
The Interpersonal Exchange Model of Sexual Satisfaction: Implications for Sex Therapy with Couples

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Abstract

Although much has been written about the treatment of sexual dysfunction and sexual dissatisfaction, the enhancement of sexual satisfaction has received little attention in either the empirical or clinical literature. Most of the literature on sexual satisfaction that does exist has lacked a definition of the construct. In addition, until recently, there has not been a theoretical model to guide either research or our understanding of factors influencing sexual satisfaction. In order to fill these gaps, Lawrance and Byers (1995) developed and established the validity of the Interpersonal Exchange Model of Sexual Satisfaction (IEMSS). This article first discusses issues related to defining sexual satisfaction and proposes a definition of the construct. Second, the exchange perspective in general and the IEMSS in particular are described. Third, the results of studies which have validated the IEMSS with Canadians in long-term relationships, Canadians in dating relationships, and married individuals living in China are presented. Finally, the implications of the IEMSS for clinical practice are elaborated.

Résumé

Bien qu'on ait beaucoup écrit sur le traitement des dysfonctions sexuelles et du manque de satisfaction sexuelle, l'accroissement de la satisfaction sexuelle a reçu peu d'attention, soit dans la littérature empirique ou clinique. La plupart des écrits sur la satisfaction sexuelle qui existent ne possèdent pas de définition du construct. De plus et jusqu'à une époque récente, il n'existait pas de modèle théorique pouvant diriger la recherche ou notre compréhension des facteurs déterminant la satisfaction sexuelle. Afin de combler ces lacunes, Lawrance et Byers (1995) ont conçu le modèle suivant et en ont établi la validité: *Interpersonal Exchange Model of Sexual Satisfaction (IEMSS)* [Modèle d'échange interpersonnel de satisfaction sexuelle]. Cet article discute premièrement des questions liées à la définition de la satisfaction sexuelle et propose une définition du construct. Deuxièmement, la perspective d'échange en général et le modèle *IEMSS* en particulier sont décrits. Troisièmement, cet article présente les résultats des études vérifiant la validité du *IEMSS* chez des Canadiens engagés dans des relations à long terme, chez des Canadiens dans les relations pré-conjugales et chez des personnes mariées vivant en Chine. Finalement, les implications du *IEMSS* pour la pratique clinique sont énumérées.

Sexual satisfaction is important to most couples. Individuals are concerned about the quality of their sexual relationship as well as their own sense of sexual satisfaction and the sexual satisfaction of their partner. Although considerable attention has been paid to the treatment of sexual dysfunction, sexual problems, and sexual dissatisfaction, the enhancement of sexual satisfaction has received little attention (Cooper & Stoltenburg, 1987). Of course, some couples do seek counselling and therapy to deal specifically with sexual problems and dysfunctions. However, even more couples seek counselling for more general relationship issues and the majority of these couples also have sexual concerns (Frank, Anderson, & Kupfer, 1976). These concerns often do not reflect the presence of a sexual dysfunction per se but rather arise because one or

both partner's sexual satisfaction is not as great as it could be or as it used to be. That is, these individuals get aroused and have orgasms, but experience disappointment with the quality of their sexual encounters with their partner. In addition, although resolving the sexual dysfunction often results in decreased sexual *dissatisfaction*, it does not necessarily result in increased sexual *satisfaction*. Sexual satisfaction is not equivalent to a lack of dissatisfaction, just as joy is not the lack of depression, and health is not the lack of disease.

Sexual satisfaction in general, and enhancement of sexual satisfaction in particular, has received little attention in the empirical or clinical literature. Further, the literature has been devoid of a conceptual framework for understanding and studying sexual satisfaction (Perlman & Abramson, 1982). What exactly is sexual satisfaction? How can we best assess sexual satisfaction? What are the factors that influence sexual satisfaction? The goal of this paper is, first of all, to present a conceptual model, the Interpersonal Exchange Model of Sexual Satisfaction, that Kelli-an Lawrance and I developed to guide our understanding of sexual satisfaction and identify directions for enhancing sexual satisfaction (Lawrance, 1994; Lawrance & Byers, 1992). In addition, the implications of the Interpersonal Exchange Model of Sexual Satisfaction for the assessment and treatment of couples experiencing low sexual satisfaction are explored.

Defining Sexual Satisfaction

Before developing the Interpersonal Exchange Model of Sexual Satisfaction, it was necessary to adopt a definition of sexual satisfaction. Lawrance and Byers (1992; Lawrance, 1994) reviewed and critiqued existing definitions of sexual satisfaction. First, we noted that there has not been a consistent conceptual definition of sexual satisfaction used either in the research or in the clinical literature (see also Perlman & Abramson, 1982). In fact, many authors use the term sexual satisfaction without defining it at all or use a tautological definition such as "Satisfaction is conceptualized as the degree to which [one] is satisfied with [one's] sex life" (Pinney, Gerrard, & Denney, 1987, p. 234.)

Second, we noted that the operational definitions of sexual satisfaction have been equally inconsistent and inadequate (Lawrance & Byers, 1992). For example, many researchers have assessed sexual satisfaction by having respondents rate their sexual relationship on a single bi-polar scale. For some of these researchers, the opposite of sexually satisfied is *sexually dissatisfied*, for others it is *not at all satisfied*, for still others it is *sexually frustrated* (Davidson & Darling, 1988; Frank, Anderson, & Rubenstein, 1978; Hatfield, Greenberger, Traupmann, & Lambert, 1982; Jobes, 1986). It is not clear whether these scales, all purported to measure sexual satisfaction, are equivalent.

Although some researchers have developed multi-item scales to measure sexual satisfaction (Ard, 1977; Hatfield et al., 1982; Hudson, Harrison, & Crosscup, 1981; Patton & Waring, 1985; Pinney et al., 1987; Schenk, Pfrang, & Rausche, 1983; Whitley & Poulsen, 1975), there are considerable methodological difficulties with these scales (Lawrance & Byers, 1992). The items on these scales differ considerably from one scale to the next. Further, they often include items, such as the frequency of sexual activity or the frequency of orgasm, that are contemporaneously used as predictors of sexual satisfaction. This makes it difficult to interpret the relationships between variables or to determine what factors influence sexual satisfaction. For example, Kimlicka, Cross, & Tarnai (1983) asked respondents to indicate how pleasurable they found different sexual behaviours and used these data to draw conclusions about sexual satisfaction. However, sexual pleasure and sexual satisfaction are not necessarily the same thing. A person who finds many behaviours to be pleasurable could nevertheless be dissatisfied with his/her sexual relationship. Perhaps the respondent and his/her partner do not engage in those behaviours frequently enough; perhaps the emotional connectedness is missing from the sexual interaction; perhaps the partner does not find these behaviours pleasurable; and so on.

The inconsistencies in operationalizing and assessing sexual satisfaction demonstrate a lack of understanding and agreement in our conceptualization of sexual satisfaction. The discrepant definitions also make it difficult to compare results across studies. Sexual satisfaction is more than physical pleasure. It is more than the frequency of sex, or the consistency of orgasm, although these have sometimes been used as measures of sexual satisfaction. Certainly job satisfaction is rarely equated with the number of hours worked or the number of promotions received. Nor is sexual satisfaction equivalent to a lack of sexual dissatisfaction or a lack of sexual dysfunction (Lawrance, 1994; Lawrance & Byers, 1992). In fact, MacNeil and Byers (1997) found that although individuals with more sexual concerns and problems reported lower sexual satisfaction, the numbers of sexual concerns and sexual problems accounted for only 22% of the variance in sexual satisfaction. As the literature does not provide a clear conceptual definition of sexual satisfaction, we looked to the marital/relationship satisfaction literature, which has been more systematic in defining relationship satisfaction, to develop our definition of sexual satisfaction.

Relationship satisfaction has been defined in two different ways. One approach has been to define relationship satisfaction in cognitive terms as the *evaluation* of the positives and negatives in the relationship compared to what is expected (e.g. Walster, Walster, & Berscheid, 1978). Another approach has been to define relationship satisfaction as one's *affective* orientation towards one's relationship; for example, one's sub-

jective feeling of happiness with the relationship (e.g. Rusbult, 1983). In reality, satisfaction probably includes both an evaluative and an affective component. Accordingly, Lawrance and Byers (1992; 1995) proposed the following definition of sexual satisfaction:

An affective response arising from one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship.

This definition contains both affective and evaluative components and thus distinguishes satisfaction from purely affective constructs such as happiness as well as from purely evaluative constructs such as success.

Exchange Models of Satisfaction in Interpersonal Relationships

A model of sexual satisfaction needs to take into account the interpersonal context in which sexual activity occurs. Therefore, we developed the Interpersonal Exchange Model of Sexual Satisfaction within the tradition of social exchange models. Exchange models examine interpersonal relationships in reference to what the partners put into and get out of the relationships (e.g. Nye, 1982; Thibaut & Kelley, 1959; Walster et al., 1978). The social exchange perspective has been applied successfully to predicting overall relationship satisfaction (Cate, Lloyd, Henton, & Larson, 1982; Cate, Lloyd, & Long, 1988; Davidson, 1984; Michaels, Edwards, & Acock, 1984; Rusbult, 1983; Rusbult, Johnson, & Morrow, 1986; Walster et al., 1978). Although social exchange models have been shown to be useful in understanding various other aspects of sexual relationships, for the most part, this perspective has not been applied specifically to sexual satisfaction (Sprecher, 1998).

Common to virtually all exchange models are the concepts of the level of rewards and the level of costs partners exchange in their relationship. *Rewards* are defined as exchanges that are pleasurable and gratifying to the person, while *costs* are exchanges that demand physical or mental effort or cause pain, embarrassment, or anxiety (Thibaut & Kelley, 1959). Rewards and costs can, of course, include goods and services, but they can also include expression of affect, sharing of interests, and communication (Foa & Foa, 1980; Swenson, 1973). Basically, exchange models predict that the more one's rewards exceed one's costs, the more satisfying the relationship will be.

According to Thibaut and Kelley (1959), the values of rewards and costs are subjective and are determined in reference to the individual's "comparison level." *Comparison level* can be defined as the level of rewards and costs that the individual believes that she or he should receive or expects to receive from a relationship. Again, exchange theories predict that individuals who perceive that the level of rewards and the level of costs they receive in their relationship compare favourably to the level of rewards and costs they expect to receive in the relationship will be more satisfied.

Equality models argue that satisfaction is also influenced by one's perceptions of how equal one's own rewards and costs are to one's partner's rewards and costs. That is, the more individuals perceive their rewards and costs to be equal to those of their partner, the more satisfied they will be. This is similar to aspects of the mutual sexuality approach (Simmons, Slattery, & Smith, 1995). It should be noted that some exchange models use the concept of equity rather than equality. Equity models consider partners' "inputs" and "outcomes." In contrast, equality models suggest simply that satisfaction exists when partner's outcomes are perceived to be equal, regardless of their inputs. Research suggests that there is little difference in the relative ability of equity and equality to predict relationship satisfaction (Cate et al., 1988; Michaels et al., 1984). As equality is conceptually simpler and easier to evaluate than is equity, we used equality rather than equity in the Interpersonal Exchange Model of Sexual Satisfaction. Finally, in long-term relationships, satisfaction is influenced by the history of exchanges between partners (Gottman et al., 1976; Levinger & Huesman, 1980; Rusbult, 1983). That is, satisfaction is not greatly influenced if rewards and costs are temporarily unfavourable or temporarily unequal. Instead, decreased satisfaction is associated with ongoing, consistently unfavourable levels of rewards and costs, or persistent inequality between partners.

The Interpersonal Exchange Model of Sexual Satisfaction

The Interpersonal Exchange Model of Sexual Satisfaction (IEMSS) capitalizes on the strengths of various exchange models of relationship satisfaction. As an exchange model, and in keeping with our definition of sexual satisfaction, the IEMSS takes into account the interpersonal context in which sexual activity within a relationship occurs as well as the level of sexual rewards, level of sexual costs, comparison levels for sexual rewards and sexual costs, and the perceived equality of sexual rewards and sexual costs. It should be noted that the original IEMSS did not include the nonsexual aspects of the relationship as a component of the model. However, based on the finding that relationship satisfaction makes a unique contribution to sexual satisfaction over and above the contribution of sexual exchanges (Lawrance & Byers, 1995), a nonsexual relationship component has been added.

Specifically, the IEMSS identifies four distinct aspects of relationships that influence sexual satisfaction (Lawrance & Byers, 1995). First, the IEMSS proposes that satisfaction with the sexual relationship will be greater to the extent that relationship satisfaction is greater. Second, sexual satisfaction is expected to be greater to the extent that the level of rewards incurred in the sexual relationship exceeds the level of sexual costs. Third, sexual satisfaction will be greater to the extent that the level of rewards and the level of costs that one experiences in the sexual

relationship compare favourably to the level of rewards and the level of costs one expects to experience in the sexual relationship. That is, sexual satisfaction will be greater to the extent that comparison level for rewards or relative rewards exceed comparison level for costs or relative costs. Finally, greater sexual satisfaction is expected to be related to greater perceived equality between one's own and one's partner's level of rewards and one's own and one's partner's level of costs in the sexual relationship. In addition, the model predicts that sexual satisfaction is influenced by the *history* of these four aspects of the relationship more than by the levels of these components at any single point in time.

Evaluation of the IEMSS

My colleagues and I have demonstrated that the IEMSS has good validity for dating as well as for long-term heterosexual relationships in three separate studies. For example, Lawrance and Byers (1995) mailed questionnaires to Canadian university alumni and volunteers from the community. Participants in the study also completed the same questionnaire three months after the original mailing. Our sample consisted of 244 individuals in heterosexual relationships who were married or cohabiting. Participants ranged in age from 20 to 66 years ($M = 37.4$ years). Most (85%) were married. We found strong support for the IEMSS. As proposed, all of the IEMSS components were significantly related to sexual satisfaction. Together, the IEMSS components accounted for 79% of the variance in sexual satisfaction. Further, as predicted, measuring the components at two points in time provided a better prediction of sexual satisfaction than did exchanges at a single point in time. In a second study, we mailed copies of the same questionnaire, translated into Chinese, to a random sample of married Chinese individuals living in Beijing or Shanghai (Renaud, Byers, & Pan, 1997). Completed questionnaires were received from 361 individuals who ranged in age from 21 to 77. We found that all of the components of the IEMSS contributed uniquely to the prediction of sexual satisfaction, in this case accounting of 58% of the variance in sexual satisfaction. This supports the cross cultural utility of the IEMSS. Finally, we investigated the validity of the model in a sample of 99 Canadian university students (Byers, Demmons, & Lawrance, 1998). These students had been dating an average of 13 months (range = 3 to 36 months). The model accounted for 74% of the variance in sexual satisfaction. In all of these samples, the higher the relationship satisfaction, the more the level of rewards exceeded the level of costs, the level of relative rewards exceeded the level of relative costs, and one's own and one's partners' levels of rewards and costs were perceived to be equal, the greater the sexual satisfaction. Further, these studies demonstrated that the IEMSS worked equally well for men and

for women, and for individuals who differed in the duration of their romantic relationship and in the extent of their self-disclosure.

There were some similarities and differences between the results with Canadian dating couples and Canadian couples in long-term relationships (Byers et al., 1998; Lawrance & Byers, 1995). In both studies, each component of the model was individually related to sexual satisfaction and together the components accounted for similar percentages of the variance in sexual satisfaction. However, relationship satisfaction accounted for more variance in sexual satisfaction amongst dating couples than amongst married and cohabiting couples. In contrast, sexual exchanges added more to the prediction of sexual satisfaction over and above relationship satisfaction for married and cohabiting individuals than for daters. This suggests that, in fairly new relationships, there is likely to be an overall appraisal of the relationship that influences affective responses along a number of dimensions, including sexual satisfaction. In these relationships, sexual exchanges may contribute only a small amount to sexual satisfaction over and above this global appraisal. That is, if a dating individual is satisfied with the relationship, for the most part, they also find sex satisfying. In contrast, in long-term relationships, this global appraisal of the relationship may have a smaller, although, important, impact on sexual satisfaction. More specific appraisals of actual sexual exchanges appear to have a major influence on sexual satisfaction for these couples. That is, in long-term relationships an individual is sexually satisfied if they are satisfied with the nonsexual aspects of the relationship, and also perceive both themselves and their partner to experience a high level of sexual rewards and few sexual costs.

The relative contributions of the sexual exchange variables to the prediction of sexual satisfaction also differed for individuals in long-term and dating relationships. For the married and cohabiting individuals, the difference between the level of rewards and the level of costs contributed the most to the prediction of sexual satisfaction. For the daters, the difference between comparison level for rewards and costs made the largest contribution; that is, how their rewards and costs compared to their expectations. Equality of rewards and costs contributed the least to the prediction of sexual satisfaction for both groups.

Specific Rewards and Costs

Byers and her colleagues have also used the IEMSS to study specific types of rewards and costs in the sexual relationship. Past research has demonstrated that various aspects of sexual relationships are related to sexual satisfaction. Many of these factors can be conceptualized as rewards (e.g. experience of orgasm, sexual pleasure, emotional expressions of love) or as costs (e.g. sexual dysfunction, lack of self-disclosure) (Lawrance & Byers, 1992). However, the IEMSS proposes that the impact of specific

rewards and costs is accounted for by the components of the model. That is, these factors influence sexual satisfaction through their impact on the perceived levels of rewards and costs. In keeping with this prediction, Byers et al. (1998) found that although self-disclosure was related to sexual satisfaction, the relationship was indirect through the influence of self-disclosure on the components of the IEMSS.

We have also found that, as predicted, Canadian men and women do not differ in either their sexual satisfaction or perceptions of how rewarding and costly they perceive their sexual relationship to be (Lawrance & Byers, 1995; Byers et al., 1998). In contrast, we found that men and women in long-term relationships do differ in the *types* of rewards and costs incurred in the sexual relationship (Lawrance & Byers, 1995). Specifically, the women were more likely than were the men to report emotional and relational qualities of the sexual relationship such as being with the same partner each time you have sex, how one's partner responds to one's sexual advances and how one's partner treats you when you have sex, as rewards. In addition, the women were more likely than were the men to report physical and behavioural aspects of sexual interactions, such as difficulty reaching orgasm and engaging in sexual activities one dislikes but which one's partner enjoys, as costs. That is, the types of exchanges that women were more likely than men to finding rewarding are also those aspects of sexual relationships that investigations of sexual relationships have rarely included (Handy, Valentich, Cammaert, & Gripton, 1985; Tiefer, 1988; see Pinney et al., 1987 for an exception). Conversely, the types of exchanges that women were more likely than men to report as costs are also those aspects of sexual relationships that have frequently been included in studies of sexual satisfaction (e.g. Hartman, 1983; Hudson et al., 1981; Kimlicka et al., 1983; Morokoff & Gilliland, 1993; Nathan & Joaning, 1985; Perlman & Abramson, 1982). Despite this gender bias in the types of exchanges that have been included in studies of sexual satisfaction, these studies often have drawn general conclusions about men's and women's sexual satisfaction in relationships, as well as about how rewarding and costly men and women perceive their relationship to be. By examining a wider range of rewards and costs, Lawrance and Byers (1995) have demonstrated that it is the types of rewards and costs that differ for men and women, not the overall levels of sexual satisfaction, sexual rewards, or sexual costs.

In our study of Chinese married individuals, we also found differences in the specific rewards and costs reported by men and women, but not in their overall levels of rewards and costs (Renaud, Byers, & Pan, 1996). However, in keeping with the cultural differences between China and Canada, the gender differences in rewards and costs did not parallel those found in the Canadian sample. These results support the need for counsellors and therapists to assess a wide range of potential rewards and

costs in their clients' sexual relationships in order to ensure that the exchanges that are most salient to men and women from different cultural and ethnic backgrounds are included.

Implications of the IEMSS for Clinical Assessment

In order to establish the validity of the IEMSS, we developed the Interpersonal Model of Sexual Satisfaction Questionnaire (Lawrance & Byers, 1998). It includes measures of sexual satisfaction, relationship satisfaction, the components of the IEMSS, and specific sexual rewards and costs experienced in the relationship. These four measures—the Global Measure of Sexual Satisfaction, the Global Measure of Relationship Satisfaction, the Exchanges Questionnaire, and the Rewards and Cost Checklist, respectively—are described below. All four measures have been shown to have good reliability and validity (Lawrance & Byers, 1998, pp. 140-44). The instruments have potential for use in clinical practice to identify problem areas related to sexual satisfaction as well as specific sexual exchanges to target in therapy. It is likely that they can also be used to document changes in satisfaction and in sexual exchanges over the course of therapy. Further, the brevity of each of these measures makes them ideal for use as assessment instruments in clinical practice. However, as these measures have not yet been validated for use with clinical populations, their use should be considered experimental.

The Global Measure of Sexual Satisfaction. A review of the literature indicated that no existing scales are consistent with our definition of sexual satisfaction. In addition, the psychometric properties of many sexual satisfaction scales are poor or unknown. Therefore, we developed the Global Measure of Sexual Satisfaction or GMSEX. In keeping with the recommendations of Fincham and Bradbury (1987) regarding the assessment of relationship satisfaction, the GMSEX asks respondents to make global evaluative judgments using a semantic differential approach. By adopting this approach, we separated the description of the sexual relationship (e.g. frequency of orgasm) from the evaluation of the relationship. Thus, the GMSEX provides an estimate of sexual satisfaction that does not confound sexual satisfaction, conceptualized as an affective response, with the factors and interpersonal exchanges that may influence sexual satisfaction.

The GMSEX assesses global satisfaction with the sexual relationship. Respondents rate their sexual relationship on five 7-point bipolar scales: *good-bad*, *pleasant-unpleasant*, *positive-negative*, *satisfying-unsatisfying*, *valuable-worthless*.

The Global Measure of Relationship Satisfaction. The Global Measure of Relationship Satisfaction (GMREL) is identical to the GMSEX except participants rate their overall relationship with their partner. Thus, it

provides a global evaluation of the positive and negative dimensions associated with the overall relationship.

Exchanges Questionnaire. The Exchanges Questionnaire is a six-item measure which assesses levels of rewards and costs in a sexual relationship with a partner. Three items require respondents to think of their sexual relationship over the previous three months and indicate: (a) how rewarding their sexual relationship is; (b) how their level of rewards compares to their own expectations about how rewarding their sexual relationship "should" be; and, (c) how their level of rewards compares with the level of rewards their partner receives in the sexual relationship. The other three items assess costs using the same format. Level of rewards (REW) and level of costs (CST) are rated on 9-point scales with endpoints, not at all rewarding [costly] (1) and extremely rewarding [costly] (9). Comparison level for rewards (CLrew) and comparison level for costs (CLcst) are also rated on 9-point scales with anchors, much less rewarding [costly] in comparison (1) and much more rewarding [costly] in comparison (9). Perceived equality of rewards (EQrew) and perceived equality of costs (EQcst) are rated on 9-point scales with anchors, my rewards [costs] are much higher, and my partner's rewards [costs] are much higher. In keeping with the IEMSS, these items are used to calculate the extent to which rewards exceed costs, and relative rewards exceed relative costs. The two perceived equality scales (EQREW, EQCST) are recoded such that higher scores indicate greater equality between the partners (see Lawrance & Byers, in press).

Rewards and Costs Checklist. To increase the level of sexual rewards or to decrease the level of sexual costs, it is necessary to assess and change perceptions of specific rewards and costs. We developed the Rewards and Costs Checklist in order to assess specific rewards and costs. Respondents indicate whether, within their sexual relationship, each of the 46 items on the Checklist is a sexual reward, a sexual cost, both a reward and a cost, or neither a reward nor a cost for them. Examples of items are *the level of affection expressed during sexual activities, the amount of spontaneity in your sex life, the degree of privacy you and your partner have for sexual activities, and engaging in sexual acts that you dislike but your partner enjoys*. The Checklist also provides individuals with the opportunity to identify additional rewards and costs that are not listed. Responses are used to determine both the total number of rewards and costs reported as well as to examine the specific items that are experienced as rewards and costs.

Implications of the IEMSS for Counselling and Therapy with Couples

From a clinical perspective, the IEMSS offers a framework for understanding the factors that contribute to the sexual satisfaction of clients. It offers measurement instruments for assessing these factors. This assess-

ment provides information as to the areas in which intervention is needed if we are to help our clients increase their sexual satisfaction. Of course, not all clients will need intervention in all of the assessed areas.

Increasing relationship satisfaction. The first implication for intervention that arises from our work with the IEMSS is that sexual satisfaction can be increased by improving the quality of the nonsexual aspects of the relationships for those couples for whom relationship satisfaction is low. We have demonstrated that global relationship satisfaction impacts on sexual satisfaction over and above the effects of the quality of the sexual interactions. This extends past research which has shown that relationship satisfaction and sexual satisfaction are positively correlated, but has not shown that this relationship is independent of sexual interactions (Hatfield et al., 1982; Morokoff & Gilliland, 1993; Perlman & Abramson, 1982). Thus, interventions commonly used in relationship therapy to increase the quantity and quality of time spent together, improve communication and problem-solving skills, decrease negative behaviours, alter unrealistic expectations, and help couples assign more benign attributions to displeasing behaviour, are all likely to result in increases relationship satisfaction. Increased relationship satisfaction, in turn, is likely to increase sexual satisfaction.

Increasing sexual rewards and decreasing costs. A second possible area of intervention suggested by the IEMSS is to help couples increase their level of rewards and decrease their level of costs in the sexual relationship as assessed by the Exchanges Questionnaire. One way of doing this is to increase the frequency of specific rewards and decrease the frequency of specific costs. As it is the extent to which sexual rewards exceed sexual costs that affects sexual satisfaction, it is important that couples both increase sexual rewards and decrease sexual costs. Of course, individuals differ in the aspects of the sexual relationship that they experience as rewards or cost. Further, a particular type of exchange (e.g. oral sex) may be experienced as a reward by one partner but as a cost by the other partner. Thus, it is essential to assess actual and potential rewards and costs for each member of the couple. Therapists must be careful not to limit their assessment of sexual rewards and costs to traditional views of what exchanges should be rewarding and costly in a sexual relationship. Similarly, therapists need to guard against inadvertently imposing a male model of sexual rewards and costs on women, a heterosexual model of sexual rewards and costs on lesbians and gay men, or a North American view of sexuality on clients from other cultural and ethnic backgrounds.

One way to identify the rewards and costs that might be targeted in therapy is to use the Rewards and Costs Checklist (Lawrance & Byers, in press). Of course, couples' descriptions of their sexual relationship can also be used to identify important rewards which are missing or infre-

quent in the sexual relationship and sexual activity that has significant costs for one or both partners. For example, a couple who exclude the sensuous part of lovemaking and limit sex to a few perfunctory kisses followed by intercourse, and/or in which emotional intimacy does not accompany physical intimacy may be experiencing low levels of sexual rewards. Similarly, couples who only make love late at night when one or both partners are tired, and/or in which one partner engages in sexual activities when they are not comfortable or interested in doing so are likely to be experiencing high levels of costs.

The terms *rewards* and *costs* can be used with couples. Alternately, other terms which may be more meaningful to clients, such as the terms *pleases* and *displeases* or *positives* and *negatives*, can be used to refer to the positive and negative aspects of lovemaking. Couples can be made to understand what is meant by sexual rewards (pleases) and sexual costs (displeases) by drawing the parallel to a job. We use the following instructions on the Interpersonal Exchange Model of Sexual Satisfaction Questionnaire:

Think about your job.

If you're like most people, you can give concrete examples of positive, pleasing things you like about your job. These are "REWARDS."

Most people can also give concrete examples of negative, displeasing things they don't like about their job. These are "COSTS."

Below are some rewards and costs that could be associated with a job.

- rate of pay
- level of responsibility
- interactions with your boss
- the hour at which you start work
- opportunity for advancement

"Rate of pay" would be a *reward* if you felt that you were being paid well . . . but it would be a *cost* if you felt that you were being underpaid.

"Level of responsibility" would be a *reward* if you had just enough responsibility at work but it would be a *cost* if you had either too much or too little responsibility.

"Interactions with your boss" would be *neither* a reward *nor* a cost if you really didn't interact much with your boss.

"The hour you start work" would be *both* a reward and a cost if you liked starting work at that time, but disliked the rush-hour traffic at that time.

For some couples, a communications/problem-solving approach may be sufficient to develop strategies to decrease sexual costs and increase sexual rewards for both partners. For other couples, a sex therapy approach involving sensate focus and other specific sexual exercises may be needed to help couples adopt a sexual script that meets the needs of both partners.

Altering unrealistic expectations. In keeping with our predictions, we found that it is not just the absolute levels of sexual rewards and costs that affect sexual satisfaction, but also how these rewards and costs compare to expectations. Some couples have realistic expectations about their sexual relationship. For these couples, increasing the level of sexual

rewards and decreasing the level of sexual costs will also result in a more favourable evaluation of their relative rewards and costs. That is, their rewards and costs will conform more closely to their expectations. However, other couples may have unrealistic expectations about sexual interactions in long-term relationships. Certainly, Eidelson and Epstein (1982) have demonstrated the many individuals have unrealistic expectations about other aspects of their long-term relationships, and that unrealistic relationship expectations have a negative impact on relationship satisfaction. There are a number of factors that may result in individuals having unrealistic sexual expectations. Among these factors is the unrealistic media portrayal of sexual interactions (Zilbergeld, 1992). In films and novels, individuals instantly know how best to please their partner without telling each other what pleases and displeases them sexually or expressing their sexual desires; the romantic aspects of the relationship are idealized and do not take into account the realities of busy lives, hectic schedules and demands of children; couples rarely argue; and, every wanted sexual encounter is earth shaking. Neither the media (in which lovers are usually young and new to their relationship) nor open discussions with friends and relatives teach people how to have satisfying long-term sexual relationships. For clients with unrealistic sexual expectations, it may be impossible to increase rewards and decrease costs enough to meet their expectations. Rather, the therapist will have to assess and challenge these expectations by providing normative data on sexuality. A more realistic, although highly positive, view of sexuality in long-term relationships which takes into account the realities of the couples' life, may increase the clients' satisfaction with the high level of rewards and low levels of costs they do experience.

Equality of rewards and costs. Typically, favourable outcomes on the first three components of the IEMSS—that is increased relationship satisfaction, more favourable reward/cost ratio for both partners, and more favourable perceptions of relative reward/relative reward ratio by both partners—also will make the couples' rewards and costs more equal. If, however, one partner still perceives inequality in sexual rewards and costs, equality issues should be targeted directly. This can be done in one of two ways. First, given that both individuals now perceive their own rewards to greatly exceed their own costs and to match their expectations, the therapist can query the importance of the perceived inequality of sexual rewards and costs. That is, given that the individual is reporting that sex is great for them, why are they worried about whether it is somewhat more or less wonderful for their partner? Alternately, this perceived inequality may point to additional issues that need to be dealt with in therapy. For example, it may help to identify important differences between the partners that have not been resolved or a particular reward or cost that is seen as essential to sexual satisfaction. In this case,

the inequality may not reflect the numbers or levels of rewards and costs experienced by the partners but rather the fact that one or both partners feel that important needs are not being met.

CONCLUSION

The IEMSS has been demonstrated to provide a valid and useful conceptual model of sexual satisfaction within relationships. It provides a framework for assessing and understanding not only a couple's level of sexual satisfaction but also the factors that are affecting their satisfaction. Further, the Global Measure of Sexual Satisfaction, the Global Measure of Relationship Satisfaction, the Exchanges Questionnaire, and the Sexual Rewards and Costs Checklist can be used to assess couples sexual and relationship satisfaction as well as the costs and rewards they experience in the sexual relationship. In addition, the components of the IEMSS can be used to guide therapeutic interventions designed to increase sexual satisfaction. That is, sexual satisfaction can be enhanced by increasing relationship satisfaction, increasing the level of rewards and decreasing the level of costs, altering unrealistic expectations about how rewarding and costly sexual relationships should be, and increasing the perceived equality of rewards and costs. Although the IEMSS has only been validated on heterosexual couples to this point, we expect that it will prove to be equally applicable to individuals in same sex relationships.

Some of our other findings also have implications for counselling. For example, we found that women's sexual satisfaction may depend less on the physical intrapersonal facets of sexual interactions and more on the affective, interpersonal, relationship aspects (Lawrance & Byers, 1995). This suggests that, as therapists, we need to make sure that our own cognitive models are not based on a traditional, masculine model of sexuality which has tended to emphasize the physical and behavioural aspects of sexual interactions (Handy et al., 1985; Tiefer, 1988). We need to ensure that we understand, value, and communicate both women's and men's experiences of sexuality. Similarly, we need to ensure that we do not introduce ethnocentric or heterosexist views of sexual satisfaction into our clinical practice. Thus, we need to help our clients to take a broad view of sexual rewards and sexual costs.

We also found that sexual exchanges have a greater impact on the sexual satisfaction of heterosexual couples in long-term relationships than on those in dating relationships (Byers et al., 1997; Lawrance & Byers, 1995). These results have implications for the sorts of messages we need to convey to couples to help them prevent a decrease in sexual satisfaction over the course of the relationship. Many of these messages are already strategies advocated by sex therapists and educators. On an interpersonal level, we need to emphasize the importance of individuals telling their partner what pleases and displeases them sexually as well as

of developing sexual scripts that include affection, intimacy, and sensuality rather than relying on sexual scripts that emphasize arousal and orgasm as the only important components. On a societal level we need to increase sex education in the schools and provide more realistic sexual portrayals in the media. Within the IEMSS framework, these types of strategies should increase sexual rewards, decrease sexual costs, and challenge unrealistic sexual expectations.

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The author would like to thank Cheryl Renaud for her helpful comments on an earlier version of this manuscript. Send requests for reprints to E. Sandra Byers, Ph.D., Department of Psychology, University of New Brunswick, Fredericton, New Brunswick E3B 6E4.