

COMMUNICATION IN LAMAZE COUPLES

by

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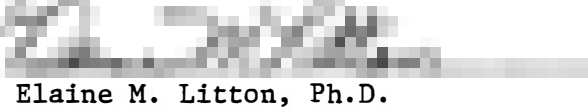
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ABSTRACT

This descriptive study of 34 expectant couples was conducted in Salt Lake City between August and December of 1979. The study sought to answer the question: Do couples choosing Lamaze Childbirth Education have better communication skills than couples not choosing Lamaze preparation?

The total population was divided into two groups. Group A or couples choosing Lamaze Childbirth Education consisted of 16 couples. Group B or couples not choosing Lamaze Childbirth Education consisted of 18 couples.

Two test tools were used to evaluate the communication levels of the couples. The Marital Communication Inventory or MCI consists of 46 questions and was designed by Millard Bienvenu to evaluate the communication process in couples. The Primary Communication Inventory or PCI consists of 25 questions and was designed by Harvey Locke with adaptations by Leslie Navran to measure verbal and nonverbal communication in couples. In addition to these tests, couples completed a Demographic Data Sheet.

Findings indicated that men in Group A were significantly older than men in Group B. Although women in Group A tended to be older than women in Group B, the difference was not significant. Similar findings were revealed in the literature. The number of years married was not significantly different for the two groups.

There was no significant difference between the educational and income levels of the two groups, which contrasted findings reported in the literature.

Results from the MCI revealed a significantly better communication level in Group A couples. In addition, women in Group A had a significantly higher mean MCI score than women in Group B. Further, the trend was for men in Group A to have a higher mean score than men in Group B.

Results from the PCI revealed no significant difference between the communication of couples in the two groups. However, men in Group B had a significantly higher mean PCI combined score than women in Group B. A difference in the verbal or nonverbal areas could not be found for this group. This combination of findings requires further study.

Data from this study suggest that couples choosing Lamaze Childbirth Education are a self-select group who are generally older with possibly more stable marriages and better communication skills. This will be an important group to study in order to discover why their communication skills are better. Findings from further studies can be beneficial to professionals such as nurses, physicians, psychologists, marriage counselors or social workers who could then apply the knowledge to all types of childbirth education with the intent of improving the quality of health care for all expectant couples regardless of whether natural childbirth was desired or not.

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CHAPTER I

INTRODUCTION

It has been reported that couples participating in Lamaze Childbirth Education Classes have more successful marriages and since communication skills are reported to be associated with successful marriage, the question is asked: Do couples choosing Lamaze Childbirth Education have better communication skills prior to taking the Lamaze classes than those couples choosing other types of childbirth education?

Assumptions for this study are: (1) Health care providers value efforts toward improving the quality of life. (2) Lamaze Childbirth Education provides for significant verbal and nonverbal communication between the partners throughout the class series.

The purpose of this study was to determine if couples who choose Lamaze Childbirth Education Classes have increased communication skills over those couples who do not choose Lamaze classes.

Quality of Marriages in Lamaze Couples

Many proponents of the Lamaze method stress the benefit of an enhanced marriage to couples who use this method (Dick-Read, 1944; Ewy, 1970; Kitzinger, 1971; Tanzer, 1967; Vellay, 1960). Bradley (1965) stated that there is a decreased incidence of divorce in natural childbirth couples. However, this claim has never been

scientifically substantiated.

Tanzer (1967) attempted to support her hypothesis that the use of the Lamaze method improved marital relations which she defined as "the view of the marriage partner" (p. 240). The Lamaze women described their husbands as "indispensable, strong, competent and helpful" while the control group husbands were seen as "impotent, weak, and needing care themselves" (p. 349).

The difficulty with Tanzer's study is the inability to replicate the aspect concerning improvement of the marital relationship. The data collected consisted of verbatim accounts by the women participating in the study. There was no standard method of analyzing the data. Even Tanzer agreed the information was subjective and even though the reader clearly sees a trend for positive statements by the Lamaze women, no explanation was given for this.

Diane Susan Moore (1977) stated that the Lamaze method teaches the couple a system of communication, both verbal and non-verbal, that enhances understanding and changes their patterns of interaction. The birth experience using Lamaze helps the couple relate to each other in a new way, but "there have been no studies to support that the marital unit, by some objective measure is closer" (p. 25). Henneborn (1975) speculated that if a couple worked together (as in Lamaze training) towards a common goal (active participation in childbirth), they would have more favorable feelings toward each other and could possibly improve their communication.

Communication and Marriage

It has been stated in the literature that communication is an important component of marriage. Indeed, effective communication has a positive relationship to good marital adjustment, which is defined as the status of the marital relationship at a given time (Bienvenu, 1970; Boyd & Roach, 1977; Locke, 1956; Navran, 1967; Satir, 1964). Levinger (1960) reported that highly satisfied couples have a higher frequency of marital communication. A question arises: If Lamaze indeed teaches a couple better communication skills, can it be inferred from the literature that this can also improve their marriage?

Bienvenu (1970) defined communication in a marriage as "the exchange of feelings and meanings as husbands and wives try to understand one another and to see their problems and differences from both a man's and a woman's point of view. Such communication is not limited to words. It also occurs through listening, silences, facial expressions, and gestures" (p. 26). Locke, Sabagh, and Thomes (1956) defined communication as "the exchange of meaningful symbols, including words and gestures" (p. 116). Further, they defined primary communication as that which occurs in the primary group, or marital unit. Communication is thus a dynamic process of information exchange, both verbal and nonverbal which includes gestures, expressions, posture, touch, and silence.

Communication and the Type of Marriage

Some authors have discussed type of marriage and the effect

on communication. Harrel (1972) described two types of marriages. The institutional marriage is one where the husband and wife have clear task differentiation (male vs. female) and have separate interests, activities, and friends. The attributes he described for a companionship marriage are:

1. Affection is the basis for existence;
2. husband and wife have equal status and authority;
3. major decisions are by consensus; and
4. common interests and activities coexist with division of labor and individuality of interests. (pp. 2-3)

He found that communication in institutional couples may be less effective than communication in companionship couples.

Burges, Locke, and Thomes' (1963) view of companionship marriage includes mutual participation in the giving and receiving of affection, in confiding and sharing in common experiences and family decisions. Burges (1964) further stated that "high marital satisfaction is associated with joint decision making" (p. 300). Yi-Chuang Lu (1952) also supports Burges' view that equilateral decision making is associated with high marital adjustment.

No studies have been done to describe the relationship between types of marriages and the type of childbirth education a couple chooses. It could be speculated that couples in institutional marriages would not choose the Lamaze method because their roles are clearly defined and participation in childbirth may not be viewed as a husband's role. Similarly, couples with companionship marriages might be more likely to choose the Lamaze method because they do many activities together and have a minimum of task differentiation.

Communication During Pregnancy

Pregnancy may affect a couple's communication. Raush et al. (1974) stated that couples remain consistent in their relationship throughout the developmental stages of newly married, expectant, and parenting. His study focused on how a couple handles conflict; there are many other areas of communication in a couple's relationship. Another limitation was the small sample size of the study.

Brenner and Greenberg (1977) view pregnancy as a delicate time in the course of a marriage which requires honest communication. They say that "couples may get on different tracks and stop relating to each other" (p. 19). They stated that the most important role of the primary care physician was to assist the couples in communicating their feelings in a meaningful way. Meyerowitz (1970) stated that "a woman accepts pregnancy well when it brings her closer to her husband" and that "satisfaction is determined by the woman's report of togetherness as based on free verbal communication considered typical of the equilateral relationship" (p. 39). Can Lamaze Childbirth Education bring a couple closer together and therefore increase their marital satisfaction because of the free verbal communication taught in the classes?

Communication and Self-Image

Does communication allow one to control the environment and thereby affect one's self-image? Miller and Steinberg (1975) wrote that obtaining information increases a person's potential for controlling the environment. Success or failure to control the

environment is a part of the person's self-identity. Since information exchange is a function of communication, the ability to communicate effectively enables a person to control his environment and thereby increases his self-image.

Would Lamaze training, which teaches the couple to communicate with the intent of controlling their environment (the birth experience), also increase their self-images? Croneweldt and Newmark (1974) reported that Lamaze preparation positively influences the father's perception of himself and his relationship with his wife. Goodwin (1970) also stated that women who used Lamaze had improved self-images but not a different image of their husbands. However, Hott (1972) reported no significant difference between Lamaze prepared fathers' self-concepts or their concept of their wives as compared to non-Lamaze prepared fathers. Tanzer (1967) speculated that Lamaze training would improve one's self-image. But that was only speculation. So it is not clear from the literature whether Lamaze preparation can alter the self-image of either husband or wife.

Lamaze Preparation and Adjustment to Parenting

Moore (1977) raised an interesting question. If Lamaze training improves communication, a couple's marriage, and their self-concepts, can it also improve their adjustment to parenting? Crokenberg and Wente (1976) partially support this assumption by saying that Lamaze training prepares the husband for active involvement in

the birth process and establishes the mother-father-infant triad which should improve the father's adjustment to parenthood. But in the final analysis, Lamaze-prepared fathers did not have an easier, more positive adjustment to parenthood in any area. No studies have been done to determine if Lamaze training could improve a woman's adjustment to parenthood.

Differences in Couples Choosing

Lamaze Preparation

It has been speculated that couples who choose Lamaze classes are different. Tanzer (1967) stated that couples choosing Lamaze were from a higher socioeconomic and educational background. Goodwin (1970), Hott (1972), and Hughey (1978) support Tanzer's findings. Perhaps some couples cannot afford the Lamaze class fee of \$25 to \$35. Many hospitals now charge up to \$20 for their prenatal classes. Less educated couples might not understand Lamaze preparation or be informed of this option. Most physicians and clinic personnel encourage participation in childbirth preparation classes and explain the different courses available.

Tanzer (1967) stated that women who chose Lamaze were not of a particular psychological or physiological type. Studies on the psychological type of the husband have not been done. Huttel (1972) reported that women choosing Lamaze were generally older but not significantly different from the non-Lamaze choosers. Again no studies have been done regarding the age of men choosing Lamaze training.

Locus of control as defined by Windwer (1977) is the degree to which a person feels a reward. This depends upon his/her behavior versus the degree that he/she feels outside forces control the reward. Those with internal locus of control feel attainment of a goal, such as active participation in childbirth, depends on their behavior and is therefore controllable. Windwer speculated that Lamaze couples have an internal locus of control. She defined people with high social desirability as more conforming and "other directed." They feel the need to do and say what is socially appropriate to obtain approval. Those people with low social desirability are less conforming and do and say what they feel regardless of social pressure. She postulated that couples choosing Lamaze would score low on social desirability. In the final analysis, locus of control and social desirability were not significant variables for couples who chose Lamaze Childbirth Education Classes. Barnett (1980) found that couples choosing Lamaze Childbirth Education do indeed have an internal locus of control. However, 50% of her control group also had an internal locus of control. In summary, it is not clear from the literature whether couples choosing Lamaze are significantly different from couples not choosing Lamaze.

Summary of Lamaze Childbirth Education

Natural childbirth originated in Russia after World War II. Lamaze, a French physician, further refined the method, which takes his name, and instituted it in his clinic in France. He delivered Majorie Karmel's baby. Karmel later introduced the

method to America through her book, Thank-you, Dr. Lamaze. In 1960, she, along with Bing, a physical therapist, established the American Society for Psychoprophylaxis in Obstetrics, commonly known as ASPO. This organization standardizes the practice and teaching of Lamaze Childbirth Education for preparation of ASPO certified instructors across the nation.

A typical Lamaze series consists of six, two-hour classes held once a week. The first hour consists of lecture/discussion related to anatomy and physiology of pregnancy, the process of labor and delivery, use of medication, and behavioral techniques designed to reduce discomfort during labor and delivery. During the second hour, demonstrations of relaxation and breathing techniques are done, followed by carefully supervised practice. The instructor gives each couple feedback on the performance of their skills. Couples practice the skills of verbal and nonverbal communication with supervision by the instructor. They are taught to be active participants in their labor/delivery experience. Couples and instructors are committed to "natural childbirth" and so desire little or no medication or other medical interference in the labor/delivery process. Studies do show that Lamaze women use less pain medication (Henneborn, 1975; Hughey, 1978; Huttel, 1972; Tanzer, 1967). The instructors of Lamaze classes are usually ASPO certified. Only small numbers of couples can be properly taught and supervised at one time. This limits class size to 10 or less couples. Huprich (1977) presents an excellent review of the Lamaze method.

Summary of Alternate Childbirth Education

There are a variety of other types of childbirth education classes offered to the consumer. A standard hospital course may offer four to six, two-hour classes held either weekly or bi-weekly. There is frequently less emphasis on relaxation/breathing techniques and more emphasis on the presentation of didactic material. Class content includes nutrition, exercises, anatomy, and physiology of pregnancy, fetal development, the process of labor and delivery, and newborn care. Breathing techniques for labor/delivery may be included but this can vary from instructor to instructor. Techniques are demonstrated and perhaps practiced but cannot be closely supervised due to the large class size which may be 50 or more couples. In addition, husbands may or may not attend all lectures. Couples in these classes have no chance to practice or improve their communication skills. The instructors of these classes are often interested labor/delivery room nurses. Their preparation, experience and teaching skills may vary considerably. There is no standard curriculum for their training. There is usually less emphasis on natural childbirth per se. There may be some emphasis placed on active participation by couples in their labor/delivery experience but this often depends upon the teacher and the institution they represent.

Would the different emphasis of these classes preclude certain couples from choosing them? Would couples who may have better communication skills choose a Lamaze class because it emphasizes the use of these skills and may even improve them? Would couples with less effective communication choose a regular hospital course

because it does not emphasize the importance of using their communication skills and does not expect them to use these skills in active participation and feedback? It is the aim of this study to determine if couples choosing Lamaze have better communication skills than those who do not choose Lamaze preparation.

It is generally thought that couples who chose Lamaze preparation for childbirth have a strong desire to follow through on natural childbirth. Certainly Lamaze-prepared instructors are trained to assist couples to do this. Perhaps the significant aspect of Lamaze preparation is not natural childbirth but the process by which couples are taught and supervised for the joint participation in the labor/delivery process. This would require specific verbal and nonverbal communication skills. Perhaps all couples should have this opportunity. This would certainly increase the need for more professional nursing involvement in the preparation of teachers for the Lamaze method.

CHAPTER II

METHODOLOGY

Design

This descriptive study was conducted using a single comparison group design to answer the following question: Do couples choosing Lamaze Childbirth Education have significantly better communication skills than couples not choosing Lamaze preparation?

Subjects

Subjects were divided into two groups. Group A or couples choosing Lamaze Childbirth Education consisted of 16 couples. Ten couples (62.5%) were registered to take classes from an instructor who taught at LDS Hospital; the remaining six couples (37.5%) were registered with an instructor who taught in a local library classroom. Both instructors were ASPO certified registered nurses.

Group B or couples not choosing Lamaze preparation consisted of 18 couples registered to take a regular hospital prenatal course at two Salt Lake City hospitals: 11 (61.1%) at LDS Hospital, and 7 (38.9%) at Cottonwood Hospital. Instructors for these classes were labor/delivery room nurses from each hospital who were not ASPO certified.

Instruments

Instrument No. 1 was the Marital Communication Inventory or

the MCI. It was designed by Bienvenu (1970) to evaluate the communication process in couples to determine more specifically those who have satisfying marriages from those who do not. Test items were developed to look at "patterns, characteristics, and styles of communication" (p. 27). The test consists of 46 questions whose responses allow a choice of usually, sometimes, seldom, or never. Scores are weighted 0, 1, 2, or 3 and vary according to the question. The range of scores is 0 to 138. Face validity was obtained by showing the test to a panel of experts who agreed it pertained to marital communication. Cross validation was obtained when two comparable groups were given the test and mean scores obtained were 105.78 and 105.68, respectively. In addition, further validation was obtained by the use of the Mann Whitney U Test statistic to differentiate a group of couples with known marital difficulties from a group who had no marital problems ($U = 117$, $p = .01$). To test the reliability of the MCI, a split-half technique was done using answers to odd versus even numbered questions with the Spearman Brown Correlation formula. A .93 coefficient was reported. Thus, the MCI was determined to have acceptable validity and reliability (see Appendices A and B).

Instrument No. 2 was the Primary Communication Inventory or the PCI. It was originally designed by Locke (1959) and called the Marital Adjustment Test. He reported the reliability coefficient, using a split-half technique with the Spearman Brown formula, to be .90. He further stated that the test seemed to have face validity because the scores could differentiate adjusted from maladjusted

couples. Navran (1967) later made adaptations to the test and called it the Primary Communication Inventory or the PCI. The test concentrates on verbal and nonverbal communication in the primary group or married couple. It consists of 25 questions whose responses allow a choice of very frequently, frequently, occasionally, seldom, or never. Responses are weighted .5, 4, 3, 2, or 1 except for items 8, 15, and 17 which are weighted 1, 2, 3, 4, or 5. Scores for items which involve making a judgment about the spouse (5, 6, 7, 9, 11, 13, 15, 21, and 24) are transposed for the two mates. Nonverbal plus verbal scores yield the total score. Scores for items 6, 7, 9, 11, 15, 18, and 23 are added to produce the nonverbal score. The nonverbal score is then subtracted from the total score to yield the verbal score. The range for the total score is 25 - 125, 18 - 90 for the verbal score, and 7 - 35 for the nonverbal score.

Navran (1967) compared the communication skills of two groups: happily married couples and unhappily married couples. He differentiated the marital satisfaction by the use of Locke's Marital Relationship Inventory, the same test as Locke's Marital Adjustment Test discussed earlier. Navran reported the intercorrelation of the PCI and the Marital Relationship Inventory scores to be high ($r = .82$), indicating that there is a positive relationship between good communication and good marital adjustment. He further stated that verbal communication skills are more strongly associated with good marital adjustment ($r = .91$) than are nonverbal skills ($r = .66$). It is unclear, however, if the PCI, which is an adapted version, has the same validity and reliability as Locke's original tool (see Appendices

C and D).

In addition to Instruments No. 1 and 2, the couple was given a Demographic Data Sheet to complete together (see Appendix E).

Procedure for Data Collection

Data were collected between August and December of 1979. Supervisors of the OB units at Cottonwood and LDS Hospitals were contacted regarding the study. At Cottonwood, the instructor of the class was notified and she then gave the investigator a list of couples registered who were contacted for interest and asked to come early to be tested. At LDS Hospital, the research project was approved by the Human Subjects Committee who suggested, for reasons of confidentiality, that the investigator come early to class and test available, interested couples.

Supervisors in both hospitals referred the investigator to Lamaze instructors. One instructor, who taught her classes at LDS Hospital, allowed the investigator to test the 10 couples registered (none refused) at the beginning of the first class. The other instructor, for personal reasons of confidentiality, contacted couples registered in several of her classes and asked them to come early if they were interested in participating in the study.

At the time of testing, the investigator explained the study and elicited the couples' written consent. Then husbands and wives were each given separate copies of Instruments No. 1 and 2 to complete. Tests were code numbered to assure confidentiality. Couples were asked not to discuss the questions while taking the tests.

When they were finished, the couple was given the Demographic Data Sheet to complete together. The investigator remained present to collect all the data and to answer any questions.

Statistical Analysis

Differences within the two groups and between the groups was analyzed by the calculation of Chi-squares. Since this was a preliminary study where no previous research has been done and the sample size was small, the confidence level was set at .05.

Limitations of the Study

1. Due to the small numbers in the two groups and their questionable normality, results cannot be generalized to other populations without further study.
2. Intact groups were used due to the time constraint which did not permit random sampling.
3. The validity and reliability of the Primary Communication Inventory may not have been established.
4. The intercorrelation of the instruments used was not found in the literature.
5. It was assumed that the research tools accurately assessed the level of communication in couples. This may not have been the case.
6. Couples' perception of their communication skills, prior to taking the class, may have affected their choice of responses.

7. The fact that a couple chose a Lamaze Childbirth class may have affected their choice of responses, that is, social desirability may have been a factor in the choice of responses.

8. Results of the tests were not correlated to observed behavior.

CHAPTER III

RESULTS AND DISCUSSION

Chi-square was used to analyze differences within groups and between the two groups, of data collected with Instruments No. 1 and 2, and the Demographic Data Sheet. Due to the investigational nature of this study, where no previous research has been done and due to the small sample size, the confidence level was set at .05.

Demographic Data

Thirty-four couples completed the tests. This total population consisted of Group A or couples choosing Lamaze Childbirth Education (N = 16) and Group B or couples not choosing Lamaze (N = 18). All but two women in each group were primigravidas, that is, they had no previous pregnancy experience.

For purposes of analysis, age was divided into two categories: 17 - 25 years and 26 - 37 years. The couples' mean age in Group A was 26.5 (range: 21 - 36.5). The couples' mean age in Group B was 22.2 (range: 18 - 32). There was no significant difference between the means of couples' ages between Groups A and B. In addition, there was no significant difference between ages of women and men within either group. Although not significant, Group A women tended to be older than Group B women. Huttel (1972) identified the same trend. Group A men were significantly older than Group B men

($p = .01$). No studies in the literature cited this difference.

Years married was divided into three categories: 0 - 1 year, 1 - 2 years, and greater than 2 years. The mean years married for Group A was 3.5 years (range: .5 - 14 years; $SD = 3.88$). Four couples in Group A, married for over six years, tended to skew the data. The mean years married for Group B was 1.7 years (range: .25 - 5.5; $SD = 1.4$). Even though the difference in the means appears substantial, this was not significant.

Educational level was divided into two categories: 10 - 14 years and greater than 14 years. The mean educational level for couples in Group A was 14.4 years (range: 11 - 17), while the mean for Group B was 13.1 years (range: 10.5 - 16.5). There was no significant difference between couples' mean educational levels in Groups A and B. In addition, the educational levels within either group or between women or between men were not significantly different.

Income levels were defined as: less than \$5,000 = 1; \$5 - 10,000 = 2; \$10 - 15,000 = 3; \$15 - 20,000 = 4, and greater than \$20,000 = 5. The highest frequency of income levels for both groups, 50% for Group A and 53% for Group B, were in the 3 and 4 levels or \$10 - 20,000 income. The mean income level for Group A was 3.7 or approximately \$18,500 while Group B's mean was 3.3 or about \$16,500. There was no significant difference between the two groups. Although educational level and income level were not found to be significantly different for the two groups in this study, this was in contrast to information reported in the literature. Tanzer (1967), Goodwin (1970), Hott (1972), and Hughey (1978) all stated couples

choosing Lamaze were from a higher socioeconomic and educational level. It can be seen that the two sample groups were comparable (see Table 1).

Major Findings

The MCI test scores, for purposes of analysis, were divided into Low, Medium, and High categories so that Low = 0 - 100, Medium = 101 - 120, and High = 121 - 138. The couples' mean MCI score in Group A was 107.5 (range: 96.5 - 128.5), while that of Group B was 102.3 (range: 82.5 - 127.5). Group A had a significantly higher mean score than Group B ($p = .01$). In addition, there was a significant difference between the mean MCI scores of women in Group A and women in Group B ($p = .05$). Women in Group A tended to have a majority of scores in the Medium category whereas women in Group B had the majority of scores in the Low category. Although there was no significant difference in the mean MCI score between men in Group A and Group B, a trend was identified. Group A men tended to have more scores in the Medium category while Group B men had more scores in the Low category, similar to the findings for women in each group. There was no significant differences between the mean MCI scores for women and men within either group (see Tables 2 and 3).

The PCI combined scores were similarly divided into the three categories so that Low = 25 - 100, Medium = 101 - 110, and High = 111 - 125. The couples' mean PCI combined score for Group A was 100.7 (range: 85.5 - 121), while the mean for Group B was 98.3 (range: 89 - 107.5). There was no significant difference between

Table 1
Demographic Data

	Group A						Group B					
	Women		Men		Couples		Women		Men		Couples	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
<u>Age (Years)</u>												
17 - 25	10	62.5	7	43.8*	10	62.5	16	88.9	17	94.4*	16	88.9
26 - 37	6	37.5	9	56.2*	6	37.5	2	11.1	1	5.6*	2	11.1
<u>Years Married</u>												
0 - 1					6	37.5					7	38.9
1 - 2					5	31.25					7	38.9
> 2					5	31.25					4	22.2
<u>Education Level (Years)</u>												
10 - 14	9	56.25	8	50.0	8	50.0	14	78.0	12	66.7	13	72.2
> 14	7	43.75	8	50.0	8	50.0	4	22.0	6	33.3	5	27.8
<u>Income Levels</u>												
1 and 2					4	25.0					5+	29.4
3 and 4					8	50.0					9+	53.0
5					4	25.0					3+	17.6

* Significant at $p = .01$

+ One couple did not report income so $\underline{n} = 17$.

Table 2

Mean Communication Test Scores for Groups A and B

	Group A						Group B					
	Women		Men		Couples		Women		Men		Couples	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
<u>MCI</u>												
Low	3	18.75	5	31.25	2	12.5	8	44.5	11	61.1	9	50.0
Medium	11	68.75	9	56.25	12	75.0	6	33.3	5	27.8	8	44.4
High	2	12.5	2	12.5	2	12.5	4	22.2	2	11.1	1	5.6
<u>PCI Combined</u>												
Low	9	56.25	10	62.5	8	50.0	13	72.2	10	55.5	11	61.1
Medium	6	37.5	5	31.25	7	43.75	4	22.2	7	38.9	7	38.9
High	1	6.25	1	6.25	1	6.25	1	5.6	1	5.6	--	--
<u>PCI Verbal</u>												
Low	4	25.0	9	56.25	6	37.5	10	55.6	10	55.6	10	55.6
Medium	11	68.75	6	37.5	9	56.25	8	44.4	8	44.4	8	44.4
High	1	6.25	1	6.25	1	6.25	--	--	--	--	--	--
<u>PCI Nonverbal</u>												
Low	--	--	--	--	--	--	1	5.6	--	--	--	--
Medium	8	50.0	3	18.75	4	25.0	8	44.4	4	22.2	4	22.2
High	8	50.0	13	81.25	12	75.0	9	50.0	14	77.8	14	77.8

Table 3

Summary of Age and Test Scores

Variable	Group A Mean	Group B Mean	χ^2	df	p >
Age of Men	27.5	22.4	9.1	1	.01
Age of Women	25.5	22.0	3.22		
Mean MCI Score for Couples	107.5	102.3	9.465	2	.01
Mean MCI Score for Women	109.25	106.6	6.225	2	.05
Mean MCI Score for Men	105.75	98.1	3.28		
Mean PCI Combined Score:					
Group B: Women		97.1	11.11	2	.01
Men		99.6			
Mean PCI Combined Score:					
Group A: Women	101.1		.725		
Men	97.7				
Mean PCI Combined Score for Couples	100.7	98.3	1.62		

the mean combined PCI score for Group A and Group B. In addition, there was no significant difference between the mean PCI combined scores of Group A and Group B women or Group A and Group B men, or between women and men in Group A. Men in Group B had significantly higher mean combined PCI scores than Group B women ($p = .01$) (see Tables 2 and 3).

The PCI verbal scores were divided into Low = 18 - 70, Medium = 71 - 85, and High = 86 - 90. The couples' mean PCI verbal score for Group A was 72.7 (range: 62.5 - 89) while that of Group B was 71 (range: 58.5 - 80.5). There was no significant difference between the mean PCI verbal scores between or within either group. Thus, there was no significant differences in the verbal communication skills between the two groups (see Table 2).

The PCI nonverbal scores were divided into Low = 7 - 20, Medium = 21 - 25, and High = 26 - 35. The mean PCI nonverbal score for Group A was 26.8 (range: 23 - 32) while Group B's mean was 27 (range: 23.5 - 32.5). There was no significant difference between these means. In addition, no significant differences were found between the nonverbal PCI scores for women and men within either group, or between Group A and Group B women or between Group A and Group B men.

To summarize, Group A had a significantly higher mean MCI score than Group B; Group A women had a significantly higher mean MCI score than Group B women. There was no significant difference between the mean combined PCI scores of the two groups. However, Group B men had significantly higher mean combined PCI scores than

Group B women. There was no significant differences between mean verbal and nonverbal scores within or between groups.

There was no significant difference in the couples' mean ages between groups, however, Group A women tended to be older than Group B women and Group A men were significantly older than Group B men. There was no significant difference between income or educational levels of the two groups. This may have been a result of small sample size.

Since the results of the MCI test revealed a significant difference between the communication skills of the two groups, it would seem reasonable to expect that the PCI test would also show similar results. Since the PCI is a shorter test and the reliability and validity may not have been established, the results of the two tests might not intercorrelate. Because the results of the tests were not correlated to observed behavior, it cannot be assumed that they indeed measure communication skills accurately. In addition, a significant difference was found between the communication level of women and men in Group B as reflected by the combined PCI score. No significant difference could be isolated in the verbal and non-verbal scores for this group. The reason for this combination of findings is unclear and requires further study.

Data from this study suggest that couples who choose Lamaze Childbirth Education are a self-select group who are generally older and have better communication skills. Why this is so requires further investigation. Couples who may not relate as well to each other might be less likely to choose Lamaze preparation.

CHAPTER IV

SUMMARY AND RECOMMENDATIONS

A descriptive study of the communication skills of couples choosing Lamaze Childbirth Education and those couples not choosing Lamaze preparation was conducted in Salt Lake City. The study sought to answer the following question: Are the communication skills of couples choosing Lamaze better than couples not choosing Lamaze?

The total sample population of 34 couples was composed of Group A or couples choosing Lamaze ($N = 16$) and Group B or couples not choosing Lamaze ($N = 18$). Criteria selected to insure continuity of the sample populations included: Group A couples were to be taught by an ASPO certified instructor and couples in Group B were selected from non-Lamaze hospital prenatal courses. The population was tested from August to December 1979.

Husbands and wives completed separate copies of Instruments No. 1 and No. 2 and together completed the Demographic Data Sheet. Instrument No. 1, the Marital Communication Inventory or MCI measured the level of marital communication. Instrument No. 2, the Primary Communication Inventory or PCI measured communication in the primary group or married couple and is divided into two components, verbal and nonverbal skills.

Findings indicated that there was no significant difference in the mean age of couples in Groups A and B. However, men in Group A were significantly older than men in Group B ($p = .01$). Although women in Group A tended to be older than women in Group B, there was no significant difference between their mean ages. Huttel (1972) also reported the same trend. The significance of this age difference is unclear. Couples choosing Lamaze preparation are generally older and it could be speculated that they are a more mature group. In addition, the number of years married was not significantly different for the two groups. And surprisingly, there was no significant difference in the educational or income levels between the groups. This was in contrast to the findings reported by several authors (Goodwin, 1970; Hott, 1972; Hughey, 1978; Tanzer, 1967) who stated that couples choosing Lamaze are from a higher socioeconomic and educational level.

The results from Instrument No. 1, the MCI, by X^2 analysis revealed a significantly better communication level in Group A ($p = .01$). In addition, Group A women had a significantly higher mean MCI score than Group B women ($p = .05$). Although there was no significant difference in the mean MCI scores of Groups A and B men, the trend was for men in Group A to have more scores in the Medium category while Group B men had more scores in the Low category.

The results from Instrument No. 2, the PCI, by X^2 analysis did not reveal any significant difference between the communication of couples in Group A and Group B. However, Group B men had a significantly higher mean combined PCI score than Group B women ($p = .01$).

There was no significant difference between the verbal and nonverbal mean scores of women and men in Group B. This combination of findings requires further study.

In summary, results from the MCI tool revealed a significant difference between the communication skills of the two groups and the PCI tool did not. By analysis, the results of the MCI test showed that couples choosing Lamaze Childbirth Education have a significantly better communication level than couples not choosing Lamaze preparation. In addition, men in Group B had a high percentage of scores in the Low category on the MCI test and women in Group B had a high percentage of scores in the Low category on the PCI test. This data suggests that couples not choosing Lamaze Childbirth Education have poorer communication skills.

Recommendation for Further Study

1. Conduct another study similar to this one but using a larger population. Further study regarding the scoring of the two tests should be done prior to another study in order to better interpret the results.
2. Conduct a pre-post study with similar instruments and using the two groups to determine if communication skills can be improved by childbirth education.
3. Since the literature correlates good communication with a satisfying marriage, a study of expectant couples should be undertaken using a test to measure marital adjustment or satisfaction, such as Locke's tool, in a

pre-post design to determine if marital satisfaction can be improved with childbirth training.

4. Psychological makeup of husband and wife as well as their self-images, type of marriage, and locus of control should also be studied in both groups.

5. Since parenting skills may be related to communication, these skills should be further evaluated for both groups in a longitudinal, pre-post design.

6. There is a need to describe in what areas of communication, such as intimacy, decision-making, or dealing with conflict, couples choosing Lamaze preparation excel and what questions on the tests can discriminate these before applying the knowledge to all childbirth groups.

7. Observational and interview methods should be used in addition to the use of these written tests and correlations should be described.

Implications for Care

A review of the literature indicates that improved communication enhances marriage and that Lamaze-prepared couples have generally better marriages. Results of this study indicate that couples choosing Lamaze Childbirth preparation also have better communication skills prior to taking the classes than those couples who do not choose Lamaze preparation. Data suggest that couples choosing Lamaze Childbirth preparation are a self-select group, that is, they are generally older and have better communication skills. Since

Lamaze preparation fosters both verbal and nonverbal communication between partners, it would certainly seem wise to continue current classes and expand the growth of this type of childbirth preparation. Since class size must remain small to accommodate the one-on-one supervision and couple practice sessions, considerably more well-prepared educators will be needed.

It seems evident that because couples choosing Lamaze Childbirth Education are a self-select group, they will be an important population to continue to study. Much could be learned from this group. What is the significance of their better communication skills? How do they communicate and in what areas do they excel? What other factors should be considered such as their older age affecting marital stability and therefore their communication skills?

It would seem more reasonable to study Lamaze couples further to discover why they have more stable marriages and better communication. Results of further testing could provide professionals such as nurses, physicians, psychologists, social workers, or marriage counselors with valuable information which could improve all types of childbirth education classes regardless of whether natural childbirth was desired or not.

APPENDIX A

INSTRUMENT NO. 1: MCI

Note. From A counselor's guide to accompany a marital communication inventory by M. J. Bienvenu. Copyright 1978 by Family Life Publications, Inc. Reprinted by permission.

Male Form

	USUALLY	SOME-TIMES	SELDOM	NEVER
1. Do you and your wife discuss the manner in which the family income should be spent?	_____	_____	_____	_____
2. Does she discuss her work and interests with you?	_____	_____	_____	_____
3. Do you have a tendency to keep your feelings to yourself?	_____	_____	_____	_____
4. Is your wife's tone of voice irritating?	_____	_____	_____	_____
5. Does she have a tendency to say things which would be better left unsaid?	_____	_____	_____	_____
6. Are your mealtime conversations easy and pleasant?	_____	_____	_____	_____
7. Do you find yourself keeping after her about her faults?	_____	_____	_____	_____
8. Does she seem to understand your feelings?	_____	_____	_____	_____
9. Does your wife nag you?	_____	_____	_____	_____
10. Does she listen to what you have to say?	_____	_____	_____	_____
11. Does it upset you to a great extent when your wife is angry with you?	_____	_____	_____	_____
12. Does she pay you compliments and say nice things to you?	_____	_____	_____	_____
13. Is it hard to understand your wife's feelings and attitudes?	_____	_____	_____	_____
14. Is she affectionate toward you?	_____	_____	_____	_____
15. Does she let you finish talking before responding to what you are saying?	_____	_____	_____	_____
16. Do you and your wife remain silent for long periods when you are angry with one another?	_____	_____	_____	_____
17. Does she allow you to pursue your own interests and activities even if they are different from hers?	_____	_____	_____	_____
18. Does she try to lift your spirits when you are depressed or discouraged?	_____	_____	_____	_____
19. Do you avoid expressing disagreement with her because you are afraid she will get angry?	_____	_____	_____	_____
20. Does your wife complain that you don't understand her?	_____	_____	_____	_____
21. Do you let your wife know when you are displeased with her?	_____	_____	_____	_____
22. Do you feel she says one thing but really means another?	_____	_____	_____	_____
23. Do you help her understand you by saying how you think, feel, and believe?	_____	_____	_____	_____
24. Are you and your wife able to disagree with one another without losing your tempers?	_____	_____	_____	_____

	USUALLY	SOME-TIMES	SELDOM	NEVER
25. Do the two of you argue a lot over money?	_____	_____	_____	_____
26. When a problem arises between you and your wife are you able to discuss it without losing control of your emotions?	_____	_____	_____	_____
27. Do you find it difficult to express your true feelings to her?	_____	_____	_____	_____
28. Does she offer you cooperation, encouragement and emotional support in your role (duties) as a husband?	_____	_____	_____	_____
29. Does your wife insult you when angry with you?	_____	_____	_____	_____
30. Do you and your wife engage in outside interests and activities together?	_____	_____	_____	_____
31. Does your wife accuse you of not listening to what she says?	_____	_____	_____	_____
32. Does she let you know that you are important to her?	_____	_____	_____	_____
33. Is it easier to confide in a friend rather than your wife?	_____	_____	_____	_____
34. Does she confide in others rather than in you?	_____	_____	_____	_____
35. Do you feel that in most matters your wife knows what you are trying to say?	_____	_____	_____	_____
36. Does she monopolize the conversation very much?	_____	_____	_____	_____
37. Do you and your wife talk about things which are of interest to both of you?	_____	_____	_____	_____
38. Does your wife sulk or pout very much?	_____	_____	_____	_____
39. Do you discuss sexual matters with her?	_____	_____	_____	_____
40. Do you and your wife discuss your personal problems with each other?	_____	_____	_____	_____
41. Can your wife tell what kind of day you have had without asking?	_____	_____	_____	_____
42. Do you admit that you are wrong when you know that you are wrong about something?	_____	_____	_____	_____
43. Do you and your wife talk over pleasant things that happen during the day?	_____	_____	_____	_____
44. Do you hesitate to discuss certain things with your wife because you are afraid she might hurt your feelings?	_____	_____	_____	_____
45. Do you pretend you are listening to her when actually you are not really listening?	_____	_____	_____	_____
46. Do the two of you ever sit down just to talk things over?	_____	_____	_____	_____

Female Form

	USUALLY	SOME-TIMES	SELDOM	NEVER
1. Do you and your husband discuss the manner in which the family income should be spent?	_____	_____	_____	_____
2. Does he discuss his work and interests with you?	_____	_____	_____	_____
3. Do you have a tendency to keep your feelings to yourself?	_____	_____	_____	_____
4. Is your husband's tone of voice irritating?	_____	_____	_____	_____
5. Does he have a tendency to say things which would be better left unsaid?	_____	_____	_____	_____
6. Are your mealtime conversations easy and pleasant?	_____	_____	_____	_____
7. Do you find yourself keeping after him about his faults?	_____	_____	_____	_____
8. Does he seem to understand your feelings?	_____	_____	_____	_____
9. Does your husband nag you?	_____	_____	_____	_____
10. Does he listen to what you have to say?	_____	_____	_____	_____
11. Does it upset you to a great extent when your husband is angry with you?	_____	_____	_____	_____
12. Does he pay you compliments and say nice things to you?	_____	_____	_____	_____
13. Is it hard to understand your husband's feelings and attitudes?	_____	_____	_____	_____
14. Is he affectionate toward you?	_____	_____	_____	_____
15. Does he let you finish talking before responding to what you are saying?	_____	_____	_____	_____
16. Do you and your husband remain silent for long periods when you are angry with one another?	_____	_____	_____	_____
17. Does he allow you to pursue your own interests and activities even if they are different from his?	_____	_____	_____	_____
18. Does he try to lift your spirits when you are depressed or discouraged?	_____	_____	_____	_____
19. Do you avoid expressing disagreement with him because you are afraid he will get angry?	_____	_____	_____	_____
20. Does your husband complain that you don't understand him?	_____	_____	_____	_____
21. Do you let your husband know when you are displeased with him?	_____	_____	_____	_____
22. Do you feel he says one thing but really means another?	_____	_____	_____	_____
23. Do you help him understand you by saying how you think, feel, and believe?	_____	_____	_____	_____
24. Are you and your husband able to disagree with one another without losing your tempers?	_____	_____	_____	_____

	USUALLY	SOME-TIMES	SELDOM	NEVER
25. Do the two of you argue a lot over money?	_____	_____	_____	_____
26. When a problem arises between you and your husband are you able to discuss it without losing control of your emotions?	_____	_____	_____	_____
27. Do you find it difficult to express your true feelings to him?	_____	_____	_____	_____
28. Does he offer you cooperation, encouragement and emotional support in your role (duties) as a wife?	_____	_____	_____	_____
29. Does your husband insult you when angry with you?	_____	_____	_____	_____
30. Do you and your husband engage in outside interests and activities together?	_____	_____	_____	_____
31. Does your husband accuse you of not listening to what he says?	_____	_____	_____	_____
32. Does he let you know that you are important to him?	_____	_____	_____	_____
33. Is it easier to confide in a friend rather than your husband?	_____	_____	_____	_____
34. Does he confide in others rather than in you?	_____	_____	_____	_____
35. Do you feel that in most matters your husband knows what you are trying to say?	_____	_____	_____	_____
36. Does he monopolize the conversation very much?	_____	_____	_____	_____
37. Do you and your husband talk about things which are of interest to both of you?	_____	_____	_____	_____
38. Does your husband sulk or pout very much?	_____	_____	_____	_____
39. Do you discuss sexual matters with him?	_____	_____	_____	_____
40. Do you and your husband discuss your personal problems with each other?	_____	_____	_____	_____
41. Can your husband tell what kind of day you have had without asking?	_____	_____	_____	_____
42. Do you admit that you are wrong when you know that you are wrong about something?	_____	_____	_____	_____
43. Do you and your husband talk over pleasant things that happen during the day?	_____	_____	_____	_____
44. Do you hesitate to discuss certain things with your husband because you are afraid he might hurt your feelings?	_____	_____	_____	_____
45. Do you pretend you are listening to him when actually you are not really listening?	_____	_____	_____	_____
46. Do the two of you ever sit down just to talk things over?	_____	_____	_____	_____

APPENDIX B

SCORING KEY FOR MCI

Note. From A counselor's guide to accompany a marital communication inventory by M. J. Bienvenu. Copyright 1978 by Family Life Publications, Inc. Reprinted by permission.

Item	Usually	Sometimes	Seldom	Never
1	3	2	1	0
2	3	2	1	0
3	0	1	2	3
4	0	1	2	3
5	0	1	2	3
6	3	2	1	0
7	0	1	2	3
8	3	2	1	0
9	0	1	2	3
10	3	2	1	0
11	0	1	2	3
12	3	2	1	0
13	0	1	2	3
14	3	2	1	0
15	3	2	1	0
16	0	1	2	3
17	3	2	1	0
18	3	2	1	0
19	0	1	2	3
20	0	1	2	3
21	3	2	1	0
22	0	1	2	3
23	3	2	1	0
24	0	1	2	3
25	0	1	2	3
26	3	2	1	0
27	0	1	2	3
28	3	2	1	0
29	0	1	2	3
30	3	2	1	0
31	0	1	2	3
32	3	2	1	0
33	0	1	2	3
34	0	1	2	3
35	3	2	1	0
36	0	1	2	3
37	3	2	1	0
38	0	1	2	3
39	3	2	1	0
40	3	2	1	0
41	3	2	1	0
42	0	1	2	3
43	3	2	1	0
44	0	1	2	3
45	0	1	2	3
46	3	2	1	0

Total: _____

APPENDIX C

INSTRUMENT NO. 2: PCI

Note. From Communication and adjustment in marriage by L. Navran, Family Process, 1967, 6(2), 178-179. Copyright 1967 by Family Process, Inc. Reprinted by permission.

	Very Frequently	Frequently	Occasionally	Seldom	Never
1. How often do you and your spouse talk over pleasant things that happen during the day?					
2. How often do you and your spouse talk over unpleasant things that happen during the day?					
3. Do you and your spouse talk over things you disagree about or have difficulties over?					
4. Do you and your spouse talk about things in which you are both interested?					
5. Does your spouse adjust what he (she) says and how he (she) says it to the way you seem to feel at the moment?					
6. When you start to ask a question, does your spouse know what it is before you ask it?					
7. Do you know the feelings of your spouse from his (her) facial and bodily gestures?					
8. Do you and your spouse avoid certain subjects in conversation?					
9. Does your spouse explain or express himself (herself) to you through a glance or gestures?					
10. Do you and your spouse discuss things together before making an important decision?					
11. Can your spouse tell what kind of day you have had without asking?					
12. Your spouse wants to visit some close friends or relatives. You don't particularly enjoy their company. Would you tell him (her) this?					
13. Does your spouse discuss matters of sex with you?					
14. Do you and your spouse use words which have a special meaning not understood by outsiders?					
15. How often does your spouse sulk or pout?					
16. Can you and your spouse discuss your most sacred beliefs without feelings of restraint or embarrassment?					
17. Do you avoid telling your spouse things which put you in a bad light?					
18. You and your spouse are visiting friends. Something is said by the friends which causes you to glance at each other. Would you understand each other?					

	Very Frequently	Frequently	Occasionally	Seldom	Never
19. How often can you tell as much from the tone of voice of your spouse as from what he (she) actually says?					
20. How often do you and your spouse talk with each other about personal problems?					
21. Do you feel that in most matters your spouse knows what you are trying to say?					
22. Would you rather talk about intimate matters with your spouse than with some other person?					
23. Do you understand the meaning of your spouse's facial expressions?					
24. If you and your spouse are visiting friends or relatives and one of you starts to say something, does the other take over the conversation without the feeling of interrupting?					
25. During marriage, have you and your spouse, in general, talked most things over together?					

APPENDIX D

SCORING SHEET FOR PCI

Note. From Communication and adjustment in marriage by L. Navran, Family Process, 1967, 6(2), 180. Copyright 1967 by Family Process, Inc. Reprinted by permission.

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<u>Own Test</u>	<u>Test of Spouse</u>	<u>Verbal</u>	<u>Nonverbal</u>
1 _____		1 _____	
2 _____		2 _____	
3 _____		3 _____	
4 _____		4 _____	
_____	5	5 _____	
_____	6	_____	6
_____	7	_____	7
8 _____		8 _____	
_____	9	_____	9
10 _____		10 _____	
_____	11	_____	11
12 _____		12 _____	
_____	13	_____	
14 _____		14 _____	
_____	15	_____	15
16 _____		16 _____	
17 _____		17 _____	
18 _____		_____	18
19 _____		19 _____	
20 _____		20 _____	
_____	21	21 _____	
22 _____		22 _____	
23 _____		_____	23
_____	24	24 _____	
25 _____		25 _____	
<hr/>			
Total: _____	Totals: Verbal _____	Nonverbal _____	

APPENDIX E

DEMOGRAPHIC DATA SHEET

_____ / _____ / _____	
Last Name	First Name Husband's Name
_____ / _____	
Address	Telephone Number
_____ / _____ / _____	
Your Age	Husband's Age Number of Previous Pregnancies
_____ / _____ / _____	
Your Doctor's Name	Due Date Hospital
_____ / _____ / _____	
Number of Years Married	Highest Level of Education: Yours Husband's
_____ / _____	
What religion are you?	What ethnic background are you? (Ex: Caucasian, Spanish, Indian)

* * * * *

What is the range of your family income? (Please circle one)

Less than \$5,000

\$5,000 - \$10,000

\$10,000 - \$15,000

\$15,000 - \$20,000

Greater than \$20,000

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