between Couple Motivation Questionnaire Scales and Different Measures of the Quality of Couples' Relationships

* p < .05. ** p < .01. *** p < .001.

that motivational components did not have direct effects on the dyadic happiness variable. Men's and women's motivation did not reveal significant linkages with men's dyadic happiness $(\beta s = .04 \text{ and } -.04, \text{ respectively})$. In line with a theory-trimming process (Pedhazur, 1982), when a predictor had a beta weight lower than .20 and thus was not significant, we repeated the analysis without the nonsignificant predictor. In the present case, we conducted a second multiple regression similar to the first one but without the two motivation components. Results of this analysis revealed that the beta weights from men's and women's perception of the couple's adaptive behaviors were, respectively, .61 and .22 (see Figure 2). This equation explained 61% of the variance of men's reports of dyadic happiness. Finally, in a third multiple regression men's and women's motivation indices were included as predictors of men's perceptions of the couple's adaptive behavior. This allowed a test of the expected direct effects between the motivation components and men's perceptions of the couple's adaptive behaviors. Men's and women's motivation revealed significant betas of .30 and .36, respectively, and explained 32% of the variance of men's perceptions of the couple's adaptive behaviors. Although the beta weights for women were greater than those for men, the confidence intervals indicated that they were not significantly different from one another.

The same analyses were repeated for predicting women's perceptions of the couple's adaptive behaviors and experienced couple happiness (see Figure 2). The first multiple regression analysis, conducted the same way as for men, also revealed that men's and women's motivation index did not contribute in explaining women's dyadic happiness ($\beta s = -.09$ and -.02, respectively) when perceptions of couples' adaptive behaviors were included. In the second multiple regression analysis, men's and women's perceptions of couples' adaptive behaviors were kept in the equation to predict women's dyadic happiness. Results revealed that only women's perceptions of the couple's adaptive behaviors had a beta greater than .20 ($\beta s = -.14$ and .85 for men and women, respectively). Therefore, the analysis was repeated with only this latter predictor. Women's perceptions of the couple's adaptive behaviors had a beta of .74 and thus explained 55% of women's dyadic happiness. The final multiple regression analysis consisted of having men's and women's motivation indexes as predictors of women's perceptions of the couple's adaptive behaviors. Only women's motivation index was revealed to be a significant path ($\beta = .41$). Men's motivation index, with a beta

of .24, was kept in the equation. Both predictors explained 32% of women's perceptions of the couple's adaptive behaviors.

Discussion

This study revealed several important findings regarding the role of motivational styles and self-determination in the quality of couples' relationships. A model was proposed linking self-determination theory's motivational styles to adaptive relationship behaviors, to perceptions of adaptive behaviors, and, finally, to impact on couple happiness. The present study was designed to make a preliminary test of the motivational, cognitive, and affective components of this model. In addition, the study provided an initial test of three important aspects of selfdetermination theory: (a) the simplex structure postulated for the full range of motivational styles proposed in self-determination theory (amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation), (b) the generalizability of self-determination theory with older adults, and (c) the generalizability of self-determination theory in the domain of close relationships.

Regarding the postulated motivational, cognitive, and affective linkages of the motivational model, the path analyses were highly significant and explained important portions of variance. These analyses showed that both partners' motivational style to maintain their couple relationship strongly predicted personal feelings of satisfaction with the relationship through their impact on perceptions of the couple's adaptive behaviors. That is, the more self-determined both partners' motivational style, the greater their perceptions of positive, ongoing dyadic behaviors (e.g., consensus, cohesion, and affectional expression), which in turn strongly predicted their personal happiness with the relationship. The mediating perspective of the present model was strongly supported in that the motivational style of both partners had close to zero beta weights to predict dyadic happiness when their perceptions of the couple's adaptive behaviors were considered in the equation. These latter results thus provide initial support for the validity of the model.⁴

⁴ We conducted other path analyses that accounted for the effect of the length of couples' relationships and the number of children they had. These variables were individually included in the equation at the same level as that of the motivation component. In all of the cases, the paths between these variables and the other predictors were not significant and did not modify the contribution of the predictors.



Figure 2. Path analyses testing the motivational model of couple happiness with sample male and corresponding female partner. (Correlation coefficients are presented in parentheses. Unless indicated, that is, ns, all paths are significant.)

The contribution of women toward the quality of the relationship as experienced by both members is a second important finding that merits further discussion. Results from the path analyses showed gender differences that are in line with those obtained in two previous studies. Davis and Oathout (1987) and Franzoi and colleagues (1985) demonstrated that women's perspective-taking tendency had the greatest impact on the couple's satisfaction. Notably, women's perspective-taking tendency made a stronger contribution to men's satisfaction than did men's own perspective-taking tendency. As well, women's perspective-taking tendency was the strongest predictor of their own satisfaction. Men's perspective taking did not significantly influence women's satisfaction. In our study, women's own motivational style was the only significant predictor of women's perceptions, whereas women's motivation also showed a strong, significant linkage with men's perceptions. These results tend to support the contention that the female member of the couple plays a greater role than her male partner in the development or maintenance of the quality of intimate relationships (e.g., Davis & Oathout, 1987; Franzoi et al., 1985; Rusbult et al., 1986). It is worth noting that the present results not only extend these findings with respect to motivational styles, but also document this phenomenon with a different population. Previous studies reporting such a pattern were conducted with college-student dating couples (Davis & Oathout, 1987; Franzoi et al., 1985). In the present study, we found the same pattern in a French-Canadian population with an average age of 38.1 years and with an average of 12.6 years of communal living.

Although women revealed stronger predictors, it is impor-

tant to note that the model was highly significant for both genders. Specifically, the model explained 61% and 55% of the variance for men's and women's couple happiness, respectively. Although comparisons are difficult to make because populations may not necessarily be equivalent (age group, length of relationship, and French-Canadian subjects), these figures are among the highest in explained variance across the several studies investigating models or predictors of marital happiness and satisfaction. For example, Bradbury and Fincham's (1988) R²s from their contextual model equation explained 35% of the variance for husband and wife satisfaction. This equation included responsibility and causal attributions, femininity and masculinity sex roles, and relationship beliefs. Franzoi et al.'s (1985) model proposing that self-consciousness be mediated by perspective taking followed by self-disclosure explained 22% and 16% of male and female satisfaction, respectively. Davis and Oathout's (1987) model linking dispositional empathy to partner's perceptions of relationship behavior explained, in their best equations, 41% and 42% of male and female satisfaction, respectively. Rusbult and colleagues' (1986) best equation including four patterns of problem solving-exit, voice, loyalty, and neglect-predicted 43% of the variance of distressed-nondistressed couples. Looking at the relationship between marital locus of control and marital satisfaction, Miller and colleagues (1986) found correlations accounting for 19% and 17% of the variance for husbands and wives, respectively. Investigating the predictors of quality of relationship with married, cohabiting, gay, and lesbian couples, Kurdek and Schmitt (1986) found that self-reports of investment, relationship beliefs, sex role, dyadic

attachment, personal autonomy, interpersonal orientation, shared decision making, social support, and psychological maladjustment contributed to explaining 77% of the relationship satisfaction of cohabiting couples. With married couples, the same predictors explained 58% of the variance.

In sum, the proposed motivational model compares very well with other models or predictors of relationship satisfaction and happiness for both male and female partners. From a theoretical point of view, the model brings a new perspective to the literature while remaining relatively parsimonious and solidly based in an articulated theoretical foundation (self-determination theory). In this respect, the model presents the potential for knowledge building, theory testing, and eventually improving the quality of close relationships.

Although the present results showed strong support for the motivational model, certain limitations of the study should be acknowledged. First, we have used cross-sectional data for causal modeling purposes. Although path analyses can provide an interesting test of the mediational model proposed, it is not a strong test of the causal linkages among the different proposed components. Future studies using longitudinal data or structural equation modeling such as provided by LISREL (Jöreskog & Sörbom, 1984) could be conducted to confirm on a more solid empirical base the power of the motivational model. Testing the full model by including the behavioral component would also be a logical future step in the validation of the proposed model. Finally, future studies need to address more fully the psychometric characteristics of the Couple Motivation Questionnaire.

In the present study, the gradual increases in the average ratings from lower to higher self-determined motivational styles could be interpreted as a problem of social desirability with the scales. However, results from a different study (Sabourin & Blais, 1989) showing very weak relationships between the scales (slightly modified items) of the Couple Motivation Questionnaire and measures of social desirability and self-deception may suggest that response distortions in the present study have been weak.5 An alternative interpretation to these results could be that our subjects had been living together for a long period of time (an average of 12.6 years) and would be classified as nondistressed according to their average score of 135.22 (SD = 14.8; possible range from 0 to 151) on the DAS. Couples scoring below 90 are often considered distressed couples. Thus, for our nondistressed couples, scores on the lower self-determined scales should, on average, be lower than on the more self-determined motivational scales. In this regard, we could add to the agenda of future studies the need to verify the generalizability of the motivational model to different types of couple relationships such as more distressed couples, homosexual couples, and elderly couples.

A third important aspect of this study is that it extends support for self-determination theory in several ways. To the best of our knowledge, this study was the first empirical test of all six forms of motivation proposed by self-determination theory. Results confirmed the validity of these motivational styles in two ways. On one hand, the pattern of correlations between the different motivation scales supports the notion that the six different types of motivation postulated by self-determination theory represent different levels on a self-determination continuum. On the other hand, the consistent pattern of correlations between the different types of motivation and various important indices of the quality of couple relationships are directly in line with the theory's predictions. This pattern revealed that the greater the level of self-determination in the motivational style, the greater the quality of the relationship. Conversely, the less self-determined the motivational style, the greater its negative relationship with indices of the quality of the relationship.

These results qualify previous findings regarding extrinsic motivation by showing that it is not necessarily negatively related to the quality of the relationship (e.g., C. Seligman et al., 1980). The more self-determined forms of extrinsic motivation (i.e., identified and integrated regulation) were, in fact, positively related with indices of the quality of the relationship. The present study also extends these previous findings by empirically demonstrating an important refinement regarding the low self-determined nature of extrinsic motivation. In that respect, the theory distinguishes between two different forms of extrinsic motivation, that is, external regulation and introjected regulation. Although much of the previous research has demonstrated the controlling potential implicated in external regulations (Deci & Ryan, 1985, 1987), there is presently little evidence to support the contention that introjected regulation also corresponds to low levels of self-determined functioning. The inclusion of this latter form of motivation was a particularly significant theoretical contribution because it permitted an explanation, within a theoretical framework, of why certain selfcontrol processes or self-regulations, though they are "internal to the person," are not similar experiences as under intrinsically motivated processes and can also be quite different from the experience of more self-determined extrinsic motivations. The present results support this theoretical contribution by showing consistently negative relationships between introjection and both perceptions of the couple's adaptive behaviors and personal reports of couple happiness. In other words, these results support the view that people can be motivated to maintain a relationship by sheer "willpower" (i.e., introjection) and without external contingencies as motivating forces. More important, they highlight that the quality of day-to-day interactions with one's partner should be much less positive for individuals maintaining their couple relationship by "willpower" as compared with those maintaining their relationship by "willfulness" (i.e., through more self-determined extrinsic or intrinsic motivations; Deci, 1980).

This study also supports the usefulness of adding the amotivation construct to the intrinsic-extrinsic conceptualization. Representing the lowest level of self-determination, amotivation consistently showed the strongest negative correlations (except for passive acceptance) with the various measures of relationship quality (all rs are at the p < .0001 level). These findings

⁵ We have used Paulhus's (1984) questionnaire assessing both impression management and self-deception. For the Other Deception Questionnaire (impression management) correlations were .03, -.05, -.13, -.05, -.06, and .05 for amotivation, external regulation, introjection, identification, integration, and intrinsic motivation, respectively. In the same order, the relations with the Self-Deception Questionnaire were .02, .20 (p < .02), -.02, -.05, -.14, and .01.

are in line with recent studies assessing this construct in the education domain (Vallerand et al., 1989). In sum, the present results extend knowledge of couples' motivational processes by supporting the refined conceptualization of extrinsic motivation and the inclusion of the amotivation construct proposed in self-determination theory.

The generalizability of self-determination theory to the domain of interpersonal relationships, to older adult populations, and to a French-Canadian population was also demonstrated. The validity of some of the different forms of motivation proposed in self-determination theory had previously been tested (to the best of our knowledge) only in the academic domain and in the area of prosocial behaviors. In these studies, subjects were either college students (Vallerand et al., 1989) or of younger age groups (Grolnick & Ryan, 1987, 1989; Ryan & Connell, 1989). Results from these studies are also coherent with our findings in supporting a simplex structure among the motivational scales as well as showing such a structure between these scales and various indices of the quality of the experience in education (e.g., Grolnick & Ryan, 1987; Vallerand et al., 1989) or prosocial contexts (Ryan & Connell, 1989).

In sum, the present results support the proposed motivation model of couple happiness, which emphasizes the importance of autonomy-driven processes as opposed to controlling and amotivated processes in the development and maintenance of the quality of couples' relationships.

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