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Evaluating the Effectiveness of Premarital Education:

A Review of Outcome Research

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ABSTRACT

In an effort to address high rates of marital distress and divorce, numerous scholars, educators, and policy makers have advocated for premarital education programs. Despite this widespread support, there remains a number of valid questions regarding the general effectiveness of premarital education in strengthening marriages and preventing divorce. This paper presents a comprehensive and critical evaluation of the research literature pertaining to the effectiveness of premarital education. Our findings suggest that premarital education programs are generally effective in producing immediate and short-term gains in interpersonal skills and overall relationship quality, and that these improvements are significantly better than non-intervention control group couples in these areas. However, there is less support for the long-term effectiveness of these interventions. Drawing from the findings of this review, we propose implications for future research, education, and policy.

Key words: Premarital education, Premarital counseling, Outcome research, Premarital relationships

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Successful marriage is a highly valued goal for the majority of Americans. In fact, 93% of Americans rate having a happy marriage as one of their most important objectives, and more than 70% of Americans believe that marriage should be a lifelong commitment that should only be ended under extreme circumstances (Waite & Gallagher, 2000). However, despite their desires for successful, life-long marriages, couples marrying for the first time in the United States continue to face roughly a 40 to 50% chance of divorcing during their lifetime (NCHS, 1996). Some demographic projections also predict that the divorce rate will likely rise for the coming generation, with as many as two-thirds of recent marriages ending in divorce (Lamanna & Riedman, 1997) and that two-thirds of these divorces will occur within the first ten years of marriage (NCHS, 1996). These trends are compounded by the fact that many distressed couples never divorce, but remain in non-satisfying and/or conflictual relationships (Notarius & Markman, 1993). The current and projected state of marriage in the United States is troublesome given that numerous research studies have shown that successful marriages promote mental, physical, and family health; while conflictual and unstable marriages undermine well-being and incur large social and financial costs for communities (see Waite & Gallagher, 2000 for a review).

In an effort to address the current rates of marital distress and divorce, numerous scholars and educators have advocated for the development and implementation of premarital education or counseling¹ programs (Markman, Floyd, Stanley, & Storaasli, 1988; Stahmann & Salts, 1993). Premarital education has also become a focus of both national and international public policy, as several states (Ooms, 1998; MMS, 2000) and countries (Stahmann, 2000) have proposed or enacted legislation that requires or offers incentives for couples to participate in premarital education. In fact, although debate continues about whether the current divorce rates should be viewed neutrally, as a by

product of contemporary social and family norms, or as a serious problem (Doherty & Carroll, in press), almost every family scholar and professional advocates for better preparation for marriage. Despite this widespread support for marriage preparation programs, valid questions remain regarding their effectiveness in strengthening marriages and preventing divorce (Stanley, 2000; Sullivan & Bradbury, 1997). Some of these questions regarding premarital education include: (a) “Is it generally effective?,” (b) “Is it effective for all couples?,” (c) “Are some forms of premarital education more effective than others?,” and (d) “Are premarital education programs reaching couples who are most at risk for marital problems?” Addressing these questions has become an issue of critical importance, because as the demand for premarital education increases, so does the need for sound research to determine the effectiveness of such preventive interventions.

The purpose of this paper is to provide a comprehensive review and critical evaluation of the research literature pertaining to the effectiveness of premarital education in improving the quality of marriages and preventing divorce. Specific attention is given to evaluating: (a) the inclusiveness of the populations being reached by premarital education programs, (b) the characteristics of the programs being developed, (c) the methodological approaches of studies evaluating these programs, and (d) the effectiveness outcomes of these investigations. Drawing from the findings of this review, implications for future research, education, and policy are presented. We hope to provide a critical review of the premarital education literature that can guide future efforts in theory development, research evaluation, and clinical practice as family professionals set out to better answer the questions outlined above.

PREMARITAL EDUCATION: AN OVERVIEW

Premarital education programs are best defined as a knowledge and skills-based training procedure which aims at providing couples with information on ways to improve their relationship once they are married (Senediak, 1990). The programs are typically educational in nature, and in most instances are time-limited and content specific. In contrast to intervention efforts with

distressed couples, premarital education programs are based in a *prevention perspective* that has the goal of starting with happy couples (even though they may be at risk for future distress) and helping them maintain their relatively high levels of functioning (Markman & Hahlweg, 1993). With a preventive orientation these programs are geared at providing couples with an awareness and understanding of potential problems which may occur after marriage, as well as providing couples with information and resources to effectively prevent or ameliorate such problems. From a review of over 20 selected premarital programs, Stahmann & Salts (1993) concluded that there is a fair amount of consistency in the topics typically covered in premarital education programs, with some of the common topics including: communication, conflict resolution, roles in marriage, commitment, financial management, sexuality, parenting expectations, and partners' families of origin. Many programs also use couple assessment questionnaires (e.g., FOCCUS, PREPARE, RELATE) as part of the educational process to help partners learn about and evaluate their relationships (see Larson, Holman, Klein, Busby, & Peterson, 1995, for a review).

Today, as in the past, there are three main groups that provide most premarital education:

(1) clergy, (2) professional counselors or therapists, and (3) physicians. Clergy provide the greatest amount of formal premarital education, as part of optional or mandatory marriage preparation programs before church weddings (Stahmann & Hiebert, 1997; Stahmann & Salts, 1993). Professional counselors or therapists do some premarital education, often for those who have been divorced and are preparing to marry again. Physicians do some premarital education as well, but that is usually limited to one meeting where they give contraceptive and sexual information (Stahmann & Hiebert, 1997).

Historical Antecedents

The first documented premarital intervention was in 1924 when Ernest Groves taught the first premarital course in preparation for family life at Boston University. The first mention of premarital education as a significant process or valuable service in building emotional and physical

health was in a 1928 article in the American Journal of Obstetrics and Gynecology (Stahmman & Hiebert, 1997). Formal premarital education programs have been practiced from as early as the 1930's, with the first program developed at the Merrill-Palmer Institute in 1932. In 1941, the Philadelphia Marriage Council established a standardized program with the stated purpose to help young married and premarital couples gain "a better understanding of what companionship in married life involves and thus help them avoid some of the causes of marital difficulties" (Mudd, Freeman, & Rose, 1941, p. 98).

Despite these early beginnings, premarital education was still relatively uncommon until the 1970s. While clergy have had a long history of meeting with couples prior to their wedding, it is only in the last three decades that the focus of these meetings have shifted from education about the nature and meaning of the marriage rite itself toward education geared at preparing couples for marriage (Stahmann & Hiebert, 1977). Similarly, because interactional theories were still in their infancy in the 1950s and 1960s, professional counselors still tended to conceptualize marital problems as the problem of one individual in the relationship. Therefore, premarital education, as we understand it today, was not a regular part of professional clinical practice during that time.

From the 1970's until the present, there has been an increased interest by both clergy and other family professionals in preparing couples for marriage through formal educational programs. It is not a coincidence that this increase mirrored a parallel development- the increasing divorce rate in the United States during that time. Particularly within the last decade, family professionals from a variety of backgrounds have turned their attention to addressing the troubles in contemporary marriages. This "marriage movement" (MMS, 2000) has included a number of widespread religious, scholarly, and legal initiatives to address the challenges poised to marriages today, including a renewed emphasis on premarital education.

THE SCIENCE OF PREVENTION

Before proceeding with an evaluative review of the outcome research pertaining to premarital education, it is important to situate this review within its current scientific context – namely, within the emerging research discipline of *prevention science* (Coie, et al., 1993). This section briefly describes the emergence of this research discipline and some of the general principles that outline its conceptual framework. Attention is given to how these principles pertain to preventing marital distress and divorce and highlight the need for the type of research that is reviewed here.

Prevention Science: Some Guiding Principles

The concept of prevention as it is used in public health has only been taken seriously in the mental health field in the last few decades. In the last decade in particular, interest in human and relationship development has converged increasingly with the examination of precursors and treatments for psychological and relationship disorders (Cicchetti & Toth, 1992). From this interdisciplinary interfacing of normative developmental research and intervention-based clinical research a new discipline is being forged that has been termed “*prevention science*” (Coie, et al., 1993). A number of basic principles of prevention science have been articulated by a National Institute of Mental Health (NIMH) study group (Coie et al., 1993) that reported to a National Prevention Conference in 1991. This interdisciplinary panel proposed that the two-pronged goal of prevention science is to “provide the *knowledge base* and *intervention strategies* to prevent or ameliorate a wide range of diverse disorders, including all forms of psychopathology” (pp. 1013). In particular, prevention science focuses on *risk* and *protective factors* for disorders, both in terms of increasing understanding of these factors and developing and evaluating intervention strategies to address them.

In accordance with these goals, the development of a science of prevention around a particular disorder requires two branches or types of interrelated scientific investigation. The first branch comprising of *developmental theory and research* that specifies and investigates the processes of

human and relational development around the identified disorder. The focus of this type of theory and research should be to identify the risk and protective factors, key mediating variables, and developmental processes associated with the disorder (Coie et al., 1993).

The second branch of investigation needed to develop a science of prevention for a disorder is that of *preventive intervention research*. Within the conceptual framework of prevention science, preventive interventions aim to counteract risk factors and reinforce protective factors in order to disrupt processes that contribute to the disorder. When guided by developmental theory, preventive intervention studies can test the effectiveness of certain interventions, as well as providing information about the developmental patterns of the disorder itself. Coie and colleagues (1993) propose that,

“Theoretically guided prevention trials can simultaneously test the efficacy of interventions and provide answers to questions about etiology. Thus, if a specific risk factor is reduced or eliminated by an intervention but the problematic process is not altered, that risk factor would no longer be considered a causal factor but might be viewed simply as a marker of problematic development” (p. 1014).

Ideally, in the development of a preventive science of a disorder, there is a complementary interplay of science and practice. Basic research on risk and protective factors should inform the design of preventive interventions and clinical trials of these interventions, in turn, should yield insights about the causes of disorder and the developmental processes that contribute to risk or recovery.

Toward a Science of Prevention of Marital Distress

In line with the goals and conceptual framework for general prevention science, the development of a *science of prevention of marital distress* will require an interweaving of both developmental and preventive intervention research pertaining to marriage relationships. While there are a number of developmental stages which will eventually need to come together in the larger science of prevention of marital distress, the period of interest for the task at hand is that of the

transition from pre-marriage to early marriage. Family scholars have a long history of attempting to identify the premarital risk and protective factors of later marital quality or marital stability. Indeed, most of the earliest and most influential research about families cited the premarital prediction of later marital quality and stability as an important, if not primary goal (Adams, 1946; Burgess & Cottrell, 1939; Burgess & Wallin, 1953; Terman & Oden, 1947). By the 1960's, Bowerman, in the influential *Handbook of Marriage and the Family* (1964), called for a theory of marital development and prediction. The interest in premarital prediction waned considerably in the 1970s and early 1980s; probably because of the need for theory development in this area and scholars' interests in studying alternatives to traditional marriage (Holman & Linford, 2000). In the late 1980s and 1990s, interest in strengthening marriages and in preventing divorce has increased. Researchers renewed interest in the field is evidenced by four recent extensive reviews of the research in this area (Cate & Lloyd, 1992; Larson & Holman, 1994; Linford & Carroll, 2000; Wambolt & Reiss, 1989) and the recent publication of the first large-scale longitudinal study in over 40 years to investigate the premarital risk and protective factors of marital quality and stability (Holman & Associates, 2000).

As noted, the body of developmental research investigating the premarital risk and protective factors of later marital quality and stability has been extensively reviewed and critiqued in recent years, and will not be reviewed here. Rather the focus of this review is on the preventive intervention research pertaining to the transition to marriage. The use of intervention trials to both test the effectiveness of the interventions and to identify risk and protective factors of marital distress is essential in developing a science of prevention for marital distress. Markman & Halweg (1993) have noted, "preventive interventions can be conceptualized as adding to our knowledge about [marital development] in that one of the best ways to understand a phenomena is to try to change it" (p. 30). Preventive interventions, with their longitudinal components, provide one of the best opportunities to conduct experiments that enable us to evaluate change and ultimately better understand patterns of marital development.

Marital Distress: A Generic Risk Factor

Another point emerging from an evaluation of prevention science that is relevant to our purpose here has to do with the *priority* that should be given to developing a preventive science of marital distress. From their extensive review of interdisciplinary research, Coie and colleagues (1993) concluded that prevention science has already identified a relatively small number of *generic or common risk factors* that underlie a wide variety of psychopathology. Marital distress has been directly identified as one of these common or generic risk factors. Specifically, marital distress has been linked to a wide range of both adult disorders (e.g., depression) and child disorders (e.g., conduct problems) (Coie et al., 1993; Waite 1995). In addition, a good marriage is seen as one of the common and generic protective factors against a wide range of dysfunctions (Coie et al., 1991, 1993; Markman & Hahlweg, 1993).

One of the primary objectives of prevention science is to trace the links between generic risk factors and specific clinical disorders and to moderate the destructive effects of identified risk factors. If generic risk factors, like marital distress and instability, can be identified and altered in a population, this can have a positive influence on a wide range of mental health problems and can reduce the need for many health, social, and correctional services. This strategy of targeting common risk factors has a higher potential payoff for society than does focused interventions on specific, but rarely occurring disorders. Therefore, it is clear that the development of successful preventive interventions that address the common risk factors of marital distress and divorce have the potential to save untold personal, social, and economic costs (Duncan & Markman, 1988).

EVALUATION OF PREMARITAL EDUCATION

The review presented here is the result of a comprehensive search of the literature using two computer bibliographic search systems: *PsychInfo* (1887-2001) and the *Family Studies Database* (1970-2001). This search indicated that four previous attempts have been made to comprehensively review the

empirical literature pertaining to the effectiveness of premarital education (Bagarozzi & Rauen, 1981; Gurman & Kniskern, 1977; Schumm & Denton, 1979; Silliman & Schumm, 2000), however, three of these reviews were done nearly two decades ago. The fourth, more recent review (Silliman & Schumm, 2000), primarily consists of a descriptive, program-level review of the marriage preparation literature that focuses on the format and theory of the interventions themselves. The aim of the review presented here is to provide a critical, meta-level review of the various components (e.g., design, sample, program format, measurement, analysis, and outcomes) and types of studies (e.g., experimental, non-experimental, ex-post-facto) that have been done to evaluate the effectiveness of premarital education. We believe that this type of review complements the richly descriptive review done by Silliman and Schumm (2000) and is useful in that it both *updates* and *expands* upon earlier reviews in this area. To facilitate the process of developing an up-to-date review of the literature, the selection of studies included in this review was guided by the same two minimal inclusion criteria that were used by Bagarozzi & Rauen (1981) in their review of the premarital education literature nearly 20 years ago. These criteria specify that in order to be included a study needed to demonstrate that:

1. *Standardized procedures* and intervention techniques were employed and followed systematically during the premarital education process, and that
2. Some type of *outcome measure* was employed by the investigator to assess the treatment's effectiveness.

The review of research evaluating *specific* premarital education programs in this paper is limited to the 22 studies with published data which were located that fulfilled these minimum requirements. However, this review also *expands* upon past reviews in that it also includes an evaluation of the 3 ex-post-facto studies of premarital education that have been completed in the last twenty years.

As noted in Table 1, this evaluative review has been organized into three primary sub-sections based on the research design of the studies reviewed: (1) Experimental and Quasi-Experimental studies,

(2) Non-experimental studies, and (3) Ex-post-facto studies. For the purpose of this review, studies categorized as *experimental* were defined as those studies “in which at least one variable was manipulated and units [were] randomly assigned to the different levels or categories of the manipulated variable(s)” (Pedhazur & Schmelkin, 1991, p. 251). *Quasi-experimental* studies were defined as those that have all the elements of an experimentally-designed study, except that subjects [were] not randomly assigned to groups (Pedhazur & Schmelkin, 1991). Due to the similarities in design and procedure, experimental and quasi-experimental studies are reviewed together in the text of this paper, but to emphasize the importance of randomization in clinical intervention they have been listed separately in Table 1. *Non-experimental* studies were defined as those in which a premarital education program was evaluated, but there was no pre-intervention evaluation of an independent variable and/or no control or comparison group was utilized.

Those studies defined as “*ex-post-facto*” in design were those in which married couples were asked *retrospectively* if they had participated in premarital education and then *were compared to those who had not participated in such preventive interventions*. These studies are markedly different from the other studies reviewed here in that they typically attempt to assess the *general effectiveness* of having had some sort of premarital education, rather than assessing the effectiveness of a particular program or educational approach. A number of other studies have been completed during the last decade that retrospectively surveyed married couples about their experiences with premarital education, but did not utilize a comparison group (See Silliman & Schumm, 1999 for a review). Although these studies provide valuable insights into improving the general practice of premarital education, they do not directly assess the effectiveness of premarital education and are consequentially not review here. Each of the following sections corresponds with the design distinction made in Table 1 and, where applicable, is organized according to four sub-sections: (1) Sample Characteristics, (2) Program Characteristics, (3) Methodological Analysis, and (4) Effectiveness Outcomes.

EXPERIMENTAL AND QUASI-EXPERIMENTAL STUDIES

An extensive review of the premarital education literature found a total of 12 studies which included control or comparison groups against which the effects of the intervention was evaluated, and therefore can be categorized as being experimental in design (Bader et al., 1980; Bagarozzi et al., 1984; Boike, 1977; D'Augelli et al., 1974; Hahlweg et al., 1998; Markman, et al., 1993; Miller et al., 1976; Parish, 1992; Pretorius et al., 1992; Ridley et al., 1981; Schlein, 1971; Stanely, et al., 2001). As can be seen in Table 1, all but two of these studies (Hahlweg et al., 1998; Parish, 1992) used random assignment to insure equivalence of experimental and control groups. The two studies which did not use randomization procedures are separated out and identified as “quasi-experimental” in design in Table 1.

Sample Characteristics

Of the 12 experimental and quasi-experimental studies reviewed, two early studies (D'Augelli et al., 1974; Schlein, 1971) did not give a detailed report of how they obtained their samples. For the most part, participants of the remaining studies were recruited through three primary sources: community sources (media, clinics, etc.), religious organizations, and college courses. All of the studies focused on couples marrying for the first time, but the relationship status of the couples participating was varied and somewhat ambiguous in that 8 of the 12 studies identified their couples as “engaged” or “couples planning to marry” (Bader et al., 1980; Boike, 1977; Hahlweg et al., 1998; Markman, et al., 1993; Miller et al., 1976; Parish, 1992; Pretorius et al., 1992; Stanley et al., 2001), two studies identified them as “premarital couples” (Bagarozzi et al., 1984; Ridley et al., 1981), and two studies identified their participants as “dating couples” (D'Augelli et al., 1974; Schlein, 1971). Nine of the 12 studies were conducted in the United States, while the other 3 were conducted in Canada (Bader et al., 1980), South Africa (Pretorius et al., 1992) and Germany (Hahlweg et al., 1998), respectively.

Only 6 of the 10 experimental studies done in the United States reported detailed information about the demographic characteristics of their samples. Of those providing information, all reported that their samples were almost exclusively made up of Euro-American, middle-class couples. Similarly, the study done by Pretorius and colleagues (1992) in South Africa only included a sample of “white South Africans” and the study done by Hahlweg and colleagues (1998) in Germany also reported a homogeneous sample in terms of ethnic diversity and social-economic status. It is clear that experimental studies investigating the effectiveness of premarital education have been done with a very homogeneous population with regards to ethnic and SES diversity. Due to the lack of diversity in the populations being reached by such research, caution should be used in generalizing their results to other populations.

Sample size. Of the 12 experimental and quasi-experimental studies reviewed, the size of the samples utilized for experimental and control groups varied widely (range $n = 7$ to 139). Of the 25 samples reported (i.e., 13 experimental groups & 12 control groups), 48% of them can be categorized as being small in size (e.g., $n = 1-29$); 36% as being moderate in size (e.g., $n = 30-59$), and the remaining 16% as being large in size (e.g., $n = 60+$). It is important to note that these are the reported sample sizes for when the studies began. Due to attrition and other factors, some of the studies actually had smaller samples in their post-test and follow-up evaluations.

Program Characteristics

As noted in Table 1, 9 of the 12 experimental and quasi-experimental studies reviewed explicitly identified a theoretical framework which served as a guide for their intervention efforts (Bagarozzi et al., 1984; Boike, 1977; Hahlweg et al., 1998; Markman, et al., 1993; Miller, et al., 1976; Parish, 1992; Pretorius et al., 1992; Ridley et al., 1981; Stanley, et al., 2001). Of those studies identifying a theoretical orientation of the program that was evaluated, about half were based in some form of family development and/or family systems theory. This makes sense in that early family

development theorists outlined a number of developmental tasks which newly married couples must resolve in order to build a solid foundation for the future development of their relationship (Duvall, 1971; Hill et al., 1970). Other programs identifying a specific theoretical orientation were based in behavioral/social learning theory (Hahlweg et al., 1998; Markman et al., 1993; Stanely et al., 2001), social exchange theory (Ridley et al., 1981), and psycho-educational perspectives (Parish, 1992).

Only one experimental study (Boike, 1977) did not include some sort of communication training as an essential skills that was taught to participants. The importance of functional communication for establishing couple consensus and successfully accomplishing developmental tasks during the transition to marriage has been supported by developmental marriage research (see Larson & Holman, 1994 for a review). Similarly, communication skills specific to the tasks of problem-solving and conflict-negotiation have been identified as important for engaged and newly married couples (Larson & Holman, 1994) and the 7 most recent of the 12 studies reviewed (Bagarozzi et al., 1984; Hahlweg et al., 1998; Markman, et al., 1993; Parish, 1992; Pretorius et al., 1992; Ridley et al., 1981; Stanley et al., 2001) all taught problem-solving and conflict-negotiation skills in their programs. None of the programs reviewed, however, used the same methods to teach couples effective communication skills, and none used the same outcome measures to assess effectiveness. As a result, comparisons between the various programs to determine their relative effectiveness in teaching communication skills cannot be made.

A variety of educational techniques were utilized by different premarital programs, including: (a) didactic lectures and discussions, (b) structured and unstructured group and couple experiences, and (c) a combination of both didactic and experiential methods. However, despite this diversity in structure, there have only been two studies (Hahlweg, et al., 1988; Stanley et al., 2001) which have evaluated the comparative effectiveness of varied program formats or approaches. In a study that compared the effectiveness of traditional group sessions with a weekend format Hahlweg and colleagues

(1998) that both types of premarital education formats were equally effective in enhancing preparation for marriage. In a study that evaluated the effectiveness of a premarital education program lead by recently trained clergy and lay leaders versus professional university staff, Stanley and colleagues (2001) found that there were no differences between the two approaches in terms of effecting positive changes in couple's interactions over time or on couples' ratings of satisfaction with premarital training.

Methodological Analysis

Of the 12 experimental or quasi-experimental studies, 8 used a combination of observational coding and self-report measures to assess participants' communication patterns and problem-solving styles (Bader et al., 1980; Bagarozzi et al., 1984; Boike, 1977; Hahlweg et al., 1998; Markman, et al., 1993; Miller et al., 1976; Pretorius et al., 1992; Ridley et al., 1980; Stanely et al., 2001); whereas the other 3 studies (D'Augelli et al., 1974; Parish, 1992; Schlein, 1971) only utilized self-report measures. Of the studies utilizing behavioral coding systems, six (Bagarozzi et al., 1984; Hahlweg et al., 1998; Markman, et al., 1993; Miller, 1971; Pretorius et al., 1992; Stanley et al., 2001) used a standardized observational procedure which was developed specifically for measuring dyadic interactional processes. Of the 12 studies where either a control or comparison group was used, three investigators (Bader et al., 1980; Boike, 1977; Ridley et al., 1980) did not use standardized self-report scales and inventories to assess changes. When these methodological factors are considered collectively, there have been six experimental studies (Bagarozzi et al., 1984; Hahlweg et al., 1998; Markman, et al., 1993; Miller, 1971; Pretorius et al., 1992; Stanley et al., 2001) that have used multiple types of standardized measures (e.g., observational & self-report measures) in their evaluation of a premarital program.

Effectiveness Outcomes

Of the 12 studies where control groups were used, only one study (Boike, 1977) did not find that the experimental group showed improvement in interpersonal skills (e.g., communication, problem-solving, empathy for partner, self-disclosure, etc.) in post-test evaluations. Similarly, the 11 studies

that reported post-test improvements (Bader et al., 1980; Bagarozzi et al., 1984; D'Augelli et al., 1974; Hahlweg et al., 1998; Markman, et al., 1993; Miller et al., 1976; Parish, 1992; Pretorius et al., 1992; Ridley et al., 1981; Schlein, 1971; Stanley et al., 2001) also found significant differences between the intervention couples and control couples on these dependent measures, with the experimental group being significantly better in relationship skills and overall relationship quality. These findings were substantiated by both observational measures (Bader et al., 1980; Bagarozzi et al., 1984; Hahlweg et al., 1998; Markman, et al., 1993; Miller et al., 1976; Pretorius et al., 1992; Ridley et al., 1981; Stanley et al., 2001) and self-reports by the couples (Bader et al., 1980; Bagarozzi et al., 1984; D'Augelli et al., 1974; Hahlweg et al., 1998; Markman, et al., 1993; Miller et al., 1976; Parish, 1992; Pretorius et al., 1992; Ridley et al., 1981; Schlein, 1971). Only three studies (Hahlweg et al., 1998; Markman, et al., 1993; Stanley et al., 2001) analyzed program effectiveness for males and females separately. These studies generally found that in post-test evaluations men and women responded equally well to premarital education interventions.

Experimental Follow-up Studies. Half of the experimental and quasi-experimental studies done to date utilized follow-up evaluations of the effectiveness of a premarital education program undertaken (Bader et al., 1980; Bagarozzi et al., 1984; Hahlweg et al., 1998; Markman, et al., 1993; Pretorius et al., 1992; Ridley et al., 1981). In two of these studies (Bader et al., 1980; Ridley et al., 1981), only subsamples of the original experimental and control groups were used. Since premarital intervention programs are designed to maintain relationship satisfaction over time and prevent divorce, these studies with longitudinal follow-ups are of particular value in determining the effectiveness of premarital education. Therefore, each study that utilized follow-up measures is briefly reviewed here.

Bader and colleagues (1980) used evaluated a premarital education program that emphasized communication training and used pre and post wedding sessions. Engaged couples were recruited from churches in the Toronto and were randomly assigned to participate in the program or a control group.

Couples participated in three assessments: one before marriage, a six-month follow-up, and a 1 year follow-up. Over the course of the project, 229 interviews were carried out, 94 (60 experimental and 34 control) prior to marriage, 72 (48 experimental 24 control) six months after marriage, and 63 (41 experimental and 22 control) one year after marriage. Trained raters evaluated audio-taped “disagreement discussions” of a subsample of 30 couples (20 experimental 10 control). These investigators found that the control couples showed no change in their mean degree of positive conflict resolution over the three interviews of the study, whereas experimental couples showed an increase in positive conflict resolution at both the six month and 1 year follow-ups. Experimental couples were also found to be more ready to deal with sensitive conflict areas in their marriage and reported accessing a broader support system to deal with marital difficulties. These findings must be interpreted cautiously, however, because the follow-up subsamples were too small and unequal to permit statistical analyses and the investigators did not describe how the follow-up subsamples were selected, thereby preventing one from knowing whether they are representative of the two groups from which they are drawn.

In a study investigating the effectiveness of the Relationship Enhancement (RE) program (Guerney, 1977), Ridley and colleagues (1981a, 1981b) used behavioral raters to evaluate the continued use of problem-solving skills of 26 couples who participated in the program compared to a control group of 28 couples. They found that the intervention group, as compared to the control group, showed significant increase in communication and mutual problem solving skills at a six-month post-intervention assessment. A series of reports also reported that experimental couples were found to be significantly improved in empathy and warmth (Ridley, Lamke, Avery, & Harrell, 1982), relationship adjustment and intimacy (Ridley & Bain, 1983; Ridley, Jorgensen, Morgan, & Avery, 1982), and self-disclosure toward one’s partner (Avery, Ridley, Leslie, & Holland, 1980). However, a complete evaluation of these results is limited in that this study failed to describe the

procedures used to train raters and did not use a standardized coding system that was specifically designed to evaluate couple-level interaction.

Baggarozzi and colleagues (1984) conducted a 3-year follow-up of an experimental study undertaken to investigate the long-term effectiveness of the Premarital Education and Training Sequence (PETS) program. Self-report and behavioral measures were used to evaluate the program at post-test, but only self-report measures were used at follow-up. Although all 18 couples that participated in the study completed the post-test evaluation, only 15 couples (7 treatment group couples & 8 control group couples) provided follow-up data. Participation in the PETS program seems to have had only immediate effects. Couples assigned to the experimental group decreased in their irrational beliefs about relationships and increased in their commitment to marriage at post-testing, while the control group increased in their irrational beliefs. However, results of the 3-year follow-up showed no differences between the two groups.

Pretorius and colleagues (1992) evaluated an Afrikaans premarital program with 40 engaged couples recruited from a white South African community. A Solomon four-group design was used in the study with 10 couples being assigned to each group (20 experimental couples and 20 control couples). Both behavioral rating and self-report questionnaires were used as measuring instruments. The results of the investigation indicated that the engaged couples who participated in the program had significantly better scores compared to couples who did not participate. These differences were evident in all variables that were evaluated, namely, relationship adjustment, empathetic understanding, communication skills, positive reinforcement, problem-solving skills, and intimacy. It was found that the effects of the marital preparation program remained constant at a follow-up evaluation six months after marriage.

The longest term follow-up study of a premarital program to date, is one done to evaluate the Premarital Relationship Enrichment Program (PREP) program by Markman & colleagues (1988, 1993).

This study has followed 114 couples who were planning their first marriage. Couples were matched on four variables (engaged vs. planning marriage, relationship satisfaction, confidence in getting married, and ratings of communication impact) and assigned to either the intervention or control condition. Twenty-five couples comprised the intervention condition, 47 couples comprised the control group, and 42 couples made up a second control group- those who were offered the intervention but declined to participate. Early reports on the outcome of this intervention program showed that up to 3 years after the program, couples showed higher levels of marital satisfaction and lower levels of relationship instability than did control couples (Markman et al., 1988). Likewise, a 4-year follow-up showed that intervention couples showed less negative interaction, more positive interaction, lower rates of relationship aggression, lower combined rates of breakup or divorce, and higher levels of relationship satisfaction compared with control couples receiving no premarital intervention (Markman et al., 1993). The results of a five year follow-up, however, showed that the experimental group and control groups generally were not significantly different on these dimensions except for increased communication skill usage and decreased tendency to resort to physical violence in men in the intervention group (Markman et al., 1993). It is important to note in interpreting these findings that nearly 60% of the couples assigned to the intervention group declined or did not complete the intervention. Therefore, it is difficult to specifically determine whether the improvement in couple's relationships was due to differential selection or to the experimental effect.

In a quasi-experimental study that investigated the effectiveness of a German version of the PREP program, Hahlweg and colleagues (1998) contrasted 55 experimental couples with a control group of 17 couples. At a 3-year follow-up, significant differences emerged with regard to the couple's dissolution rates, relationship satisfaction, and positive and negative communication behaviors favoring the experimental couples. However, the quasi-experimental nature of the study

only allows for very cautious interpretation of these results and calls for a randomized control replication study.

NON-EXPERIMENTAL STUDIES

An extensive review of the literature identified ten non-experimental studies in which a premarital intervention was evaluated, but there was no pre-test measures or control group utilized. Of these ten studies, only four (Most & Guerney, 1983; Nickols et al., 1986; Pino, 1982; Russell & Lyster 1992) have been done within the last twenty years. This trend indicates that while several of the foundational evaluation studies of premarital education utilized this less rigorous type of research design, the field is increasingly moving toward the analytic rigor afforded by using experimental designs.

Sample Characteristics

Of the 10 non-experimental studies reviewed, 4 studies (Freeman, 1965; Hinkle & Moore, 1971; VanZoost, 1973; Ross, 1977) gave no report as to how they obtained their samples. The participants for the remaining studies were recruited from either community or college sources. Similar to the experimental studies reviewed, all of the non-experimental studies focused on couples marrying for the first time, with seven of the ten identifying the relationship status of the couples participating as “engaged” or “premarital” (Freeman, 1965; Glending & Wilson, 1972; Meadows and Taplin, 1970; Most & Guerney, 1983; Nickols, et al., 1986; Pino, 1982; Russell & Lyster, 1992), one study identifying them as “dating couples” (VanZoost, 1973), and the other two studies identifying their participants as having a mixture of relationship statuses (i.e., engaged and married couples, engaged and dating couples) (Hinkle & Moore, 1971; Ross, 1977). Only the four studies completed during the last 20 years (Most & Guerney, 1983; Nickols et al., 1986; Pino, 1982; Russell & Lyster, 1992) provided demographic information on their samples. These studies mirrored the homogeneous

pattern identified in the experimental studies in that their samples were almost exclusively made up of Euro-American, middle class couples.

Sample size. Two of the early non-experimental studies reviewed here did not report the size of the sample. With the exception of two studies (Russell & Lyster, 1992; Nickols et al., 1986), those studies reporting sample size utilized small sample sizes (range = $n = 6$ to 27). Of the 8 samples reported, 6 can be categorized as being small in size (e.g., $n = 1-29$); one as being moderate in size (e.g., $n = 30-59$), and the remaining one as being large in size (e.g., $n = 60+$).

Program Characteristics

As noted in Table 1, only the three most recent non-experimental studies (Most & Guerney, 1983; Nickols, et al., 1986, Russell & Lyster, 1992) explicitly identified a guiding theoretical orientation of the intervention evaluated. Most & Guerney (1983) evaluated the Relationship Enrichment (RE) program which is based in social exchange and communication theories. Nickols and colleagues (1986) identified their program as being based in a psycho-education model of intervention, whereas Russell & Lyster (1992) evaluated a program that was based in family development theory and focused on family of origin influences on current relationship processes. Similar to the experimental studies reviewed, a variety of techniques (e.g., didactic lectures, dyadic experiences, etc.) were utilized by the different premarital education programs evaluated with non-experimental designs.

Methodological Analysis

Of the 10 non-experimental studies, 6 utilized unstandardized questionnaires devised by the researchers to evaluate their program's effectiveness (Freeman, 1965; Glending & Wilson, 1972; Hinckle & Moore, 1971; Meadows and Taplin, 1970; Ross, 1977; Russell & Lyster, 1992). In two studies standardized self-report measures were used in addition to unstandardized instruments (Nickols et al., 1986; VanZoost, 1973), while the remaining two used standardized instruments (Most & Guerney, 1983; Pino, 1982). Only one of the non-experimental studies used observational

coding as part of their studies (Most & Guerney, 1983). On the whole, non-experimental studies were plagued with more methodological deficits than were the experimental studies in this area. These deficits included: (a) the use of non-standardized measures, (b) the exclusive reliance on self-report measures, and (c) small sample sizes.

Effectiveness Outcomes

All ten non-experimental studies conducted to evaluate the effectiveness of premarital education found that couples generally reported that the experience was helpful at post-test evaluations. While these findings are consistent across the studies, their value is limited due to the fact that all of the early non-experimental studies (i.e., those done prior to 1980) used non-standardized self-report measures and only one study (Russell & Lyster, 1992) included a long-term follow-up of its findings. In a study that compared three types of premarital education programs, Pino (1982) found that couples who participated in a program that emphasized conflict management and provided diagnostic information about couple's relationships had higher marital communication and lower conflict incidence than couples participating in the other two programs. Most and Guerney (1983) found improvement on both self-reported and observational measures of empathy and conflict resolution among couples participating in a premarital education program led by led leaders. Nickols and colleagues (1986) evaluated a premarital program using PREPARE, an instrument that assesses premarital relationships, in a pretest-post-test design. They found that couples perceived improvement in their relationship in several categories, with particular satisfaction in the areas of sexual understanding and communication skills. Russell and Lyster (1992) found that participants continued to report that premarital education was beneficial at 10 months after their participation in a marriage preparation program.

EX-POST-FACTO STUDIES

As noted previously, this review expands upon past reviews of the premarital education literature in that it includes studies that have utilized an ex-post-facto design to evaluate the general

effectiveness of premarital education. A comprehensive review of the literature identified three studies that fit such a description (Sullivan & Bradbury #1, 1997, Sullivan & Bradbury #2, 1997; Schumm et al., 1998), with all of these four studies being reported within the last four years. Because each of these studies focused on different elements of premarital education each is reviewed independently here.

Two ex-post-facto studies pertaining to premarital education were published simultaneously by Sullivan & Bradbury (1997). Both of these studies set out to assess if premarital prevention programs are reaching couples who are at risk for marital distress. In both studies, newlyweds reported whether they had participated in premarital counseling and provided data on known risk factors for marital distress. The first study recruited 172 couples (118 of whom had participated in premarital education) from recent marriage licenses in Los Angeles county and the second study recruited 60 couples (20 of whom had participated in premarital education) through media advertisements from the same area. The two samples were recruited through different means because media recruitment tends to yield samples of couples who are more at risk for marital difficulties than those samples recruited with marriage licenses (Karney, Davilla, Cohan, Sullivan, Johnson, & Bradbury, 1995).

In both studies, couples who participated in premarital programs were not at greater risk for marital difficulties, and in some cases participating husbands were at lower risk for marital difficulties compared to husbands who did not participate. These studies also showed that couples who participated in premarital programs did not have better marital outcomes than couples who did not participate. However, Sullivan and Bradbury (1997) correctly point out that their studies are limited in that they did not collect information on the content and characteristics of the programs administered to the couples, therefore they were unable to make any inferences about the longitudinal effects of specific interventions. This is a significant limitation, because programs are known to vary widely. However, these studies do provide some insight into the types of couples who

are accessing premarital education and show that couples who receive premarital education may be at relatively low risk for marital discord.

Schumm and colleagues (1998) evaluated the effectiveness of premarital education with a sample of traditional military couples (e.g., civilian female wife married to a military male service member). Using a sample of more than 14,000 couples (4% having participated in premarital education and 96% having not participated in premarital education), the couples were group into a “premarital counseling typology” according to their participation and satisfaction with premarital education. Despite the fact that their sample represented a wide range of formats and approaches to premarital education, the overall outcomes of this study suggest that even relatively “unsatisfactory” premarital education is slightly more effective than no premarital education at all and “very satisfactory” premarital education is much more effective than less satisfactory or no premarital education. Schumm and colleagues (1998) also noted that the apparent impact of premarital education in their study was not trivial in that the difference between no premarital education and unsatisfactory premarital education yielded an effect size of .11, whereas the effect sizes for the difference between satisfactory and very satisfactory premarital education and between no premarital education and very satisfactory premarital education were .20 and .48, respectively.

SUMMARY AND DISCUSSION

Due to high levels of marital distress and dissolution in the United States and other countries, premarital education is increasingly being advocated as an potential way to prevent or mediate these trends. However, as noted in the introduction to this paper, a number of valid questions remain regarding the effectiveness of premarital education in strengthening marriages and preventing divorce. To summarize the results of the review presented here, we return to the four questions introduced in the beginning of this paper. Following this summary discussion, we

conclude by highlighting implications future research, practice, and policy efforts pertaining to premarital education.

Is premarital education generally effective?

There is a fair amount of diversity in existing premarital education programs, with programs often differing on a number of important dimensions (for example, the theoretical orientation of the program, the length and format of the intervention, and the educational content incorporated in the program). Therefore, aggregate findings may not apply to specific programs. This being said, we conclude that premarital education programs are generally effective in producing immediate gains in communication skills, conflict management skills, and overall relationship quality, and that these gains appear to hold for at least six months to three years. Unfortunately, because of the lack of longer term research, less can be concluded about longer term effects (beyond three years) of premarital education, especially in the crucial area of marital dissolution. Only one study had a large enough sample size and follow-up period to begin to assess impact on marital stability (Markman et al., 1993). It found lower divorce in the experimental group, but the result fell just below statistical significance. Thus, the argument for the ability of premarital education to prevent divorce currently rests primarily on indirect evidence, that is, effectiveness in improving marital relationships in areas such as communication and conflict skills which may improve the odds of a satisfying and stable relationship.

Is premarital education effective for all couples?

There is very little information available to effectively answer the question of whether or not premarital education is effective for all couples. Due to the fact that the research in this area has been done almost exclusively with young, Euro-American, middle-class couples, there is no way to ascertain if such interventions are effective with other populations and groups. While a couple of international studies lend some support for the widespread potential of premarital education, this question remains largely unanswered in the research literature to date.

Are some forms of premarital education more effective than others?

To date, there have been no experimental studies that have directly compared different models or programs of premarital education with each other. In fact, none of the studies reviewed here used the same dependent measures to evaluate effectiveness. As a result, comparisons between and among the various programs to determine their relative effectiveness in strengthening marriages and preventing divorce cannot be made. This being said, however, there has been a notable consistency of effectiveness in the premarital programs that addresses conflict negotiation and problem solving skills in their curriculum. Given this consistency, it does seem safe to conclude that some type of training in conflict negotiation skills is a necessary, though not necessarily a sufficient, component of preparing couples for marriage. This type of finding from the preventive intervention research is in line with developmental marriage research that has found that one of the core elements of relationship success is the negotiation and management of perceptual differences between partners (see Holman & Associates, 2001, for a review). What seems to be crucial is to intervene with couples in a way that teaches partners to express these differences openly, to negotiate a way to interact with one another that maintains self and yet shows flexibility to the partner's preferences, and to avoid labeling differences in a pejorative manner.

In addition to these findings about program content, the research to date seems to indicate that varied educational formats (e.g., group sessions, individual couples counseling, weekend retreats, etc.) and types of educators (e.g., professionals vs. lay leaders) may be equally effective in achieving results. However, as noted previously, a fair amount of diversity exists among premarital prevention programs and with only a handful of studies addressing these issues, we need more research to empirically discern the important ingredients of an effective premarital education program.

Are premarital education programs reaching couples who are most at risk for marital problems?

Two ex-post-facto studies (Sullivan & Bradbury #1, 1997; Sullivan & Bradbury #2, 1997) have been done which directly addressed the question as to whether or not premarital education

programs are reaching couples who are most at risk for marital problems and subsequent divorce. These studies found that couples who participate in premarital programs are at no greater risk for marital difficulties than couples who do not participate in such programs. This finding can be interpreted in two ways. On the one hand, this finding indicates that, on average, high risk couples are not participating in premarital programs at a higher frequency than low risk couples and, therefore, these programs are not reaching those couples who are most in need of such intervention. On the other hand, these findings also indicate that the population that is accessing premarital education is not significantly different than the population that is not and, therefore, the programs are not just targeting highly motivated couples with little or no risk for marital difficulties. It should be kept in mind that because newlyweds in the United States still face a 40-50% likelihood of getting a divorce, almost every couple can be considered to be at some degree of risk for divorce and for the resulting stress on themselves and their children. However, this does not preclude the need for specialized recruitment procedures to increase the number of premarital education participants who are at a relatively high risk for marital difficulties.

IMPLICATIONS

Implications For Research

In our review of the research on premarital education, certain methodological shortcomings of past research and directions for future research became apparent. These included:

1. The research literature to date on the effectiveness of premarital education is based exclusively on young, Euro-American, middle class couples. This lack of ethnic and racial diversity is one of the most glaring holes in this body of research. Racial and ethnic groups currently make up one-third of the total U.S. population and it is projected that within the next 50 years these groups will become the numerical majority of the American people (Sue, Arrendondo, McDavis, 1995). In this era

of unprecedented cultural diversity, it is imperative that the evaluation of the effectiveness of premarital education include diverse, nationally representative samples.

2. Much of the research to date must be interpreted cautiously due to the fact that a good number of the studies have used quasi-experimental or non-experimental designs and their findings may be attributed to sample selection effects. Whenever possible, future studies need to utilize true experimental designs which randomly assign couples to intervention or control group statuses.

3. Although immediate post-test assessments can be used to determine whether a program has been successful in achieving its stated goal, they cannot help researchers evaluate the relevance of the program or its long term effects. Since premarital intervention programs are designed to increase marital satisfaction and prevent divorce, only long term longitudinal follow-ups (e.g., 5 to 10 years) of both treatment and matched control groups can provide us with an indication of their ultimate effectiveness. Evaluation studies should be designed accordingly. We recognize that substantial funding is generally required for this kind of research, but only large sample sizes followed for many years can yield the necessary data on the impact of premarital education on marital stability and long term satisfaction. Such studies should also evaluate the outcomes for couples' parenting and the developmental outcomes for children.

4. Much of the premarital education research to date is limited in that studies have often failed to incorporate multiple types of standardized outcome measures. The comprehensive evaluation of a program's effectiveness requires that both participant's and outside rater's perceptions of effectiveness be taken into account. Therefore, future studies should use both self-report and observational measures to assess a program's effectiveness. Similarly, the evaluation of program effectiveness should involve measures that assess both the individual and dyadic levels. Care also needs to be taken to differentiate between statistical and substantive differences in analysis results. An evaluation may detect a

statistically relevant improvement, but the magnitude of improvement may not be meaningful enough to warrant the adoption of the program by other professionals.

5. Almost no research exists that directly compares the effectiveness of different premarital education approaches with each other. Little attention has been given in the research to date on the specific components of program design and format that contribute to effective prevention efforts. Issues of theoretical orientation, format, and duration need to be evaluated in future research. Similarly, while the use of premarital assessment instruments has become a standard component in many premarital programs and the rationale for their use is very compelling, no outcome studies were found that have evaluated their contribution to the effectiveness of premarital education (in contrast to the various studies on their psychometric development and predictive validity).

Implications for Practice

Several implications also arise for the development and implementation of premarital education programs. These include:

1. One obvious difficulty in evaluating premarital education is that it is often done in an informal manner without standardized procedures, while many of the formal programs that have been developed remain unpublished. This creates problems in comparing and qualitatively assessing the value of such interventions. Efforts should be made to standardize and systematically document intervention protocols in order to facilitate the evaluation of programs by both the administrators themselves and their peers.

2. One concern highlighted in this review is that premarital programs may not be reaching the couples who are most at risk for marital difficulties and divorce. Practitioners should work to develop specialized recruitment techniques that will increase the participation of these couples in preventive interventions.

3. Due to the lack of evidence for the long-term effectiveness of premarital education, it is reasonable to question the long-term effectiveness of programmatic interventions that offer all couples a standardized treatment, rather than tailoring specific interventions to specific couples. While it is too early to move away from standardized approaches completely, practitioners should seek to find ways to customize the education experience as much as possible to a couples specific needs. An example of such customization would be to integrate a couple assessment inventory into a program's curriculum so that each couple receives feedback information that is specific to their relationship.

Implications for Policy

Because of the complexity of research design issues, as well as the difficulties inherent in outcome research, scholars may reasonably debate elements of the current research evidence pertaining to the effectiveness of premarital education programs. Likewise, it is clear from the review presented here that it will likely take decades of more research to properly address the questions that remain about premarital education programs, especially their impact on divorce. The question for policy makers is, "do we wait to have all the answers (were that possible) before we act on what is already known?" While it is true that we need to know far more about the development of marital distress and what can be done to prevent it, the need to strengthen marriages in our society is so great that we should act now on what we already know.

Sound marriage preparation education needs to be grounded in sound research. However, marriage-oriented research has had a low funding priority from both government agencies and private foundations (Ooms, 1998). This is problematic in that a sustained public investment is needed to conduct the extensive longitudinal research using control groups that is needed to advance our understanding of how to prevent marital distress and divorce. A lack of good information will seriously hinder legislator's ability to design and assess policies to strengthen couples as they enter marriage. Policy efforts are needed to generate the funding priority for premarital education research.

In evaluating the effectiveness of premarital programs, we need to ask ourselves if a decline in long-term outcome effects of these programs can truly be an appropriate indicator of intervention failure or if such results are merely an indication that developing and maintaining successful marriages requires sustained efforts and multiple supports. It would be unrealistic to believe that premarital education can single-handedly prevent marital problems and to hold that up as the standard of proof as to whether or not they are effective and worthy of wide spread community support. Furthermore, more than just research results should guide policy decisions pertaining to premarital education. Public policy supporting such measures sends a message that marriage matters and is worthy of deliberate preparation. It has been said that the dignity we give a vocation can be measured by the seriousness of the preparation we make for it. How then do we currently appraise marriage in our society?

CONCLUSION

In a recent roundtable meeting discussing the effectiveness of couples and marriage education, the analogy was put forth that the research evidence for these programs can be viewed as the glass that is either half empty or half full (Ooms, 1998). This same analogy applies to the research specifically investigating the effectiveness of premarital education. The glass can be seen as half-empty, in that many of the premarital programs in widespread use have not been evaluated with the most rigorous standards. However, the glass can also be seen as half-full in that the best studies of the best programs have found positive effects and that the preponderance of studies from both normative developmental research and preventive intervention research have begun to identify some of the same basic processes and skills (e.g., communication, conflict negotiation, commitment, etc.) that are key factors in marital success. There is also a growing body of research on the types of interventions that may promote these interpersonal abilities. This information provides a sound foundation for the next generation of studies

that are needed to fill the remainder of the glass and address the questions that remain in developing effective premarital education programs that can address the troubles facing marriages today and in the future.

ENDNOTE

1. There are several labels that have been used to identify the types of premarital preventive interventions reviewed in this paper, including: “premarital education,” “premarital counseling,” “premarital therapy,” “premarital educative counseling,” and “marriage preparation.” For the most part, these terms are used interchangeably in the literature and are all used to refer to the type of prevention work detailed in this article. The term “premarital education” is used in this paper because it is a more generic term and is meant to denote any type of formal, standardized approach to preparing premarital couples for marriage. Not included in this definition are premarital education efforts that target non-coupled individuals during adolescence and young adulthood, namely high school and college-level marriage and family preparation courses that are found on campuses throughout the country.

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Table 1: Evaluation Studies of Premarital Education Effectiveness (Divided by Design and Chronologically Arranged).

Design/Study	Sample characteristics	Sample size ^a		Theoretical orientation of program	Program format	Program duration	Type of measure ^b	Dependent variables ^c	Assessment/ Follow-up	Method of analysis	Outcome ^d	Comments ^e
		Exp. Grp	Cont. Grp									
<u>Experimental</u>												
Schlein (1971)	Undergraduate dating couples	15	27	Not specified	Didactic and exp. groups	20 hrs 10 sessions	SR	LAS, SFAS, PCI, PCI-P	Pre-test Post-test No follow-up	ANOVA	1,3,11	5,7, 8, 9
D'Augelli et al., (1974)	Dating couples	34	34	Not specified	Didactic and exp. groups	16-20 hrs/ 8-10 sessions	SR	EUIP, CRIP, IRIP, HSIP	Pre-test Post-test No follow-up	ANOVA	1,3,11	7, 8, 9
Miller et al., (1971)	Engaged couples	17	15	Fam. sys. Com. theory	Didactic and exp. Groups	12 hrs/ 4 sessions	SR OB	SDQ, HIM, IMC, PDQ, EAS	Pre-test Post-test No follow-up	ANOVA	1,3,11	7, 8, 9
Boike (1977)	Engaged couples, 18-29 years old.	139	99	Family dev. Fam. sys. Fam. stress	Didactic groups	10 hrs/ 4 sessions	SR OB	MCI, MRI, T-JTA, NSOM	Pre-test Post-test No follow-up	ANOVA	2, 4, 11	3, 5, 7, 8, 9
Bader et al., (1980)	Engaged couples recruited through churches	60	34	Not specified	Didactic and exp. groups	Hrs not Reported / 8 sessions	SR OB	NSSR, NSOM	Pre-test No Post-test Follow-ups at 6 mos. / 1 yr	ANOVA	6, 7, 9, 13	2, 3, 4, 6, 7, 8, 9
Ridley et al., (1981)*	Premarital couples recruited from university & community	26	28	Social exchange	Didactic and exp. groups	24 hrs/ 8 sessions	SR OB	NSOM, RCS, BSRI, JSDQ, IRS, RS, PCI	Pre-test Post-test Follow-up at 6 mos.	ANOVA	1, 3, 7, 9	3, 4, 8, 9
Bagarozzi et al., (1984)	Premarital couples recruited from community sources	9	9	Family dev. Fam. sys. Life-cycle	Didactic groups	12 hrs/ 6 sessions	SR OB	MICS, SIDCARB, IBT, EAQ, DAS	Pre-test Post-test Follow-up at 3 yrs.	ANOVA	1, 3, 8, 10	7, 8, 9
Pretorius et al., (1992)	Engaged couples from white South African community	20	20	Gen. system theory Psych. educ.	Didactic groups	Not reported in English summary	SR OB	DAS, ES, CST, QRP, IQ	Pre-test Post-test Follow-up at 6 mos. after marriage	T-test	1, 3, 7, 9	7, 8, 9

Table 1 (continued)

Design/Study	Sample characteristics	Sample size		Theoretical orientation of program	Program format	Program duration	Type of measure ^a	Dependent variables ^b	Assessment/ Follow-up	Method of analysis	Outcome ^c	Comments ^d
		Exp. Grp	Cont. Grp									
<u>Experimental Cont.</u>												
Markman et al., (1993)*	Engaged couples from community	33	50	Behavioral	Didactic and exp. groups	15 hrs/ 5 sessions	SR OB	MAT, RPI, CTS, IDCS	Pre-test Post-test Follow-up at 1, 3, & 5 yrs.	Ancova	1, 3, 7, 9, 12, 13, 14	8
Stanley et al., (2001)	Engaged couples recruited through religious organizations	52 54	32	Behavioral	Didactic and exp. groups	12 hrs/ 3 sessions	SR OB	CI, CS, RDS, CST, MAT, PSR, IDCS	Pre-test Post-test No follow-up	ANOVA T-test	1,3,5	8,9
<u>Quasi-Experimental</u>												
Parish (1992)	Engaged couples recruited from colleges	14	7	Psycho-educ.	Didactic groups	12 hrs/ 6 sessions	SR	MCI, DAS	Pre-test Post-test No follow-up	ANOVA	1, 3, 11	7, 8, 9, 10
Hahlweg et al., (1998)	German couples planning to marry	64	32	Behavioral Soc. learning	Didactic groups	15 hrs/ 6 sessions	SR OB	PMAT, KPI	Pre-test Post-test Follow-ups at 1½, 3, & 5 yr	Mancova	1, 3, 7, 9	8, 10
<u>Non-Experimental</u>												
Freeman (1965)	Engaged couples	----	----	Not specified	Exp. group	Hrs not reported/ 6-10 sessions	SR	Couple report of benefit	No pretest Post-test No follow-up	None	5, 11	1, 2, 8, 9, 10
Meadows & Taplin (1970)	Engaged college students	6	----	Not specified	Exp. dyads	Hrs not reported/ 2-7 sessions	SR	NSSR	No pretest No posttest Follow-up at 1 month	None	5, 11	1, 2, 8, 9, 10
Hinkle & Moore (1971)	Engaged and married couples	----	----	Not specified	Didactic and exp. groups	14 hrs/ 7 sessions	SR	Couple report of benefit	No pretest Post-test No follow-up	None	5, 11	1, 2, 7, 8, 9, 10

Table 1 (continued)

Design/Study	Sample characteristics	Sample size		Theoretical orientation of program	Program Format	Program duration	Type of measure ^a	Dependent variables ^b	Assessment/ Follow-up	Method of Analysis	Outcome ^c	Comments ^d
		Exp. Grp	Cont. Grp									
<u>Non-Experimental Cont.</u>												
Glending & Wilson (1972)	Engaged west point cadets	15	----	Not specified	Didactic and Exp. Groups	22 hrs/ 3 day weekend	SR	Couple report of benefit	No pretest Post-test No follow-up	None	5, 11	1, 2, 7, 8, 9, 10
VanZoost (1973)	Dating couples	6	-----	Not specified	Didactic and Exp. Groups/ dyads	10 hrs/ 5 sessions	SR	ASS-C, SDQ, ICI, CKT	Pre-test Post-test No follow-up	T-test	1, 11	1, 2, 7, 8, 9, 10
Ross (1977)	Dating & engaged couples	12	----	Not specified	Didactic and Exp. Groups/ dyads	12 hrs/ 6 sessions	SR	NSSR	Pre-test Post-test No-follow-up	T-test	5, 11	1, 2, 7, 8, 9, 10
Pino (1982)	Couples in premarital programs	27	----	Not specified	Didactic group	16 hrs/ 2 sessions	SR	PMCI, CMQ-R	Pre-test Post-test No follow-up	T-test	1,11	1,2,7,8,9,10
Most & Guerney (1983)	Engaged couples	12	----	Social exchange Com. Theory	Didactic and Exp. Groups	Hrs. not reported/ Weekend format	SR OB	CCRCQ, RMS, RPRMS, LRF	Pre-test Post-test No follow-up	T-test	1,5,11	1,2,7,8,9,10
Nickols et al., (1986)	Engaged couples recruited from the community	30	----	Psycho-educ.	Didactic group	12 hrs/ 6 sessions	SR	PREPARE NSSR	Pre-test Post-test No follow-up	ANOVA	1, 5, 11	1, 2, 7, 8, 9, 10
Russell & Lyster (1992)	Couples that participated in a marriage prep. Program	153	---	Family Dev. Psycho educ. FoO focus	Didactic classes (n=25)	10 hrs/ 5 classes	SR	NSSR	No pre-test No post-test Follow-up at 1-10 mos.	T-test	1, 5, 11	1, 2, 7, 8, 9, 10

Table 1 (continued)

Design/Study	Sample characteristics	Sample size		Theoretical orientation of program	Program Format	Program duration	Type of measure ^a	Dependent variables ^b	Assessment/ Follow-up	Method of Analysis	Outcome ^c	Comments ^d
		Exp. Grp	Cont. Grp									
<u>Ex-post-facto</u>												
Sullivan & Bradbury (1997) #1	Newlyweds recruited from marriage licenses	172	----	Various	Various	Various	SR	MAT, EPQ-N, DIM, CTS	6 mos. after marriage	COR T-test	6, 14	1, 7, 8, 9
Sullivan & Bradbury (1997) #2	Newlywed couples recruited through media	57	----	Various	Various	Various	SR	MAT, EPQ-N, DIM, CTS	18 mos. after marriage	T-test	6, 14	1, 7, 8, 9
Schumm et al., (1998)	Married military couples	14,431	----	Various	Various	Various	SR	MS	0-42 years after marriage	ANOVA	6	1,2,9

Note: Dashes indicate information that was unavailable or not reported. * This study is reported in multiple publications (see text for additional references).

a: Sample size: Reported numbers = the number of couples comprising experimental and control groups.

b: Type of Measure: OB= observational coding; SR= self report

c: Dependent Variables: The subscript refers to the measures used to assess dependent variables. ASS-C (Affective Sensitivity Scale); BSRI (Bem Sex Role Inventory); CCRCQ (Communication and Conflict Resolution Concepts Questionnaire); CI (Commitment Inventory); CKT (Communication Knowledge Test); CMQ-R (Conflict Management Questionnaire – Revised); CRIP (Communication of Respect in Interpersonal Processes); CS (Confidence Scale); CST (Communication Skills Test); CTS (Conflict Tactics Scale); DAS (Dyadic Adjustment Scale); DIM (Dysfunctional Impulsivity Measure); EAQ (Exchange Attitude Questionnaire); EAS (Engagement Adjustment Scale); EPQ-N (Eysenck Personality Questionnaire-Neuroticism); EUIP (Empathetic Understanding in Interpersonal Processes); ES (Empathy Scale); HIM (Hill Interaction Matrix); HPCS (Handling Problems Change Score); HSIP (Helpee Self-Exploration in Interpersonal Processes); IBC (Irrational Beliefs Test); ICI (Interpersonal Communication Inventory); IDCS (Interaction Dynamics Coding System); IMC (Inventory of Marital Conflicts); IQ (Intimacy Questionnaire); IRIP (Immediacy of Relationship in Interpersonal Processes); IRS (Interpersonal Relationship Scale); KPI (Coding System for Marital/Family Interaction); LAS (Listener Acceptance Scale); LRF (Leader Rating Form); MAT (Marital Adjustment Test); MAP (Marital Agendas Protocol); MCI (Marital Communication Inventory); MICS (Marital Interaction Coding System); MRI (Marital Relationship Inventory); MS (Marital Satisfaction); NSOM (Non-standardized Observational Measure); NSSR (Non-Standardized Self-Report); PCI (Premarital Communication Inventory); PCI-P (Primary Communication Inventory-Partner); PEPMC (Perceived Effectiveness of Premarital Counseling); PMAT (Premarital Adjustment Test); PMCI (Premarital Communication Inventory); PREPARE (Premarital Personal and Relationship Evaluation); PRQ (Prediction and Recall Questionnaire); PSR (Program Satisfaction Rating); QRP (Questionnaire of Positive Reinforcement); RCS (Relationship Change Scale); RDS (Relationship Dynamics Scale); RMS (Response to Marital Situations); RPRMS (Role Play Responses to Marital Situations); RPI (Relationship Problem Inventory); RS (Relationship Scale); SCS (Satisfaction Change Score); ASS-C (Affective Sensitivity Scale); SDQ (Self-Disclosure Questionnaire); SFAS (Speaker Feelings Awareness Scale); SIDCARB (Spousal Inventory of Desired Changes and Relationship Barriers); T-JTA (Taylor-Johnson Temperament Analysis).

d: Outcomes: 1. Exp. group showed significant improvements in interpersonal skills (e.g., communication, problem-solving, empathy, etc.) in post-test evaluations; 2. Exp. group showed no significant in interpersonal skills in post-test evaluations; 3. Exp. group was significantly better than the control group in post-test evaluations; 4. Exp. group was not significantly better than the control group in post-test evaluations; 5. Couples reported that the experience was helpful at post-test evaluation; 6. No post-test evaluations of effectiveness outcomes were administered. 7. Same as 1 at follow-up; 8. Same as 2 at follow-up; 9. Same as 3 at follow-up; 10. Same as 4 at follow-up; 11. Same as 6 at follow-up; 12. No differences in effectiveness by gender; 13. Perceived effectiveness was found to be related to degree to which participation was seen as voluntary; 14. Couples participating in programs not at greater risk for marital difficulties than those who did not participate.

e: Comments: 1. No control group was used; 2. Non-standardized self-report measures used; 3. Non-standardized observation measures used; 4. Only subsamples used in follow-up; 5. Non-published study; 6. Post-wedding sessions used; 7. Males and females not analyzed separately; 8. Homogeneous sample used; 9. No evaluation of relationship stability; 10. Participants not

assigned to intervention statuses randomly