

Researching Recruitment Challenges in Low-Income Marriage Education Programs

Introduction and Context for Study

In January of 2003, the Oklahoma Marriage Initiative (OMI) was at a pivotal point in their operational progress. The OMI had sponsored workshop leader training on the Prevention and Relationship Enhancement Program (PREP) since August of 2001. This resulted in 450 individuals completing the full three-day training with signed agreements to deliver four workshops over the 12 months following their training date. However, by early January '03 records showed that only 81 workshops had been reported by these leaders with 1,182 citizens completing the full twelve hours of PREP. In consultation with their senior advisors and members of the OMI Research Advisory Group (RAG), the staff went into action by launching a 30-minute open-ended qualitative interview study with their trained workshop leaders to find out what was happening "out there." This internal research entitled *Project 450* provided helpful information for the OMI which by that time had spent close to four million state-allocated dollars to reach healthy marriage related program objectives (Public

Strategies, Inc. [PSI], 2003).

Although the most significant findings of that particular study had to do with under-reporting and feelings of low-confidence in the subject matter delivery, a secondary finding was that over half of the workshop leaders (53.4%) answered "Yes" to the statement: "It is difficult to recruit couples to the workshops." Other findings showed that leaders needed support by way of receiving referrals for workshops (34.7%),

workshops (34.7%), or had attempted workshops but had experienced poor attendance and felt discouraged (24.3%). Beyond these findings,

Over half of the workshop leaders (53.4%) stated that "It is difficult to recruit couples to the workshops.

when asked how the OMI could better support their efforts, the second greatest response was to ask for media or marketing support for recruiting participants to the workshops (PSI., 2003).

While this illustration is not focused on the delivery of marital education to low-income couples in particular (the OMI estimates that just under half served qualify as "lowincome" by federal standards), it does set the stage for a more general and overarching problem that now seems to be evolving across the nation as healthy marriage initiative programs and research projects commence:

Recruiting couples generally, and low-income couples specifically, to marital education classes is difficult.

Since the *Project 450* exploration, two national healthy marriage programmatic interventions were been launched with the intention

Recruitment is frequently named as one of the initial goals of the larger HMI activities in progress.

of researching the effectiveness of marriage education on targeted low-income populations. These two national projects, Building Strong Families

(BSF) and Supporting Healthy Marriages (SHM), were soon followed by a number of locally operated demonstration grant programs including adoption, child support enforcement, and refugee resettlement related interventions with healthy marriage components. And more recently but certainly not least, close to 250 various programs that include healthy marriage components blanketed the country after a spectrum of social service operations were awarded grants stemming from a provision within the Deficit Reduction Act of 2005. With this rapid growth in HMI activity,

the question on many leaders' minds was: "Now that we're building it, will they come?" (Horn, 2006). The "will they come" phrase is another way to articulate that *recruitment* is key to successful program operations.

Recruitment is frequently named as one of the initial goals of the larger HMI activities in progress. A publication produced by the Building Strong Families (BSF) project lists "Brainstorming on outreach and recruiting *methods*" as the second planning point of technical guidance offered for their pilot sites (Mathematica Policy Research, Inc.[MPRI], 2003). Similar objectives for these multi-site research projects such as Supporting Healthy Marriages (SHM) include, "Service providers who become part of the SHM project will recruit and serve..." [their targeted populations of married, low-income couples, and that because marriage education may be associated with therapy], "Recruitment materials should be designed to counteract this and other perceived stigma (MDRC, 2005)." These goals are articulated in program protocols because the target populations for both the BSF and SHM projects include mainly low-income, minority or vulnerable populations (described frequently in social science literature as "high mobility"). When high mobility individuals are the target audience, the additional stress they generally experience directly impacts recruitment success.

Recruiting both partners in a lowincome couple relationship, whether married, re-married, or "planning to marry" may be even more difficult than recruiting individuals (Adler-Baeder & Higginbotham, 2004; Ooms & Wilson, 2004). Mike Fishman, a Senior Vice President of the Lewin Group, provides technical assistance to many of the ACF HMI grantees and programs. He writes, "Many programs have said that recruiting low income couples isn't realistic—they settle for single mothers and say that it is still important to build their relationship skills and orientation toward marriage (M. Fishman, personal communication, July 22, 2005)." Barbara Devaney, a project officer of BSF provides this similarly related comment:

"Recruiting and engaging couples in marriage education programs is a challenging endeavor.

To be successful, both members of a couple need to enroll and participate on an ongoing basis. Yet, couples are made up of individuals, who have their own attitudes, needs, desires, schedules, and personal barriers. Successful recruitment strategies need to be multipronged, creative, and flexible (D. Ellis, personal communication, July 22, 2005)."

There may be gender related circumstances recruitment challenges as well. Research points to low-income males in particular as having attitudinal barriers about seeking help or assistance from government-funded agencies (Baron & Sylvester, 2002). This problem seems perhaps even more critical when, on balance, martial education is suggested as being at least one resource low-income couples can turn to in order to handle the multiple stressors they are likely to experience, especially in light of better potential child outcomes (Edin & Kefalas, 2005). If males represent one-half of the couple relationship population, then finding better ways to reduce or remove recruitment barriers will be imperative.

So what do we know about recruiting and what do we still need to know in order to help support these programs? At the time our research grant was written in 2005, limited information was accessible and applicable to this topic. However, there were efforts that informed the field about: (1) recruitment of low-income couples into prevention programs; (2) the venues of service delivery that may be most comfortable; (3) what might be important to men; and, (4) multiple constraints or barriers from a pilot study that used theoretically relevant topics from a major multidisciplinary review of barriers to help-seeking. A

brief literature review of these four keys areas is covered and then a summary of literature since we began this project is offered at the end of this section. We wanted to keep the two time points separate in order for those studying this area to see how recruitment evolved in the literature between 2005 and 2009.

Recruitment literature findings to 2005

In terms of recruiting families (including both partners) to prevention programs of all types, we know that rates are typically low (Braver, 1989). A key reason is that "prevention programs, by definition, serve those who are not currently experiencing the problem for which they are at risk. Without an obvious current problem, targeted individuals need a high level of motivation to outweigh the perceived costs of participating (e.g., time, effort, self-consciousness, possible shame) " (Dumka, Garza, Roosa, & Stoerzinger, 1997). Dumka, et al., provide an example of this research using a culturally adapted parenting program for African Americans. They reported that "in the first cohort, 25% of available subjects said they would participate, but only 14% did so, and in the second cohort, 13% agreed to participate but only 6% actually did. Thus despite systematic recruitment efforts, they enrolled only a

small portion of their target population" (Dumka, et. al, 1997, pg. 26). It also becomes apparent that tailoring preventative efforts to "the particular needs and culture of the couples being served" (Silliman, et. al, 2002) is a frame for any proactive modifications being considered.

Specifically related to marital education and low-income couples, we know that "Religious organizations may be in a very strong position for helping couples of all kinds because they tend to be very embedded in the culture in which the couples live (Stanley et. al, 1995)." Of venues and specifically on the topic of male responsiveness, Theodora Ooms of the Center for Law and Social Policy (CLASP) writes, "I'm coming to the conclusion that marriage education programs should be offered to low income couples as part of a component of a program or setting where they already come for services, and especially where men are comfortable (T. Ooms, personal communication, July 22, 2005)." And about low-income populations, venues, and the male gender, Mark Eastburg, Ph.D., Executive Director of the Healthy Marriages Grand Rapids program writes:

> One of the keys to recruiting low income participants to voluntary marriage related programming is trust.

Recruitment is far more effective when potential participants trust the organization where services will be provided, trust the persons suggesting that they attend, trust that the materials apply to their situation, and can rapidly form a trusted relationships with presenters because of common life experiences or demographics. This principal seems to be particularly important in recruiting men (M. Eastburg, personal communication, July 19, 2005).

Finally, some of "what we know" are key findings in a survey project funded by the Oklahoma Department of Human Services (OKDHS) and administered to a randomized sample of Oklahomans in order to identify barriers to seeking marital education services (Fournier & Roberts, 2003). Those findings show that for Oklahomans, the venue of service delivery is important and there are specific data for low-income individuals that are different from the general population in this area; an element of "trust as important" is signified by the male responses when asked about their preferred service provider and the credentials they carry; and, the faith community is trusted by the majority of those surveyed as "gatekeepers" to marital services, be it education, inventories, or counseling.

However, there were two other key findings from Fournier & Roberts (2003) that are very important to the illumination of this problem in the area of barriers at the individual, couple, and environmental levels. Their analysis identified that the strongest "constraint" or barrier to attending marital education programs was the phenomenon of the "couple jointly agreeing to go". Eighty-five percent of the low-income population also self-reported being "bad or very bad" at problem solving. Considering that agreeing together as a couple to attend these programs is a problemsolving exercise, then this "barrier" needs further confirmation on a national level. In addition, new data are needed from low-income couples surrounding the topic of participating in these programs in order to find what this particular and very strong barrier "looks like." By doing this, programs will be better informed by having specific and targeted information to implement in their recruiting strategies to specifically address the removal of these strong couple (and potentially internal or external) barriers to participation.

Recruitment literature findings 2005-2009

Although these findings were not available when the proposal was written for this project, we feel it is important to help guide any future work with recruitment by offering the following a brief updated overview. Further, because the discussion section at the end of this report will only include comments related to the three research projects within this grant, we felt the most appropriate place for this overview would simply be to place these comments in the literature review section. See Appendix A for a more in depth review as well as an annotated bibliography of these comments and all our updated review work:

- The easier a program is to implement, the great the likelihood it will be implemented as intended by the program developers. Web-based technologies may be useful for in-school prevention programs that require teachers to complete paperwork, word-processing, and other administrative tasks associate with delivery (Bishop et al, 2006).
- Payment is an effective strategy to increase the recruitment rate and initial attendance of low-income families. Offering low-income family's payment for their participation in a parenting prevention program resulted in a 20% increase in recruited

- families. Payment is most effective for motivating lowincome parents to come to at least one session (usually the first one). Once parents experience the context of the training, they seemed to become selfmotivated to attend regularly and the payment became less pertinent. Setting: individual vs. group; home vs. public - does not influence recruitment. From a cost-effectiveness standpoint, this result is promising. Appropriate incentives as well as a foreseeable number of program hours may lead to good participant involvement (Heinrichs, 2006).
- Identify key organizations and gatekeepers, and focus on building relationships with them. Utilize existing communication channels and networks within the organization to promote the program. Allow ample time for recruitment. Be flexible and adaptable, and modify recruitment strategies to fit in with the existing structure of the organization. Ensure that recruitment materials and strategies are culturally sensitive, developmentally appropriate, and speak to the needs and interests of the intended audience (Thompson, et al., 2006).

• And finally, younger males are less likely to access help such as behavioral health services than older females. And, never married individuals are more likely to seek these types of services than married individuals (Mackenzie, Gekoski,& Knox, 2006; Pederson & Vogel, 2007).

These studies and others noted in Appendix A are interesting in that they either build upon the findings and subsequent recommendations in this project, or reinforce other research used to support the case for this project.

In sum, there are several largescale problems associated with recruitment for marriage education programs:

- To date, HMI recruitment efforts are not generally reaching targeted expectations. There are several reasons for this, one being that recruitment efforts are time, labor, and resource intensive;
- Recruitment strategies tend to be unclear and inconsistent (the latter being an artifact of the former);
- Furthermore, we still lack an understanding of which mechanisms within the recruitment processes are effective, which are ineffective, and which are counterproductive.

Again, these are large-scale problems and questions, and one research project cannot hope to discover all the complementary solutions. However, it is possible to make progress on these issues and provide data and strategies which may better inform future recruiting efforts. Hence, for this project our plan was to:

- *Synthesize the current recruitment* practices of large marriage initiative programs across the country. A comprehensive understanding of what strategies are currently being employed and how effective those strategies are judged to be by those implementing them is critical before moving forward. With the amount of federal. local, and private dollars being invested in marriage education programs for low-income couples and families it is essential to understand these couples' perceptions of such programs and their likelihood of utilizing such services. As such, we also -
- Surveyed a nationallyrepresentative sample of low-income
 couples for their perceptions of
 marriage education and their
 willingness to utilize such programs.
 Our pilot data suggested that
 a key barrier to low-income
 couples' help-seeking is their poor

problem-solving behavior. Thus, -

• An observational component was also incorporated into this project where a sample of low-income couples (and a control group) participated in a problem-solving conversation in an observational laboratory. Our hope for this component was that it would shed much-needed light on the actual behavioral, emotional, and physiological processes that exist within low-income couples, and allow us to gauge how similar or different they are from their middle and upper income counterparts.

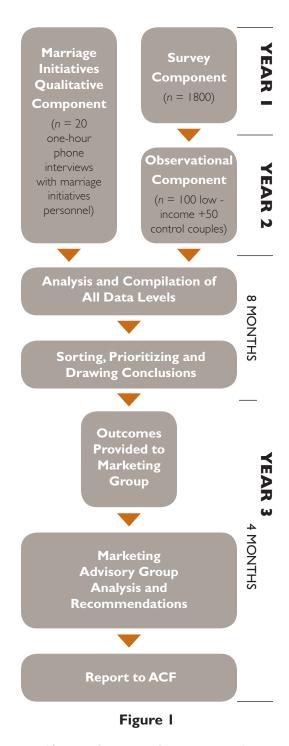
The resultant data from these three components—the synthesis of current recruitment practices, the survey of low-income couples' help-seeking attitudes and practices, and the observation of low-income couples' problem-solving interactions—was then funneled into a working group of individuals who understand how to market products and social services. This Marketing Advisory Group was responsible for putting together what they knew about current marketing/ recruitment practices with what we learned about the specific preferences and behavior of the target population and then made specific recommendations as to how recruitment strategies might be improved.

Research Project Model and Approach for Each Component

Approach

Our approach to understanding the challenges associated with recruiting low-income soon-to-be- and newlymarried couples into marriage education programs was a three-tiered undertaking designed to: 1) identify perceived barriers to help-seeking behavior using a previously piloted survey with a large (n = 1890), nationally-representative sample of low-income newly-married and soonto-be-married couples; 2) study the emotional content, communicative skill, and physiological reactivity of a small sample (n = 100) of couples from the same demographic, coupled with a control sample of similar couples with higher incomes (n = 50); and 3) assess and summarize current recruiting efforts/practices of largescale marital education and initiative programs.

This approach was followed up with the data and findings being reviewed by OSU Marketing faculty in order to apply the findings by creating recommendations based upon best marketing practices in social science prevention programs. See Figure 1 for a visual representation of the research project model.



National Survey Component

The purpose of the national survey

component of this project was to replicate our Help Seeking Survey (HSS) pilot data (obtained



from an Oklahoma sample) with a nationally-representative sample of low-income individuals, ages 18-35, who were members of a couple either newly married or are currently planning to marry.

The Help Seeking Survey was originally created by reviewing 120 marriage and family science professional journal articles to identify individual, couple, and environmental level constraints that keep people from seeking marriage education services. To qualify as a "constraint" or barrier variable, evidence had to be present within the article that a negative feedback loop, an issue named as a problem which is also dynamically keeping the problem from being solved as well, was present at one of these levels. An example of this type of constraint might be a person having feelings of anxiousness about their marriage because something is going badly within their relationship. So, they then might try and raise the issue of their relationship, but because of the anxiety - push the issue in an unhealthy way. An interactive escalation might then take place between them and their partner about the issue, influencing it to remain unresolved. Therefore, the result of attempting to solve the problem creates even more anxiety, thus continuing to exacerbate the problem even more as time goes along.

There were eight individual level, eight couple level, and three environmental constraints in the original survey and the original HSS form was administered in a paper/pencil format. The form was modified and turned into a twelve minute telephone interview. The survey component was carried out during year one of the project. See "Survey Report" on page XX for a full description of that component and an overview of the primary findings.

Observational Component

Component
(n = 100 low - income +50 control couples)

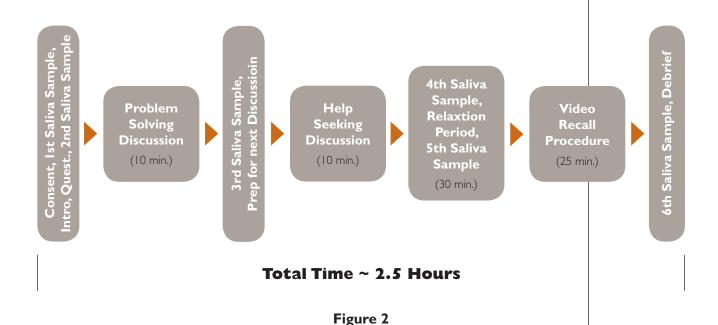
Our pilot (survey) data suggested that the greatest barrier to lowincome couples' participation in marital/couple education programs is their communication. Low-income couples consistently reported that "problem-solving" was a significant deficit in their relationship—more so than couples in different income groups-and that the actual conversation that the couple would need to have about attending such a program would be conflictual enough in and of itself to warrant not raising the issue at all. Thus, these data raise a couple of significant questions that we hoped to answer: First of all, do low-income couples actually communicate more poorly than do couples in different financial situations, or do low-income couples simply perceive that their communicative efforts are more problematic? And second, what do those conversations about seeking help through a couples education seminar or program look like? Are they fraught with negativity and highly conflictual interactions as they report, or are they actually less problematic than a couple's typical problemsolving discussions? The best way to address these questions was through observational research.

Recent findings from observational research of couples' communication have shed new light on the influence of behavior, affect (emotion), and physiology on the long-term outcomes of marital relationships. Among the most notable are those findings suggesting that communication skills and affect make differential contributions to relationship satisfaction over time, such that, over a six year period, large amounts of positive affect (e.g., humor, affection) can overcome deficits in communication skills, but frequent use of superior communication skills cannot overcome an abundance of negative affect (Johnson et al., 2005). Furthermore, others have reported that the single greatest predictor of marital dissolution at a 10-year follow-up was the level of stress hormones secreted during a marital interaction episode at time 1 (e.g., 10 years earlier; Kiecolt-Glaser, Bane, Glaser, & Malarkey, 2003). These studies demonstrate the

complexity inherent in close relationships, with the interactions of the behavioral, emotional, and biological spheres of two unique individuals. It was likely that low-income couples are even more complex due to the additional stressors that they experience in every-day living (Story & Bradbury, 2004). Thus, an observational component allowed us to develop a deeper understanding of the dynamics and relationship processes that accompany individuals and couples from this particular income stratum.

We proposed, in the second year of this project, to recruit 150 couples from two large metropolitan areas (Oklahoma City and Tulsa). We obtained a commitment from Crest Food Stores (a locally-headquartered grocer with stores in both cities) to allow us to place recruitment "sticky-notes" on

their grocery sacks. The notes were to offer newly- and soon-to-be-married couples \$100 for their participation in a 2 to 3 hour research project studying couple communication. Travel expenses were also to be covered (up to \$36 per couple). Interested couples used the provided phone number to contact project personnel who will screen for violence, mental illness, and income level. The first 100 couples who meet criteria and are below the poverty level were to be our study group, while the first 50 couples who meet criteria and are above the poverty level were to be our control group. See Figure 2 for a visual overview of the observational research protocol. See "Observational Report" on page XX for a full description of that component and an overview of the primary findings.



Marriage Initiatives Qualitative Component

(n = 20 one-hour phone interviews with marriage initiatives personnel)



In preparing for this proposal, exploratory conversations were held with individuals at many levels and areas within HMI work in order to test ideas, process potential paths of study, and to listen to their particular experiences with couple level recruitment. During these conversations, personal commentary was encountered ranging from exclamations such as, "Recruitment?! Challenging??!" delivered tongue-in-cheek, to deliberate dialogue about has been found to be helpful thus far. In fact, the preparation for this proposal became a small pilot study for mapping out this qualitative component that has been included in order to gain perspectives and best practice data from those engaging in HMI recruitment activities first hand. It is with the help of those mentioned in earlier citations, sound qualitative methodology, and information gained through previous studies and the collective experience of our project team and partnerships that we developed and implemented a qualitative interview component designed to glean the range of recruitment issues and information from those working with this experience firsthand. This component took place during years one and two of the project and the full report includes findings as well as a "Seven Steps to

Better Recruitment" promising practices tool for program managers and staff. See page XX for the full Qualitative Component report.

Marketing Group and Recommendations Phase

After the completion of the three main components (sub-projects), a methodical compilation and documentation wad made of all findings and was presented in a video recorded full day meeting including all members of the project team and both consultants from Spears' School of Business, Drs. Wiener and Mason. Other partners were invited to attend such as relevant ACF HMI leaders (invitations were channeled through the Dallas based Regional Office), leaders within the OMI, and other participants the OSU team, in conjunction with ACF oversight, felt should be included.

The project team presented a context and update on the project and key findings of all components. The team then turned the meeting over to Drs. Wiener and Mason who will facilitated an introductory overview into the process of applying these findings to marketing theories and principals. They then offered specific recommendations based upon the research project data and these marketing theories. Finally, they facilitated group discussions among the attend-

ees for any feedback to put into the final draft of this report. See page XX for a summary written by the Marketing faculty over the summary data, marketing principals and any information gained from the culminating meeting with the marriage education programmers.

As is with any research project, the end of the work brings big picture talking points, questions for further studies, considerations and suggestions for improvements if next steps are taken, etc. The "Discussions" section of the report found on page XX will include these areas of consideration as well as comments on the multiple Appendices included as resources for the readers. It is our hope that you find some helpful piece of information within each sub-report of the components, or that you find confirmation of activities you are doing well in your own healthy marriage education or other prevention program.



Qualitative Component

In preparing for this research segment of our project, Delphi studytype conversations were held with individuals at many levels and areas within current HMI work in order to test ideas, process potential paths of study, and to listen to their particular experiences with couple level recruitment. During these conversations, personal commentary was encountered ranging from exclamations such as, "Challenging? Are you kidding?!" delivered tongue-in-cheek, to deliberate dialogue about what has been found to be helpful thus far. In fact, the preparation for this proposal became a small pilot study for mapping out this qualitative component that has been included in order to gain perspectives and best practice data from those engaging in HMI recruitment activities first hand.

This component took place during years one and two of the project with the following developmental and operational steps completed:

1. A letter was drafted to each of the Family Life and Marriage Program Specialists within the ACF Regional Offices requesting a one-half hour phone meeting time to discuss this project and ask for a recommendation of one or two marriage initiative projects within their respective regions

that might be helpful and willing to provide comprehensive recruitment information. We requested that these programs recommended for the study, whether categorized as Service Delivery Settings (SDS), Community Healthy Marriage Initiatives (CHMI) or other broad category, would have been in operation for at least two years so as to maximize the potential information threshold attained for optimum informational feedback. We estimated this phase would take approximately three months after roll-out for completion. Twenty nominations were requested (two from each region), and 18 were initially received. In a second round of requests, two more nominations were received

2. Once the recommendations and contact information were compiled, a study packet was constructed and mailed to each program containing: an introductory letter, a guide for data being requested, a release form for the interview component and data sent, and a request for a digitally recorded conference call wherein a qualitative interview would take place with their key staff or leadership most familiar with this subject, and a large postage-paid return envelope in which they could voluntarily compile information we needed for this study then return it to OSU.

3. A follow up call was made to

each site two weeks after shipping these packets in order to set up appointments for the interview calls. Contacts were made with the nominated programs between October of 2006 and May 2007. Averages of 6.5 separate contacts were made with the programmers in order to set up interview appointments. Of the twenty total nominations, 14 one-hour, open ended-qualitative interviews were conducted. A total of 15 transcripts were analyzed because the National Healthy Marriage Resource Center (NHMRC) had conducted a webinar over the topic of recruitment challenges and that discussion was also transcribed for analysis. The calls took place most generally as scheduled and included descriptive and qualitative questions such as:

What type of program is this?

What type of services are offered?

What populations are targeted

What recruiting efforts worked?

What did not?

Specific experience w/low income groups?

What data is kept – programmatic, dedication of hours to task, dollars spent on materials or recruiting programs, other?

What would they be willing to share?

What is public record?

Have they articulated outcomes or goals for recruitment?

How did they set them?

When did they meet them?

Describe most difficult recruitment experience.

Describe best "pleasantly surprised" experience.

What populations are targeted?

Do they calculate cost/benefit of recruitment?

How would that take place if so?

During this interview, we asked follow up questions to the framework of stimulus items planned in order to unfold any relevant detail. These interviews were conducted by Kelly Roberts and Jennifer Patterson who have worked on research projects related to HMI work, rendered technical assistance to HMI projects, or worked directly in HMI work for the past four years. Therefore, the language and responses had a higher likelihood of common context, the interview time was utilized the most efficiently due to the general foundational work already having been internally assimilated, and the most relevant follow up questions will be asked due to their knowledge of what might be missing from the response or what might be new progress cited or additional information needed as the interview moves through its course.

- 4. Follow up queries were made regarding the informational packet sent, the HMI project's ability and willingness to send any descriptive or quantitative data that would be helpful in calculating cost/benefit ratios, and any other back-up documentation mentioned as helpful during the interviews.
- 5. The recordings were then be transcribed by the OSU Bureau for Social Research, the packets were analyzed and those data compiled, and once the transcriptions were received, appropriate qualitative tables were generated and collapsed into coding variables for analysis and interpretation. Methodology and feedback consultations were held during team meetings to ensure all variables and levels of applicable mechanisms to the recruitment processes were considered.
- 6. These data were then put into summary form and turned into a completed sub-section of this project for assimilation into the project reports, to use as a tool for the recommendation phase, and to provide feedback to those who participated in

the study should they request copies of the results.

Summary of findings

The summary of findings include the following topical areas: recruitment challenges experienced, successes, best practices found in secondary analysis, collective information to create a model of program recruitment development, and answers desired by the investigators but not found in by conducting this study.

This summary must also be taking into context by what type of programs provided the information, what curriculum they were delivering, they style or type of delivery, from what sourced they received their funding and how mature they were in their own program operations. The following is descriptive overview of those interviewed:

• Sample Overview

- Funding: Child Support
 Enforcement (8); Refugee
 Resettlement (2); Adoptive
 Couples (2); Other (3)
- Format: small group (8); retreat (2); other (3)
- Low Income: 8 grantees working specifically with low income population
- Curriculum: Family Wellness

(3); PREP (3); Active Relationships (2); Louisiana curriculum (2); Other (5)

Common recruitment challenges reported included these following summary points:

- Most grantees did not initially start with a recruitment plan; that they assumed recruitment would come much easier than it actually did.
- They had to re-channel funds so other planned components suffered due to initial lack of recruitment considerations.
- Marriage education buy-in from state agency case workers and even their own staff was much more difficult than anticipated.
- Programs had to change expectations in their initial targeted populations to be recruited. See Figure XX.
- Staff turnover in their own program and within community partnerships resulted in high level resource draining retraining tasks, and this continued process influenced degrees of lowered programmatic morale.
- Because the program managers initially neglected to articulate individual workshop recruitment

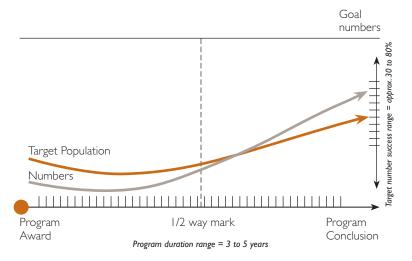
goals, data related to recruitment is spotty. Because of this lack of feedback data, they found it difficult to know what was working.

- Programs had staff mismatched to recruitment roles (e.g. "people" staff were in administrative roles, and administrative or "nonpeople" staff were in recruitment roles).
- And, common "emotional" or anecdotal responses recorded were that between 30 and 50% of time, energy and dollars were spent on recruitment as opposed to how programmers initially planned to channel these resources—toward service delivery.

Further analysis of challenges reported showed that by and large, those interviewed were unaware of resources spent on recruiting, felt it was never-ending, and that their teams were always working toward making numbers for the next workshop. The data show that estimates of programmers put them between one-third and one-half way through their grant timeline before they had a handle on the issue of recruitment (See Figure XX). And finally, the largest "lament" from programmers who were new to the field or new to marriage education service delivery

was that it is very difficult to engage populations with multiple stressors, such as low-income or vulnerable populations.

HMI Program Low-Income Couples Recruitment Development Model



Most programs reported that they would initially get the targeted numbers they needed for each service delivery, but then would quickly get behind once they had saturated all their initial ideas for recruitment. They also reported that while their initial workshops "looked" most generally like their target population, they would very quickly start thinking about ways to open up the delivery demographically and modify what they had otherwise considered at first to be the only population to which they would provide services. This graphic shows that over the length of their program tenure, most programs would eventually end up with between 30 and

80% of the number of persons they had budgeted to serve. Those interviewed reported feeling even less successful "who whom" they delivered services because they modified their initial target population by a large extent in order to achieve their actual recruitment numbers.

Common recruitment successes

found in the study were less in number than the challenges, but the theme counts were as strong or stronger than those in the "challenge" category. These findings follow the well known relationship adage that there are many things you can do wrong, but you only need to learn how to do a few right to improve your relationship...or in this case, recruiting.

- First, the program mangers (PMs) saw an increase in the degree of success when they utilized technical assistance available to them and/or other informational sharing venues.
- They found nuggets within "niche" databases such as voter registration files and particular programs had partnerships with their target population or were linked to contact files of those target populations.

- Built in recruitment personnel were the biggest support for one particular program; they hired a ten hour per week employee specifically for recruitment and coalition building.
- * There were those who found funding external to their program dollars for recruitment support.
- * By and large, "in-person" activity/
 contact and "word of mount" far
 exceeded all other recruitment
 attempts such as electronic media,
 newspaper, billboards, etc. Removing
 standard or immediate barriers
 showed incremental increases in
 numbers (child care, served fool/
 meals, provided transportation, etc.).
- * And finally, over-recruiting for large group retreat formats was necessary due to multiple stressors of those they were serving (low-income or vulnerable populations), however this over recruitment did result in success.

A promising practices model was formulated from the data collected in this study. The "7 Steps to Maximizing Programming for Vulnerable Populations" include the following:



Plan for recruitment processes right from the start...especially program resources dedicated to recruitment. Get buy-in early and at top levels of program, community and human service area/connected systems.

Identify your own particular contextual niches as specifically as possible, at all levels (micro to macro).

Match program personnel with appropriate skills to maximize capacity of both staff and recruitment tasks.

Expand potential capacity by attaching recruiting to all other programmatic tasks.

Find out early in your program timeline specific details about your target populations...not just where they are, but what has meaning for them.

Reward staff for recruitment successes. Buy-in must come first from your own program.

Information initially hoped for but not found from the data collected was mostly cost effectiveness and recruitment plan budgeting documents/ files. Attempts to gain some degree of understanding of what a dollar spent on recruiting would equate to were not successful. Only two of the pro-

grams interviewed provided us with their recruitment data. One program sent budgetary information, but we did not feel that it would be useful to share this information because that particular program was so much further developed than any of the others and was funded by state-allocated TANF dollars when all the rest were funded with much smaller federal grants. The other program sent us fliers and brochures they used, but most all of these as well as more useful examples can now be found on the "Communities of Practice" site within the National Healthy Marriage Resource Center.

Our research team realizes that the time and energies of most all the programmers interviewed was very precious. That said, we are grateful for their time and the rich information gleaned from these interviews. We are truly thankful for their participation.

Survey Component: Summary of Findings

Rationale

A national telephone survey was conducted in ten cities throughout the U.S. to measure attitudes and behaviors related to marriage and relationship education (MRE). The purpose of this survey was to replicate a pilot study completed a few years earlier in Oklahoma over help-seeking

behaviors related to MRE (n = 890).

Findings from the pilot survey showed that some of the greatest barriers to couples attending MRE classes were the couple "agreeing to go together," and having difficulty "problem solving" solutions related to attendance. Also measured in the survey were opinions related to preferred language when talking about MRE classes, what kind of decision making process would be followed, and if individuals were open in general to attending any kind of services such as marital consultation or therapy. Finally, general barriers such as transportation, child care or caring for other family members, health and other issues were measured to provide additional context to assessing problems related to recruitment.

By replicating the Oklahoma survey, our goal was to see if the findings related to recruitment challenges in Oklahoma replicated nationally, or, if there were distinct differences once a larger opinion pool was included.

Methodology

The largest of each metropolitan area within each of the ten Administration for Children and Families (ACF) regions was selected for sampling. In conjunction with Kelly Roberts, co-PI on the project, the Oklahoma State University Bureau for Social

Research (BSR) obtained a sample of 8,000 resident names and mailing addresses from random households, 800 in each of the ten study cities. The sample was targeted toward young (i.e., 18 – 35 years of age), low-income households in neighborhoods with a high proportion of minority heads of household. Extensive census data research was conducted to target the geographical areas and zip codes most likely to contain the greatest number of the target population.

Packets containing the recruitment letter, form and business reply envelope were compiled. Recruitment packets were mailed to the following cities: Portland, Los Angeles, Denver, Houston, St. Louis, Chicago, Philadelphia, the Bronx, and Miami and Providence. The survey instrument was programmed into Ci3 scripting software, and the study was set up in the WinCati interviewing software. The BSR coordinator hired and trained three additional Spanish-speaking interviewers specifically for the Recruitment Challenges project in order to manage the needs of the project.

The BSR team worked over a period of four months collecting data, and another two months cleaning and extrapolating the data and qualitative files. A total of 1,112 total respondents completed the survey and were paid \$25 for participating. They were also

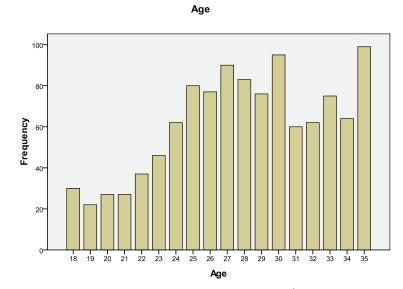
paid \$5 for each additional referral that completed a survey in a qualified area. Each metropolitan area had at least 100 or more respondents.

Population Description

The age of the survey respondents ranged from 18 to 35-years with the mean age being 28-years-old. The number of respondents in each age bracket increased until the 25-year mark, from which point the numbers in each category became more sporadic.

At 72%, a majority of the respondents were female. Males made up 28% of the group.

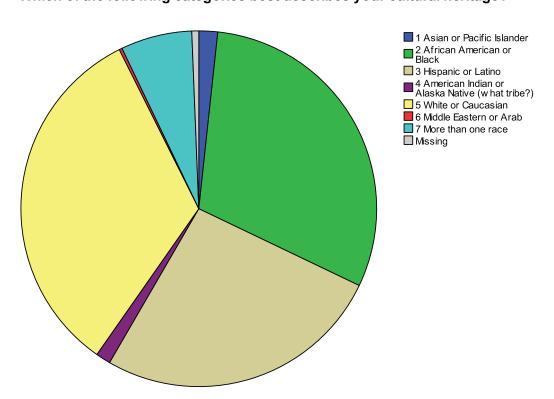
Exactly one-third of the sample was Caucasian or white. African Americans made up the next largest



ethnicity at 30.6%. The third largest group was Latinos at 26.4%.

Out of the total 1,112 respondents, 56.2% were in a self-defined committed relationship and the other 43.8% were married. Within the 338 African Americans surveyed, one-third were

Which of the following categories best describes your cultural heritage?



| Cultural Heritage Compared with Relationship Status | | | | |
|---|---------|------------------------|--|--|
| | Married | Committed Relationship | | |
| Hispanic or Latino | 59.6% | 40.4% | | |
| Caucasian or White | 44.0% | 56.0% | | |
| African American or Black | 32.5% | 67.5% | | |

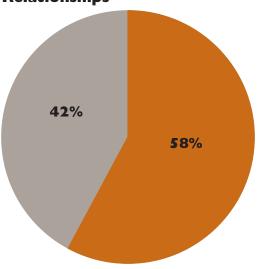
married and two-thirds classified themselves as a part of a committed relationship. Of the 292 Latino participants, 60% were married and 40% were in a committed relationship; this makes Latinos the most likely to be in a marriage relationship. The largest ethnicity surveyed was Caucasians with 366 respondents, 44% of which were married and 56% of which were in a committed relationship. Out of 625 respondents, 57.6% live with their partner; 42.4% live in separate households.

There were 487 participants that were married. For 88.1% of this group, this was their first marriage. Around 7.8% were remarried and 4.1% were married but currently separated. The average length of the respondents' marriages was 5.5 years. The range of length of marriage was less than one year to 19 years with a majority of the respondents being married less than 5 years. This heavy concentration in the lower numbers of years can be explained by the age range (18-35 years) of the survey participants.

There were 625 respondents that indicated that they were in a commit-

ted relationship; one-third of these individuals were engaged. The average length of this type of relationships was close to 4 years with 68.4% of the population having been in the relationship between 1 and 5 years. Cohabitation was a common trend in this group with 57.6% of the respondents indicating that they live with their partner.

Living Arrangements of Individuals in Committed Relationships



- Live with partner
- Live in separate households

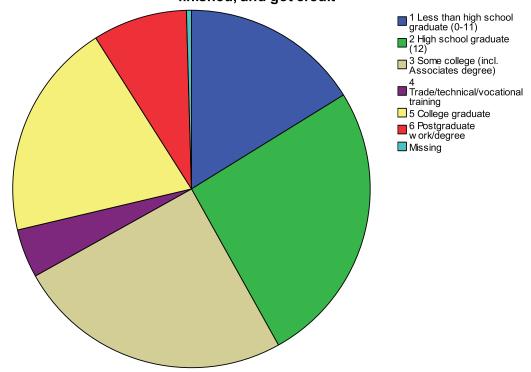
When asked about their religious beliefs, only 10.6% indicated that they were not at all religious or spiritual. A majority (42.7%) indicated that they were moderately religious or spiritual.

| Which of the following | is most tru | ie for you? | | | |
|--|-----------------------------------|---|---------------------------------------|---|-------|
| | Very Religious or Spiritual | Moderately Religious or Spiritual | Slightly Religious or Spiritual | Not at all Religious or Spiritual | Total |
| African American or Black Respondents | 33.2% | 49.9% | 18.4% | 4.5% | 100% |
| Hispanic or Latino Respondents | 15.1% | 44.9% | 30.1% | 9.9% | 100% |
| Caucasian or White Respondents | 17.9% | 40.7% | 24.5% | 17.0% | 100% |
| Married Respondents | 26.5% | 39.7% | 24.3% | 9.5% | 100% |
| Committed Relationship Respondents | 18.8% | 445.0% | 24.8% | 11.4% | 100% |

The average participant had 1-2 children. Just over one-third (36.4%) of the group indicated that they had no children of their own.

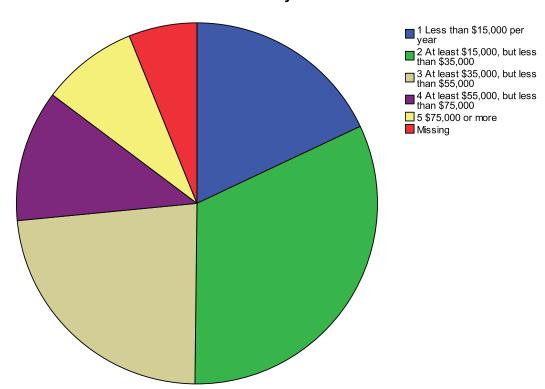
Only 5.3% of the population lived alone at the time of the survey. A majority of the participants (72.1%) lived in a household of 2-4 total individuals.

The last few questions of the interview are to help us determine whether the group of people that completes the interview is similar to - or different - from other people in your area. What is the highest grade in school that you finished, and got credit



In terms of education, 16.3% had less than a high school degree and one quarter of the respondents had a high school degree. Another 25% had some college education (including an Associate's degree). Those that held a college degree composed 19.8% of the population.

Which of the following comes closest to your yearly, after tax, household income last year?



When questioned about their income after taxes, 22 respondents refused to answer and 44 were unsure of the numbers. Eighteen percent of the population that chose to answer made less than \$15,000 per year; 32.2% fell into the next bracket, making between \$15,000 and \$35,000. The next bracket ranged from \$55,000 to \$75,000 and 12.5% of respondents fell into this category; the other 9.2% made over \$75,000.

Survey Findings

The survey items were divided into sections that included:

- Opinions about MRE including attendance, rating of experience, etc.
- Opinions about "best ways to describe" MRE classes, where they would search for info
- Information about what influences attitudes or beliefs re:

relationships, and

Responsibilities managed by participants

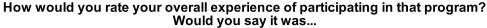
For purposes of this report, we have selected cases who fall within the \$35,000 or less category. All data and graphs shown below this point will be from those selected cases (n = 555). This rules out those participants who had a greater income than this cutoff point, but the goal of our research grant was to specifically to investigate recruitment challenges for low-income marriage education programs. If you would like SPSS reports for the entire data set, or would like a copy of the survey data set, please contact the investigators at the information provided in the report introduction section.

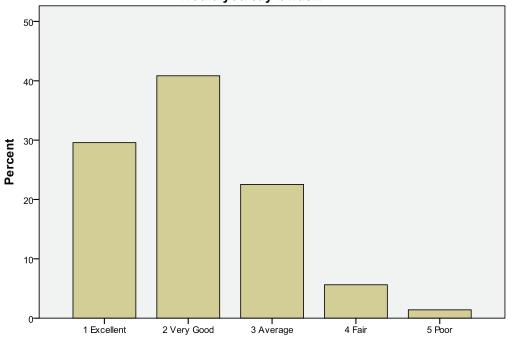
Opinions about MRE, including attendance, rating of experience, etc.

The first question was aimed at gaining an understanding of how familiar the respondents were with MRE, and whether or not they had ever attended a class.

Have you ever attended any type of relationship education class, seminar, retreat, or workshop by yourself or with a partner, yes or no?

A full 87% answer no to this question, leaving only 13% who had attended any relationship class. Of the 71 respondents who had attended, they reported their experience overall positive:





How would you rate your overall experience of participating in that program? Would you say it was...

The next two questions were asked to gain an idea of the respondents' willingness or openness to attend a MRE class. Interestingly, the results showed a slightly higher percentage willing to recommend MRE to others over attending themselves.

| | Definitely yes | Probably yes | Probably not | Definitely not |
|---|-------------------|-----------------|-----------------|-------------------|
| If you knew an unmarried couple that was considering marriage, would you recommend that they attend relationship education classes? | p 46% | 34% | 13% | 5% |
| Would you consider using relationship education classes to strengthen your marriage/relationship? | 42% | 38% | 13% | 7% |

Following the "willingness to attend" items, respondents were read a series of statements on why couples might not attend MRE and were asked to answer with their thoughts. We con-

structed the items in a "forced choice" response manner so people would be more likely to "go with their gut" and provide a fairly reliable answer.

| | Strongly Agree | Strongly Agree | Strongly Disagree | Strongly Disagree |
|--|-------------------|-------------------|----------------------|----------------------|
| I would feel bad if I thought I needed marital education classes. | 30% | 23% | 52% | 20% |
| The cost of attending a program would create financial difficulties for me. | 7 | 40 | 44 | 9 |
| My family has always solved its own problems WITHOUT outside help. | 15 | 47 | 32 | 6 |
| My partner and I might disagree about whether to attend couple classes. | П | 43 | 40 | 7 |
| My friends would support me if I needed help for my relationship. | 30 | 55 | 12 | 2 |
| I would feel pressure to make sure that my relationship looked good to others. | 6 | 29 | 48 | 16 |
| My church leader often encourages couples to attend relationship programs. | 19 | 45 | 18 | 4 |

After conducting a factor analysis to consider the percentage of variance explain by the components above, some important information came to light. Using a principal component analysis and extracting the top three areas of consideration for combined loadings, the *first* component loadings centered on worries or considerations related to: *possible cost of program*, *potential disagreements with a partner*, and feeling pressure to make their relationship look good to others.

The *second* component loadings mainly pooled together the consideration of "independence," or a family solving their own problems.

The *third* component loadings showed a high degree of the variance explained with putting together the support from friends (82% of the variance), support from clergy, and family solving its own problems.

We offer these groups of components to show that these particular ideas might be helpful in being fit together as approaches for marketing messages or normalization messages re: MRE recruitment.

Descriptions for MRE Classes; Thoughts About Resources; Venues

Following the first opinions section, the respondents were then asked a series of questions related to their ideas about how best to "name" the MRE classes in order to remove title or conceptual barriers. They were read the title or type of class, then asked to rank them from 1-10; 10 being that they would be HGIHLY likely to attend, and 1 being highly Unlikely to attend. A ranking of 5 was described as having no preference about the choice either way.

Because there wasn't a great deal of differences in the overall responses, we will simply be reporting the first series of phrases, then the mean score for each.

How about the phrase....

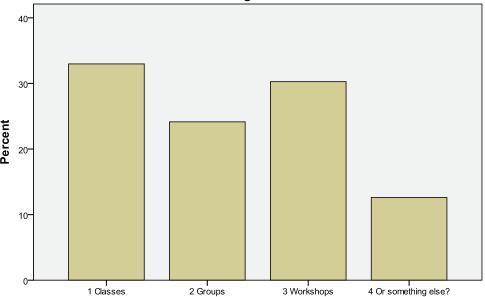
| Relationship Enhancement? | 7.26 |
|------------------------------|------|
| Conflict Resolution Skills? | 7.36 |
| Couple Communication Skills? | 7.86 |
| Marriage or Relationship | |
| Education? | 7.34 |

As you can see, of the phrases offered, all had a mean of greater than 5, and the highest favorable response was "Couple Communication Skills." When asked an open ended question about whether or not they could think of a phrase that sounded better to them, many parroted phrases already given. The majority said, "no." Of this low-income group, no phrase was replicated more than approximately five times and by and large sounded like a

hybrid of the phrases already suggested within the script.

The next question asked specifically about the "setting" title:

Which of these words fits you best when talking about attending this kind of thing? Marriage or relationship education...classes, groups, workshops, or something else?



Which of these words fits you best when talking about attending this kind of thing? Marriage or relationship education...classes, groups, workshops, or something else?

"Classes" won out with 32%, followed by "Workshops" with 30%.
"Groups" came in with the least at 24%, with 12.5% responding they would prefer "something else."

We next asked an open ended question regarding who they might "go to if their relationship were in trouble." Of the low-income cases, about one-third of the total respondents provided an answer. The first preference (most listed) was "the internet," the second most was "family or friends," the third was "church or pastor," fourth was "a counselor/therapist" and fifth was "books." Only one person listed "the Yellow Pages."

Along this information gathering line of thought, our next item had to do with venue preference. The question read: "Some people consider the sponsor or location in their decision to attend couple services. First, would you be more or less likely to use services if a CHURCH sponsored them? Would you say A, I would be more likely to use the service; B, it would have no effect at all on my choice; or C, I would be less likely to use the service?"

The respondents were next asked the same type of questions with similar initial language but were substituted the targeted variable of "CHURCH" with "COMMUNITY or CITY" sponsor, and then finally a "PRIVATE PROFESSIONAL" sponsor.

Because we know that demographic information might be useful for the venue discussion, we have reported a more detailed break-down of the results in this section, both by culture and gender.

The respondents reported the overall highest favorable ratings toward services sponsored first by a private professional (71%), followed by a church sponsor (65.2) and then a community- or city-sponsored venue (54.0) (see Table 1).

Table 1. Would you be more or less likely to use services sponsored by a...?

| | | No Effect at All | |
|------------------------|--------|---------------------|------|
| CHURCH | 65.2 | 7.7 | 27.1 |
| COMMUNITY OR CITY | 54.0 | 12.4 | 33.4 |
| PRIVATE PROFFESSION | AL71.0 | 6.5 | 22.6 |

When testing the entire group for significance related to their venue preference, services are significantly more likely to be accessed in a private professional sponsored venue than in either a church- (faith-based) sponsored or community-sponsored venue; whereas church-sponsored and community-sponsored venue choices are not significantly different.

Within this low-income set, the three largest ethnic groups were African American (n=206), Latino (n=172) and Caucasian (n=125). When the same venue choice items by ethnic group were compared, some differences were found that help inform faith-based and community initiatives about attitudes within each of these groups.

In general, Latinos rated all venues somewhat favorably and preferred the professionally-sponsored venues most, with only a 13 point range between the highest and lowest responses. African Americans rated community-sponsored venues lower, and professional and church venues higher with their highest ratings being the faith-based venues. The Caucasian respondents had overall less favorable ratings than the other two groups, rating community and church venues lower, and professionally sponsored venues higher (see Table 2).

Table 2. Would you be more or less likely to use services sponsored by...? Only the "More Likely" responses are shown. "Highs" are noted with an *. "Lows" are underlined.

| | African American | Latino | Cau- casian |
|-----------------------|---------------------|-----------|----------------|
| CHURCH | *75% | 73% | <u>40%</u> |
| COMMUNIT OR CITY | Y <u>44</u> | <u>65</u> | 56 |
| PRIVATE PROFFESSIO | NAI 69 | *78 | *66 |

Further analysis shows significant main effects among the groups in terms of likelihood to attend MRE as well as the sponsor being a significant factor in that decision to attend MRE. There are significant differences by ethnicity, F(2, 499) = 18.63, p < .001 and by venues, F(2, 998) = 10.36, p < .001. Moreover, all pairwise (paired group/venue) comparisons for ethnicities are significantly different, meaning that Latino group is more likely to access services, followed by Black and then White groups (see Table 3); or at least the data show

that these rankings are most likely to be open to the idea of attending marriage education based upon the sponsor in the aforementioned order.

Table 3. Percentage of people more likely to use services if in following venues.

The table summarizes the percentage of people using services in three different venues from three ethnic groups. The right hand column shows significant differences in favoring particular venues by ethnic groups, accounting to the simple effects of mean differences below.

| | I. Church Sponsored | 2. Community Sponsored | 3. Private Prof. Sponsored | Significant Differences |
|--------|------------------------|---------------------------|-------------------------------|----------------------------|
| Black | 75% | 44% | 69% | 1&3 > 2 |
| Latino | 73% | 65% | 78% | 3 > 2 |
| White | 40% | 56% | 66% | 2&3 > 1 |
| Total | 65% | 54% | 71% | 3 > 1&2 |

At face value, this information could be enough on its own to warrant stand-alone consideration, but further analysis showed something interesting and seems to finish out the picture related to venue preference. Despite all ethnic groups being most likely to use the services when in a professional venue overall, a sizable number of minorities are more likely to use the services provided within the other two venues over that of the professional environment. This im-

plies that MRE should be made available in all three venues if indeed the goal of healthy marriage programs is to serve the largest number of people. Over one-fourth of African-Americans are more likely to use these services if they are in a church setting than if they are in a professional setting. That percentage is lower for other ethnic groups, but is at least 15% for every ethnic group, even Caucasians (whose overall preference for using the services in a church setting is sig-

nificantly lower than in a professional setting). Given the initial set of findings, it may come as a surprise, then, that 15% to 20% of all ethnic groups say they are more likely to use the services in a community setting than in a professional setting (see Tables 4 and 5).

Table 4. Percentage of people from each ethnic group more likely using services if in Church Venue vs. Private Professional Venue

| | More Likely in Church than in Private | Equally Likely in Church than in Private | Less Likely in Church than in Private |
|--------|---|--|---------------------------------------|
| Black | 26.7% | 51.9% | 21.4% |
| Latino | 15.7% | 64.5% | 19.8% |
| White | 18.4% | 38.4% | 43.2% |

Table 5. Percentage of people from each ethnic group more likely using services if in Community sponsored Venue vs. Private Professional Venue

| | More | Equally | Less |
|--------|-----------|-----------|------------|
| | Likely in | Likely in | Likely in |
| | Community | Communit | yCommunity |
| | than in | than in | than in |
| | Private | Private | Private |
| Black | 16.5% | 41.3% | 42.2% |
| Latino | 15.8% | 56.1% | 28.1% |
| White | 20% | 52.8% | 27.2% |

To sum up the "venues" discussion, it is clear to see that much can be gained from considering this data when making decisions about a particular target population and how to begin drafting a recruitment plan. It is also clear that the plan would need to contain not only a primary targeted venue when building community partners through which to deliver MRE services, but to include secondary and tertiary venues in these plans based upon which population is being served. In this way, a programmer has the information to make an initial informed choice about where to roll out services first, but also has the understanding that a complete coverage of the area will only be gained if all three venues are eventually utilized.

The final two items wrapping up the preferences and opinions section has directly to do with the respondents' willingness to seek help for themselves and/or their own relationship.

| | Very Likely | Likely | Not Very Likely | Never Seek Help |
|--|-------------|--------|--------------------|--------------------|
| For you personally, how likely would you be to seek help for ANY type of personal problem that was distressing to you? | 36% | 40% | 19% | 5% |
| For you personally, how likely would you be to seek help if your committed relationship/marriage was in trouble? | 53 | 33 | 12 | 2 |

The interesting information to note from these two items is that, when thinking of the need to seek help relationally, the scores in the "very likely" category jump almost twenty points. And, 98% of the total respondents in this category remained open, to some degree, to seek help for their relationship.

Constraints, Barriers and Beliefs Affecting Attendance in MRE

The last section of items was built as single-items measures from previously constructed three-item scales (reference: the Oklahoma pilot study, mentioned earlier). These items represent constraints found to affect the way people might or might not decide to seek help or attend MRE classes.

While this survey report segment will only provide the frequencies related to each item and the various responses provided by the respondents, it is the intent of the investigators to conduct further analysis with various population groups to determine if particular typeologies can be built to help forecast potential frameworks that could be helpful in introducing class information, considering what various populations might be dealing with when attending classes, etc.

Sometimes religious beliefs affect relationships. Which of the following is the most true for you? Are you...

| Very religious or spiritual | 24% |
|-----------------------------------|-----|
| Moderately religious or spiritual | 42 |
| Slightly religious or spiritual | 25 |
| Not at all religious or spiritual | 10 |

Substance use can sometimes affect relationships. How would you respond to the statement: Alcohol or drug use is a problem for many of the couples I know. Do you...

| Strongly agree | 35% |
|----------------------------|-----|
| Agree | 24 |
| Neither agree nor disagree | 11 |

| Disagree | 20 | No problem at all | 39% |
|--|-----------|-----------------------|-----|
| Strongly disagree | 10 | Only a slight problem | 22 |
| "Problem solving" is the act of bring- | | A problem at times | 33 |
| ing up a topic within a couple | e's rela- | Absolutely no spare | |
| tionship, exploring options, ne | egotiat- | minutes in our day | 6 |
| | 7 | | |

ing fairly, and agreeing on a solution. In tha

| your relationship, would you say | | , | J | 0 |
|----------------------------------|--|---|---|---|
| at you and your partner are | | for your children, or temporary care for your older adults, would you say | | |
| | | | | |

| Very good at solving problems | 26% |
|------------------------------------|-----|
| Generally good at solving problems | 56 |
| Not very good at solving problems | 15 |
| Very bad at solving problems | 3 |
| | |

| is EASY for me to arrange | 25% |
|--|-----|
| is OCCASIONALLY easy for me to arrange | 13 |
| is SOMEWHAT difficult to arrange | 20 |

15

...is VERY difficult to arrange

In terms of childcare or babysitting

"Verbal or mental threat" can be experienced in many ways. Some examples are critical remarks or actions that leave you feeling put down or threatened, name calling, cursing, or frequent screaming or verbally threatening you in some way. Knowing this, would you describe your relationship as...

This information brings the survey reporting section to a close. Overall, it is clear to us as investigators that the results from this last section were somewhat different than the Oklahoma pilot data. And while we won't go into in-depth comparisons, we can see that there was a greater concern about substance abuse in couples nationally, child care is slightly more difficult to arrange as reported by this sample, the violence within relationships nationally was slightly lower than the Oklahoma data, and the national sample reports being slightly

better at problem solving.

| Non-threatening | 63% |
|-----------------------------------|-----|
| Rarely threatening | 12 |
| Occasionally threatening | 13 |
| Moderate to regularly threatening | 9 |
| Extremely threatening | 3 |
| | |

How would you describe your work schedules, commitments, projects, and "must-do" lists? Are they...

We are especially glad to have subsets of data for each of the ten metropolitan areas surveyed, and are glad to share that data should you have a need to look at the results for your particular geographic area.

Observational Component: Summary of Findings

The purpose of the observational component of this study was to collect information about low-income couples, and about similarities or differences between low-income couples and couples in different income situations, in the hopes that such information would be beneficial to the marketing group in the development of marketing strategies for the population of interest. Below is a brief review of the protocol, the rationale, and the data collected in this component, followed by a description of our findings.

Protocol, Data Collected, and Rationale

We recruited 100 couples to participate in the observational component. These couples spent approximately three hours in the Human Development & Family Science Observation and Coding Center (OCC) located on the Stillwater campus of Oklahoma State University. Recruiting was done primarily via flyers placed at strategic locations in Stillwater, Tulsa, and Oklahoma City (and neighboring

communities) designed to reach the targeted low-income population. Such locations included walk-in clinics, gas stations/convenience stores, local housing authority offices, and laundromats. Flyers indicated that participant couples would receive \$100 for their participation in the study. The initial phone contact made by interested parties was with the Oklahoma Marriage Initiative, who handled all initial screening and scheduling. Potential participant couples were screened for domestic violence, pregnancy, and significant mental illness. Couples who passed the initial screen, were between the ages of 18 and 35, and indicated they were in a "committed" relationship were then scheduled for a visit to the OCC. Two days prior to their scheduled visit, a graduate student working on the project called the couple to confirm their appointment, provide directions, and give some last minute instructions regarding eating/drinking, use of medications, and use of tobacco products the day of their appointment.

Upon their arrival at the OCC, couples were immediately provided with a consent form that described in some detail how their time would be spent while in the lab, what benefits and risks might be associated with their participation, and the compensation involved. Couples were expressly told that they could end their

participation in the study at any time if they so desired. (Note that there were no couples who refused to sign the consent form, and only three couples who did not complete the entire protocol once beginning it; one of these seemed to be under the influence of a substance and was asked to leave when it became clear that they could not seriously participate, the other two couples had misjudged the time required and needed to get home to children who were being watched by a babysitter). After signing the consent form, couples were provided with the \$100 cash incentive for their participation and were asked to provide a saliva sample (1 of 6). Each partner was given a small plastic 2mL vial and a small straw and asked to fill the vial as best they could. These samples were transferred immediately to a small freezer kept in the OCC data storage room. Partners were then moved into separate but adjoining rooms and given a packet of questionnaires to complete. Partners typically took between 30 and 45 minutes to complete the battery of questionnaires, after which they were asked to provide another saliva sample (2 of 6).

Following the second saliva sample, partners were briefly interviewed separately, the primary question being, "Can you think of a time recently when you felt hurt or offended by

your partner; a time you still have strong feelings about?" The majority of participants did not have difficulty remembering such an issue, and probing questions were used to elicit some detail about the situation, such as: "Why did that bother you?" "What do you wish your partner had done differently?" Partners were then asked if they would be willing to raise the issue during one of the two conversations they would have with their partner in the lab. All participants indicated they would be willing to do so. Partners were then seated across from each other at a small table, and a small white partition was placed between them to prevent partners from looking at and speaking to one another. A small white envelope was given to each partner as well. Partners were told that when they heard the first knock on the door, they could remove the partition and begin their conversation, where they were to raise the issues identified in their individual interviews and try to come to a better understanding of those issues in the time allotted. They were also told that when they heard a second knock on the door about midway through the conversation that they were to open their envelope and follow the directions on the piece of paper inside. A third knock would signal the end of the conversation. These conversations were digitally video recorded.

As indicated, after five minutes the first knock occurred, directing the couple to remove the partition and begin their conversation. Seven minutes into that conversation, the second knock directed the partners to open the envelopes they had been given. The papers inside both envelopes read, "Please share with your partner a time when you felt cared-for or supported by her/him, and discuss how such experiences affect your relationship." This portion of the conversation continued for another five minutes, after which a third knock signaled the end of the conversation. Partners were then asked to provide another saliva sample (3 of 6), and were prepped for the second conversation. The instructions for the second conversation were: "Please discuss for the next 10 minutes what you see the pros and cons being of attending a relationship education workshop, class, or seminar for your relation*ship.*" A similar process was repeated where the partition was put in place between the partners, and after five minutes a knock on the door directed the couple to remove the partition and begin their conversation. After 10 minutes, a second knock signaled the end of the conversation. It should be noted that the sequence of these two conversations was counterbalanced to statistically control for the order of the conversations. Couples

with odd identification numbers (e.g., 501, 503, 505, etc.) had their conversations in the order described above, while couples with even identification numbers (e.g., 502, 504, 506, etc.) had their conversations in reverse order, first starting with the conversation about attending a relationship education workshop followed by the conversation about recent hurts or offenses. There were no statistically significant differences between "odd" or "even" couples on any of the interactional measures used, suggesting that the order of the conversations did not appear to have any influence on our findings.

Upon completion of the second conversation, partners were asked to provide another saliva sample (4 of 6) and were then moved into an adjoining room where they were told they had 30 minutes to relax before the final phase of the study. This was an unstructured period where partners could do whatever they wanted. Most visited the restroom at some point during the 30 minutes; some couples continued to discuss topics that had been raised during the earlier, while others immediately turned to their cell phones to call friends or family or to play games. The consent form notified couples that for safety reasons they would be video-recorded during this phase of the study. At the end of the 30 minute relaxation period,

another saliva sample was taken (5 of 6). The key reason for the relaxation period was to provide enough time after the couple conversations for the substances of interest to make their way into the oral cavity of the participants. Research indicates about 30-40 minutes is sufficient for such measurements.

The final phase of couples' participation was a video-recall procedure wherein each partner was seated at a computer and watched the video recording of the two conversations they had just participated in. Each partner would also use the mouse to provide a continuous or moment-to-moment rating of their affect, or how they remember feeling inside, during that conversation. The mouse controlled a 9-point scale visible on the computer monitor along with the video recording. Moving the mouse up or down would produce a corresponding movement on the scale. The software recorded mouse movements at each hundredth of a second. Partners were seated in the same room, but used headphones to listen to the video recording and were unable to see their partner's screen. Upon completion of this phase, partners provided the final saliva sample (6 of 6) and went through a quick debrief wherein they were asked if they felt like their participation had in any way harmed their relationship or created any personal distress. No participants indicated any distress or relational harm due to their participation.

There are three domains of data that were collected during the observational component of this study: video/observational, affective, and physiological. The video data is important because it gives us insights into how people behave when they interact with one another; this is especially true during the conversation where partners discuss the pros and cons of attending a relationship education seminar or workshop, as such data has, to the best of our knowledge, never before been collected. As our pilot data suggested that this conversation may be one that is difficult for partners, we were excited about looking at how such conversations unfold.

Affect is a very influential variable in couple relationships, and has a great deal of predictive power (Griffin 1993, 2003; Johnson et al., 2005). Indeed, negative affect—a general state characterized by predominately negative attitudes, emotions, and behaviors (Schaap, 1984)—has been heralded by some as "the prime discriminator of couple quality" (Griffin, 1993, p. 231). That is, the affect with which one says something tends to be one of the most reliable means of distinguishing between distressed

and nondistressed couples (Gottman & Levenson, 1986; Revenstorf, Vogel, Wegener, Hahlweg, & Schindler, 1980). Some of the earliest research on marital interactions reported that negativity during such interactions was a key indicator of distressed marriages (Gottman, 1979; Raush, Barry, Hertel, & Swain, 1974). The numerous observational studies that have followed have confirmed and extended these initial findings (Gottman, 1994, 1998; Heyman, 2001). Indeed, several that have examined the influence of both behavior and affect on couple relationships have concluded that the affective content of couple interactions is more indicative of current relationship quality than is the verbal content (Gottman, 1979; Hahlweg, et al., 1984; Smith, Vivian, & O'Leary, 1990).

The rationale for collecting physiological data revolves around stress. We know that stress—particularly financial stress—can have substantial negative influences on couple relationships. Indeed, it is often reported that the majority of arguments couples have involve finances to some degree. For low-income couples, these stressors may be chronic and potentially overwhelming, reducing emotional and physiological resources available for managing other types of stressors, such as relational problems or disagreements, and thereby resulting in

poor approaches to problem-solving or conflict resolution. We hypothesized that low-income couples would be under greater stress than were couples in other income categories, and that such stress would contribute to low-income couples' greater difficulty in managing relationship issues. Our primary measures of physiological stress are the repeated saliva samples that were analyzed for cortisol and alpha-amalyse.

The stress response system is primarily composed of two physiological systems: the corticotrophinreleasing hormone (CRH) from the HPA axis which signals the release of glucocorticoids (including cortisol) and the locus coeruleus (LC) norepinephrine (sympathetic)/autonomic nervous system which triggers the release of catecholamines (epinephrine, norepinephrine, and dopamine; Levitan & Kaczmarek, 2002). When working properly, the stress response system is meant to help individuals respond adaptively to either general or specific stressors through a series of interrelated and counteracting forces (Chrousos & Gold, 1992), and to facilitate appropriate recovery from such stress responses. The sympathetic system is activated by a perceived challenge requiring a response, whereas, the CRH system is signalled in reaction to a situation deemed outside of the individual's

control resulting in a redirection of efforts toward conservation (Henry, 1992). As such, the stress response system is inextricably connected with emotional, behavioral, and cognitive responses and when dysregulated can be linked to numerous psychological maladies (Chrousos & Gold, 1992).

The primary substance of interest in the HPA axis is cortisol. Cortisol is a stress hormone which exerts tremendous influence on the immune and cardiovascular systems. The release of cortisol from the adrenal glands indicates activation of the hypothalamic-pituitary-adrenal (HPA) axis, which occurs when an individual perceives a stressor as uncontrollable or hopeless (Dickerson & Kemeny, 2004). Dysregulated HPA axis activity has been implicated in a number of behavioral problems in youth and adults, such as aggression, conduct disorder, anti-social behavior, risktaking/impulsivity, and other externalizing problems (Shirtcliff, Granger, Booth, & Johnson; 2005).

The autonomic nervous system is comprised of the sympathetic and parasympathetic systems. The SNS is responsible for the effects leading to the "fight-or-flight" response. The activation of the LC-NE/autonomic nervous system, located in the brain stem, leads to the release of norepinephrine into a series of

densely interconnected neurons. Norepinephrine activates in part the amygdala which aids in the emotional appraisal of the stressor (Chrousos & Gold, 1992). Next, innervation of sympathetic nerves stimulates the sympathetic adrenal medullary system which is responsible for the release of epinephrine and norepinephrine respectively (Henry, 1992). The term "adrenergic" is applied to those nerve fibers of the SNS that release norepinephrine (and possibly small amounts of epinephrine) at a synapse when a nerve impulse passes. Consequently, the response to adrenergic receptor activation results in the defensive reaction commonly referred to as the "fight-or-flight" response (Cannon, 1914). In pursuit of attenuating the stressor, the activation of norepinephrine may result in a narrowed focus on the current threat (Henry, 1992). The activation of the SNS results in numerous effects such as increased heart rate, blood pressure, and pupil dilation (Cannon, 1914; Levitan & Kaczmarek, 2002). Overall, the SNS plays a key role in the stress response system, and yet, has received considerably less attention than the HPA axis in the literature primarily due to inaccessibility of markers. However, new research has delivered some promising candidates as biological indicators of sympathetic activity.

A variety of animal studies have linked the salivary protein alpha amylase to ANS activity and sympathetic nerve stimulation (Asking & Gjorstrup, 1987; Schnevers & Hall, 1991; Skov et al., 1988; Speirs et al., 1974). As a result of these findings, researchers have suggested salivary protein levels may be a reliable method of assessing sympathetic activity (Gallacher & Peterson, 1983). Of specific interest is alpha amylase, an enzyme generally present in the saliva in high concentrations that has the primary purpose of aiding in digestion as well as serving a protective function in preventing the build up of bacteria (Granger et al., 2006).

On the basis of previous oral biological research, along with animal studies that lend support to the possible connection between salivary alpha amylase and adrenergic activity, many researchers began testing alpha amylase levels in humans. Physical activity is one known stimulus for the release of catecholamines, and as expected, also appears to increase levels of salivary alpha amylase. For instance, several studies have demonstrated the effects of running on alpha amylase levels as well as cycling (Li & Gleeson, 2004). For both mediums of exercise, alpha amylase levels rose significantly providing further impetus for exploration.

Beyond physical stress, psychological stress also has been shown to have pronounced effects on alpha amylase levels (Bosch et al. 1996; 1998; Nater et al., 2005; Skosnik et al., 2000). In fact, Bosch and associates (1998) found that not only did alphaamylase levels increase with psychosocial stress but also appeared to correlate to the number and intensity of stressors. Moreover, these results are distinct from nonstress situations. For example, Nater and colleagues (2005) found significant differences in stress versus resting conditions in their study related to a psychosocial stress test. These increases appear to remain significant separate of salivary flow rate (Bosch et al., 1996). Taken together, these findings clearly indicate the efficacy of alpha-amylase as a stress marker.

Recently, health scientists have proposed that many emotional and behavioral problems in both children and adults may not necessarily be linked to dysregulation in one bodily system (e.g., the HPA axis), but rather the dysregulated interactions between multiple bodily systems (e.g., the HPA axis and the autonomic nervous system; Bauer, Quas, & Boyce, 2002). This notion was empirically confirmed in a recent publication (Gordis, Granger, Susman, & Trickett, 2006), which demonstrated that asymmetrical activation of the HPA (mea-

sured via salivary cortisol) and the sympathetic branch of the autonomic nervous system (measured via salivary alpha-amylase) was characteristic of adolescent aggression.

| Education Level of Participants | | |
|---------------------------------|------|--------|
| | Male | Female |
| Less than High School | 4 | 2 |
| HS Grad | 12 | 6 |
| Some College | 50 | 52 |
| Tech/Vocational | 3 | 3 |
| College Grad | 20 | 28 |
| Postgraduate | 10 | 7 |

| Cultural Heritage of Participants | | |
|-----------------------------------|------|--------|
| | Male | Female |
| Asian/Pacific Islander | 2 | 2 |
| African American | 9 | 6 |
| Hispanic/Latino | 5 | 3 |
| American Indian | 10 | 8 |
| Caucasian | 73 | 78 |
| Middle Eastern | 0 | I |

Analyses and Findings

Sample characteristics. Of the 100 couples recruited for this component, 33 were married and 66 were not (31 cohabiting, 13 engaged, 22 dating). Of those married, all were in their first marriage, and the length of marriage ranged from one month to eleven years. Nineteen of the married couples had cohabited prior to marriage (2 weeks to 5 years), but nearly all indicated that they had plans to marry prior to cohabiting. A total of

60 couple fell into the "low income" category of making less than \$35,000 per year.

Regarding perceived barriers to participation in relationship education programs:

| "I would feel bad if I thought | I needed marriage or rel | ationship education classes." |
|--------------------------------|--------------------------|-------------------------------|
| | Male | Female |

| | Male | Female |
|-------------------|------|--------|
| Strongly Agree | 2 | I |
| Agree | 35 | 18 |
| Disagree | 50 | 56 |
| Strongly Disagree | 12 | 22 |

"The cost of attending a relationship education program would create financial difficulties for me."

| | Male | Female |
|-------------------|------|--------|
| Strongly Agree | I | 12 |
| Agree | 50 | 43 |
| Disagree | 43 | 39 |
| Strongly Disagree | 5 | 4 |

"My partner and I might disagree about whether to attend relationship classes."

| | Male | Female |
|-------------------|------|--------|
| Strongly Agree | I | 6 |
| Agree | 32 | 40 |
| Disagree | 56 | 41 |
| Strongly Disagree | 10 | П |

"'Problem Solving' is the act of bringing up a topic within a couple's relationship, exploring options, negotiating fairly and agreeing on a solution. In your relationship, would you say that you and your partner are:"

| | Male | Female |
|-----------------|------|--------|
| Very Good at PS | 21 | 22 |
| Generally Good | 66 | 64 |
| Not Very Good | 12 | H |
| Very Bad at PS | 0 | I |

In the above table, 63% of those who reported that they were "Very Good" or "Generally Good" at problem solving were from the low-income group, deviating from the pilot data

that suggested that low-income couples believed they were not as good at problem solving as couples from other income levels.

Regarding help-seeking preferences:

| Ranking descriptions of classes/workshops (1-10, 10 being most likely to attend a class by that name) | | | |
|---|------|--------|--|
| | Male | Female | |
| Relationship Enhancement | 6.4 | 7.7 | |
| Conflict Resolution Skills | 6.0 | 6.5 | |
| Couple Communication Skills | 6.7 | 7.3 | |
| Marriage/Relationship Education | 5.9 | 6.3 | |

| "Which of these words fits you best when talking about attending this kind of thing?" | | |
|---|------|--------|
| | Male | Female |
| "Classes" | 44 | 30 |
| "Groups" | 13 | 12 |
| "Workshops" | 37 | 50 |

Again, the word "group" has a very negative connotation, likely due to the interactive and clinical connotations. Words that carry more of an educational ("classes") or technical ("workshops") meaning tend to fare much better.

Video data – help-seeking conversation. To investigate the major pros and cons discussed by couples regarding attending relationship education a content analysis was conducted on 42 couple discussions. The question couples were asked to discuss was: "Please discuss for the next 10 minutes what you see the pros and cons being of attending a relationship education workshop, class, or seminar for your relationship." This information was compiled from couples who indicated an income of \$35,000 or less.

Major themes:

A very high percentage (almost all) of these couples equated "relationship education" with "therapy," which then colored the entire conversation about the topic. This was evidenced by many couples referring to the topic as "counseling" or "therapy," where many couples actually mentioned that a benefit to attending would be having an impartial, third-party observer available to facilitate the interaction. Also, many couple mentioned that a private practice setting would be ideal for relationship help (this appeared to come out of the private practice setting deemed as more confidential and safe, and the general disdain for group settings). Many couples saw relationship education as some-

- thing you go to if your relationship is in trouble, adopting a, "If we needed it maybe it could be good" mentality. Thus, it appeared that the majority of the couples in the low-income sample do not appear to know what relationship education is (e.g., the aim, scope, etc.), and therefore, were uncomfortable talking about it. At times the conversation would drift to other things, and only mention bits and pieces of the topic at hand.
- Couples who indicated that spirituality and/or religiosity were important to them expressed an increased preference for attending programming with a religious component (e.g., Christian focus). On the other hand, couples who indicated they were not religious were many times adamantly against attending programming with any kind of religious influence. Overall, couples expressed mixed reviews about programs offered in the community, with the majority of these being negative. The negative nature of these depictions of community-sponsored programs appeared to come out of a general disregard for the person/professional potentially facilitating the program and the imagined or assumed quality of the program.

Positives:

- The theme that received the most number of positive remarks by the couples was the potential to learn relationship skills/techniques (e.g., communication, listening, problem solving, conflict resolution, etc.).
- The second most mentioned theme was the potential to open up conversation between partners for partners to get to know each other better, understand each other better, and share more with each other through attending the program.
- The third most mentioned theme was the potential to identify and work through problematic relationship issues.
- The fourth most mentioned theme was the potential to learn financial information (e.g., budgeting, saving strategies, etc.).
- The fifth most mentioned theme was the potential to strengthen the relationship.
- Some of the themes mentioned at moderate levels were: Spend more time together (such as in a retreat setting); prevent future issues (premarital counseling was mentioned moderately as a good thing that could prevent issues from

arising in marriage); learn parenting skills; get a discount on a marriage license; attend programs for free; learn from other couples; and that attending a program would show commitment to the relationship.

Negatives:

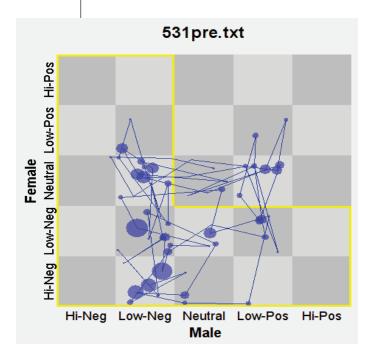
- The theme that received the most negative remarks about attending programs was the cost (monetary). Many of these couples expressed difficulty making ends meet, and that attending a program that would cost a fair sum of money would be impossible.
- The second most mentioned theme was a general disdain for programs in a group format. These program types were often mentioned as uncomfortable, as couples mentioned having to "air dirty laundry" in front of a group. These group programs were also associated with an overall lack of privacy.
- The third most mentioned theme was that attending a program would actually bring out deep issues that would cause conflict or make matters worse (intensify issues) in the relationship.
- The fourth most mentioned theme was that partners would

- disagree about attending a program. In a related line of thought, partners also expressed concern about one partner being more committed to the focus of the program than the other, or one partner "forcing" the other to go.
- The fifth most mentioned themes were issues related to finding the time to go, and issues related to the location (e.g., having to travel great distances to attend).
- Some of the themes mentioned to a moderate degree were: Couples not seeing a need to attend ("We are fine how we are"); uneasiness with others seeing partners attend a relationship education program or know about partners attending; issues with the aim or focus of the program (e.g., too general, too religious, information not helpful; program not in-line with values, expectations not met of the program); issues related to the quality or competency of the program facilitator; finding out partners are not compatible or being told partners are not compatible; and issues related to someone else not knowing your relationship ("Who could know our relationship better than us?").

Notable findings – questionnaires
We found very little of interest in the

questionnaire data, particularly when comparing low-income couples to those couple not in a low income situation. Indeed, there were no statistically significant differences between these two groups of couples on personality measures (NEO-FFI five-factor personality inventory), global stress measures (Derogatis Stress Profile), attachment-related anxiety and/or avoidance (Experiences in Close Relationships Inventory), or relationship satisfaction (Revised Dyadic Adjustment Scale).

However, we were able to replicate the oft-found relationship between attachment security and relationship satisfaction, where couples who were more securely attached were also significantly more likely to be satisfied in their relationship. There were no correlations with income, however.



Notable findings – affect. We hypothesized that low socioeconomic status would be associated with less affective flexibility and more negativity during couple interactions. Affect data were manipulated via GridWare, allowing us to graphically represent each couple's affect data and develop specific affect variables. An example of one couple's "State Space Grid" (SSG) is below.

The yellow outline indicates a region of negativity, where at least one partner is feeling negative about the conversation. Each blue circle represents a shared affective state for the couple, with the size of the circle correlated with the amount of time spent in that particular state before moving on.

There are two key concepts of interest: flexibility and negativity. Thompson (1990) introduced multiple concepts for measuring dynamic emotional experience including range of emotional responses, lability or changes in emotional reaction, and persistence of specific emotional response. In order to calculate these concepts, couples' continuous affect data were entered into a SSG using the GridWare software. Dispersion, or how widely dispersed throughout the grid couples' affective responses are, was calculated utilizing the following formula $[(n\sum(di/D)^1) - 1] / n- 1$.

Lability was calculated to reflect the number of affect transitions per minute during the couple conversation. Persistence was represented by the mean duration per affect event.

For negativity, we look at "negative transitions" which is the number of times a couple visits the region outlined in yellow, and we also look at "negative duration" which is the total amount of time a couple spends in the negative region during the conversation.

In our analyses, low-income couples made significantly more frequent visits to negative territory during the second half of the conversation (when partners were directed to talk about a time when they felt "cared-for or supported") than did couples who were not in a low-income situation. Furthermore, females with higher global stress levels (as measured by the Derogatis Stress Profile) were significantly more likely to have higher negative durations during the second half of the couple conversation.

Notable findings - physiology.

The saliva samples collected from partners during the laboratory sessions were shipped to Salimetrics, LLC in Pennsylvania. Samples were analyzed using state-of-the art methods and equipment. Cortisol samples were also assayed for blood con-

tamination, which can inflate cortisol levels. Data collection for all participant couples began at 4:00pm Central Time, a time at which diurnal cortisol levels are known to be at their lowest, thereby controlling for the natural variation that exists in cortisol levels throughout the day. All samples were analyzed twice, with the mean microgram per deciliter (ug/dL; for cortisol) and mean units per milliliter (U/mL; for alpha-amylase) provided.

For alpha-amylase, we did not find any statistically-significant differences by gender or by income level. We did find that females' alpha-amylase level at intake was positively correlated with couples' transitions per minute during the discussion about hurts/offenses. Furthermore. we found that females who were in a securely-attached relationship had significantly higher levels of alphaamylase and greater changes in alphaamylase over time than did females in insecure relationships. It may be that slightly elevated levels of alpha amylase at intake may increase attention paid to threats which may in turn activate the more flexible coping strategies. The findings indicate that for the present sample the activation of the SNS may account for unique and important aspects in the internal affective structure of the couple.

Graphs of the levels of male and female alpha-amylase can be found below:

time 1 (intake) to time 6 (debrief); that is, the lower the attachment anxiety in males, the greater the decrease in cortisol levels in females from the start of the lab visit to the end.

Graphs of males' and females' cortisol levels can be found below:

Male cortisol levels (mean ug/dL):

Male alpha-amylase levels (mean U/mL):

(Note: Orange circle denotes statistically-significant difference between males in low- versus high-income situations)

Female alpha-amylase levels (mean U/mL):

For cortisol, we did not find any statistically significant differences between males and females at any time point. After controlling for a variety of health conditions, blood contamination, and time of day, we did find that low-income males had elevated levels of cortisol at time 5 (post relaxation period), which was the time that we most expected to find a difference if there was to be one. Furthermore, males' attachment-related anxiety had a significant and negative association with females' change in cortisol from

Female cortisol levels (mean ug/dL):

The implications of the cortisol findings are that low-income males are more reactive to potentially difficult conversations with their partner than are males not in a low-income situation. This suggests that these males may be feeling overwhelmed, even to the point of hopelessness during these conversations, and as such, are likely not able to constructively problem-solve or creatively consider alternatives to problems or issues being discussed. If such reactions are common, such individuals will be much less likely to consider activities or venues that they believe will force them into interactions which may elicit such reactions again.

References

Asking, B., & Gjorstrup, P. (1987). Synthesis and secretion of amylase in the rat parotid gland following autonomic nerve stimulation in vivo. *Acta Physiologica Scandinavica*, 130(3), 439-445.

Bauer, A. M., Quas, J. A., & Boyce, W. T. (2002). Associations between physiological reactivity and children's behavior: Advantages of a multisystem approach. *Developmental and Behavioral Pediatrics*, 23, 102-113.

Bosch, J. A., Brand, H. S., Ligtenberg, T. J. M., Bermond, B., & Hoogstraten, J. (1998). The response of salivary protein levels and S-IgA to an academic examination are associated with daily stress. *Journal of Psychophysiology*, 12, 384-391.

Bosch, J. A., Brand, H. S., Ligtenberg T. J. M., Bermond, B., Hoogstraten, J., & Nieuw Amerongen, A. V. (1996). Psychological stress as a determinant of protein levels and salivary-induced aggregation of streptococcus godonii in human whole saliva. *Psychosomatic Medicine*, 58, 374-382.

Cannon, W. B. (1914). The interrelations of emotions as suggested by recent physiological researches. *The American Journal of Psychology*, 25(2), 256-282.

Chrousos, G. P., & Gold, P. W. (1992). The concepts of stress and stress system disorders: Overview of physical and behavioral homeo-

stasis. JAMA, 267, 1244-1252.

Dickerson, S. S., & Kemeny, M. E. (2004). Acute stressors and cortisol responses: A theoretical integration and synthesis of laboratory research. *Psychological Bulletin*, *130*, 355-391.

Gallacher, D. V., & Peterson, O. H. (1983). Stimulus-secretion coupling in mammalian salivary glands. *International Review of Physiology*, 28, 1-52.

Gordis, E. B., Granger, D. A., Susman, E. J., & Trickett, P. K. (2006). Asymmetry between salivary cortisol and alpha-amylase reactivity to stress: Relation to aggressive behavior in adolescents. *Psychoneuroendocrinology*, 31, 976-987.

Gottman, J. M. (1979). *Marital interaction: Experimental investigations*. New York: Academic Press.

Gottman, J. M. (1994). What predicts divorce? The relationship between marital processes and marital outcomes. Hillsdale, NJ: Lawrence Erlbaum and Associates.

Gottman, J. M. (1998). Psychology and the study of marital processes. *Annual Review of Psychology*, 49, 169-197.

Gottman, J. M., & Levenson, R. W. (1986). Assessing the role of emotion in marriage. *Behavioral Assessment*, 8, 31-48.

Granger, D. A., Kivlighan, K. T., Blair, C., El Sheikh, M., Mize, J. A., Lisonbee, J. A., et al. (2006). Integrating the measurement of salivary alpha-amylase into studies of child health, development, and social relationships. *Journal of Social and Personal Relationships*, 23, 267-290.

Griffin, W. A. (1993). Transitions from negative affect during marital interaction: Husband and wife differences. *Journal of Family Psychology*, *6*, 230-244.

Griffin, W. A. (2003). Affect pattern recognition: Using discrete hidden Markov models to discriminate distressed from nondistressed couples. *Marriage and Family Review, 34,* 139-

Hahlweg, K., Reisner, L., Kohli, G., Vollmer, M., Schindler, L., & Revenstorf, D. (1984).

Development and validity of a new system to analyze interpersonal communication: Kategoriensystem fur Partnerschaftliche Interaktion. In K. Hahlweg & N. S. Jacobson (Eds.), Marital interaction: *Analysis and modification* (pp. 182-198). New York: Guilford Press.

Henry, J. P. (1992). Biological basis of the stress response. *Integrative Physiological and Behavioral Science*, 27, 66-83.

Heyman, R. E. (2001). Observation of couple conflicts: Clinical assessment applications, stubborn truths, and shaky foundations. *Psychological Assessment*, 13, 5-35.

Johnson, M. D., Cohan, C. L., Davila, J., Lawrence, E., Rogge, R. D., Karney, B. R., Sullivan, K. T., & Bradbury, T. N. (2005). Problem-solving skills and affective expressions as predictors of change in marital satisfaction. *Journal of Consulting and Clinical Psychology*, 73, 15-27.

Levitan, I. B., & Kaczmarek, L. K. (2002). *The neuron: Cell and molecular biology.* New York: Oxford University.

Li, T., & Gleeson, M. (2004). The effect of single and repeated bouts of prolonged cycling and circadian variation on saliva flow rate, immunoglobulin A and alpha-amylase responses. *Journal of Sports Sciences*, 22, 1015-1024

Nater, U. M., Rohleder, N., Gaab, J., Berger, S., Jud, A., Kirschbaum, C., et al. (2005). Human salivary alpha-amylase reactivity in a psychosocial stress paradigm. *International Journal of Psychophysiology*, 55, 333-342.

Raush, H. L., Barry, W. A., Hertel, R. K., & Swain, M. A. (1974). *Communication, conflict, and marriage*. San Francisco, CA: Jossey-Bass.

Revenstorf, D., Vogel, B., Wegener, C., Hahlweg, K., & Schindler, L. (1980). Escalation phenomena in interaction sequences: An empirical comparison of distressed and nondistressed couples. *Behavior Analysis and Modification*, 2, 97-116.

Schaap, C. (1984). A comparison of the interaction of distressed and nondistressed married couples in a laboratory situation: Literature survey, methodological issues, and an empirical investigation. In K. Halweg and N. S. Jacobson (Eds.) *Marital interaction: Analy-*

sis & modification (pp. 133-158). New York: Guilford Press.

Schneyer, C. A., & Hall, H. D. (1991). Effects of varying frequency of sympathetic stimulation on chloride and amylase levels of saliva elicited from rat parotid gland with electrical stimulation of both autonomic nerves. *Proceedings of the Society for Experimental Biology and Medicine*, 196, 333–337.

Shirtcliff, E. A., Granger, D. A., Booth, A., & Johnson, D. (2005). Low salivary cortisol levels and externalizing behavior problems in youth. *Development and Psychopathology, 171*, 167-184.

Skosnik, P. D., Chatterton, R. T., Swisher, T., & Park, S. (2000). Modulation of attentional inhibition by norepinephrine and cortisol after psychological stress. *International Journal of Psychophysiology, 36*, 59-68.

Skov, O. P., Kirkegaard, P., Rasmussen, T., Magid, E, Poulsen, S. S., Nexo, E. (1988). Adrenergic effects on secretion of amylase from the rat salivary glands. *Digestion*, *41*, 34-38.

Smith, D. A., Vivian, D., & K. D. O'Leary (1990). Longitudinal prediction of marital discord from premarital expressions of affect. *Journal of Consulting and Clinical Psychology*, 58, 790-798.

Speirs, R. L., Herring, J., Cooper, W. D., Hardy, C. C., & Hind, C. R. (1974). The influence of sympathetic activity and isoprenaline on the secretion of amylase from the human parotid gland. *Archives of Oral Biology, 19*, 747–752.

Thompson, R. A. (1990). Emotion and Self-regulation. *Nebraska Symposium on Motivation.* 1988: Socioemotional development. Current theory and research in motivation. Vol. 36 (pp. 367-467). Lincoln, NE: University of Nebraska Press.

Marketing Strategy

From a marketing strategy perspective all relationship service providers in a geographic region are viewed as being members of a single system; and the strategic objective is most efficiently and effectively meet the needs of all clients in the geographic area. A strategic analysis of the current system used to deliver relationship services to low income couples revealed a significant and unnecessary problem. It is that the failure of service providers to cooperate greatly aggravates the recruiting difficulties experienced by most service providers (and documented in section __ of this report).

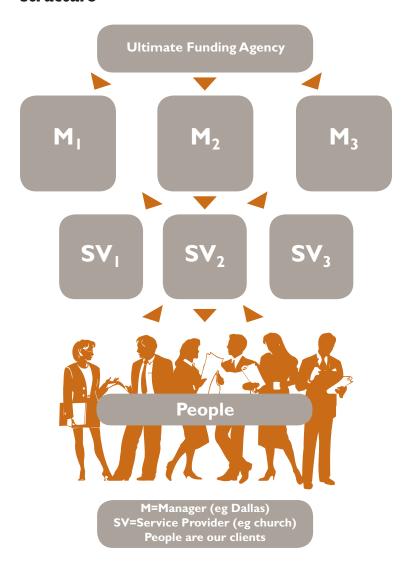
The problem: consequences and the barriers which create it

The failure to cooperate creates the following technical problems: referral agencies can be overwhelmed with multiple requests from individual service providers to be their "partner"; clients can receive so many messages touting the virtues of various service providers and services they simply hear noise; individual service providers have the responsibility for providing generic messages that could be much more efficiently provided by a single agent. In addition, to these technical problems there is the overriding issue that resources allocated towards attracting clients away from other service providers do not result in an increase in the overall number of clients served.

The failure to cooperate is due to a

variety of barriers. There is a perception that each provider is competing with all other providers for the same clients. Compensation structures that are purely driven by the number of clients served encourage this perception. There are historical and cultural reasons why some service provider segments mistrust other members, e.g., faith based and not faith based providers are at times in conflict.

Planned Structure

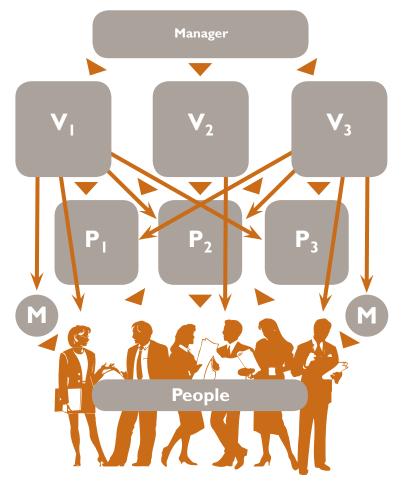


A task which needs to be engaged in either by agents whose span of control covers multiple service providers in a given geographic region; or leading service providers within a region is to overcome these barriers to cooperation.

Overcoming the perceived competition barrier

The perception amongst the providers that they are purely in competition with one another can be challenged by making two points. The first is that the perception is false. It is

Current Reality



false because (as numerous webinars etc) have emphasized service providers need to target a particular segment. The segment can be characterized along multiple dimensions. Many of the most successful programs are programs which have targeted groups such as teens, or couples having a baby. Due to the time and transportation constraints there is a natural geographic/timing segmentation that exists between providers. Because many clients seek different additional services (financial, parenting, substance abuse prevention/control, etc) there is a natural segmentation by ancillary services provided. [Many successful programs either directly provide extra servces, or partner with an agency that can provide extra services; however no program can provide everything for everyone.] Data presented earlier in this report provides some evidence for market segmentation in so far as when asked to rate religious, private, or social service providers using a three-point scale about 1/4th had a clear preference and about 1/4th had no preference.

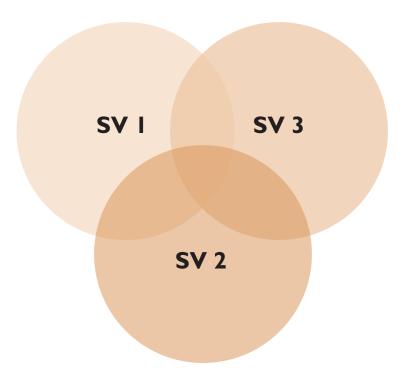
To convince service providers that even though they all compete for lowincome clients they can also cooperate; two broad approaches can be followed. One is to emphasize that in the "real world" competitors also cooperate. Examples include agricultural cooperatives, stores in mall, franchises (e.g. McDonalds), United Way participants, multi-unit retail operations (e.g. Old Navy, GAP, and Banana Republic are owned by the same holding company and even restaurants). The restaurant example refers to how in a "nice" hotel a concierge has a list to refer from, and how in a low-cost hotel one finds a laminated sheet of paper listing nearby restaurants.

The second approach is lead a work shop where the service providers "learn" that they are most targeting different (albeit overlapping) segments. The first step is for the workshop leader to work with each service provider to identify their key market segments. The second is for the workshop leader to construct a map of the entire market which depicts each provider's primary segments. The third step is to have a work shop where the providers learn how they are naturally splitting up the market; acknowledge overlapping segments and discuss whether they can be partitioned whether they are large enough to support multiple providers, tactics which will reduce the extent to which one provider's efforts to reach members of these popular segments interferes with the efforts of another provider, and (most importantly) identifies under-served segments. For this workshop approach to work the remaining to barriers to cooperation need to be addressed.

Overcoming the zero-sum barrier

The second barrier is that if the service providers a forced to play a zero-sum game with one another it is much more difficult for them to cooperate. It is not impossible since due to segmentation it is in their individual self-interest to cooperate, but it is a lot harder. In the private sector this barrier is addressed by providing payments to members of an organization based on the organization's overall performance, and/or having the organization use member resources to engage in actions which: (a) benefit all members and (b) are far more efficiently done at the organizational level. Both approaches should be con-

Service Providers Have Natural Customer Segments



sidered. The second approach can be readily implemented because there are certain activities which meet the two criteria.

The first is that each service provider shares common, broad, communication objectives. At a most general level there is a need to create awareness of programs which can provide help to couples. At the next level of specificity there is a need to overcome common barriers and misperceptions. These barriers and misperceptions are, for the most part, identified above. One barrier that is of both critical importance and common to all service providers is that help seeking for mental/relationship issues threaten self-esteem. There is a view that seeking help indicates a form of failure (have serious problems, cannot solve problems on own,

Thinking About Potential Segments and Your Natural Fit

Religious Rural Young Overwhelmed Conventional Aspirations

Not Religious Substance Abuse Urban, Inner-city Resist Convention

Local Church Attended as Child

For-Profit
Drug Programs
Street "cred"

etc.). A communication effort that addresses this problem would be helpful to all providers. Such an effort is not impossible since there are many classes of behavior where people are will seek help (eg. Improve one's ability to play a sport, learn a job-relevant skill). A final communication recommendation is that all messages must be designed for the low-income target market. It must not only use images and words which resonate with this market must be consistent with their attitudes regarding relationships and marriage. The recently, implemented "Two of Us" campaign is an example of a campaign which targets a very different segment; an analogous campaign for low income couples would be very beneficial. If this path is followed communication channels will need to be carefully selected since (as the 2-of-Us campaign illustrates) a campaign that is effective for one segment has the potential to be counterproductive for another.

A second point of beneficial cooperation is in coordinating the referral process. Under the current system each service provider must create and continually re-enforce a dyadic relationship. Each service provider is in direct competition with other service providers seeking to maintain a relationship with a potential referral source. An alternative would be to work with the referral source to iden-

tify how making referrals best meetings their needs and fits into their service delivery process. If there are natural fits between a referral source and a service provider (e.g., the source is one primarily accessed by expectant mothers and the provider's target is couples expecting a child) then providers with a poor fit would agree to "leave the source alone." If there are multiple service providers who are a good fit for the source a simple, quick system can be created and used to identify those which best meet the clients specific circumstances, such as timing and location needs, attitude towards using a faith-based provider, other services desired, etc. If there are multiple "best-fits" a rotating system based on provider capacity can be used to recommend or the client can be given a choice. [Asking a person who is uncertain if they want to "buy" an object whether they want "A" or "B" is a common and powerful way to close a "sale." In a similar vein if the service providers would like the opportunity to have one of their representatives physically present at the source a schedule can be created to avoid either having multiple people show up at once or having the source respond to a never-ending stream of requests. In addition, there are broad communication objectives. An organization of service providers can communicate to all potential

sources of referrals that if their clients go thru any of the programs they will be easier to work with since they will have improved communication skills, greater control of their emotional responses, and be better able to engage in whatever actions the source is promoting since they will have fewer relationship problems to deal with.

Overcoming the lack of trust barrier

The problem of a lack of lack of trust and respect amongst service providers is serious. It reflects both the perception that they are in zero-sum competition and historical/cultural factors. There are trust building activities which can reduce this barrier. The simplest is to create a situation that brings about face to face interaction and communication. A second is to facilitate reciprocity (where service providers exchange things of value). The simplest exchange is that of information (e.g., providers can exchange tips, lessons they have learned, or success stories). It is the act of exchange that is psychologically important. A third tactic is to arrange of the service providers to work on a common project. The project does not have to be connected to relationship education. The important psychological point is that working together builds trust that is transferred to competitive settings.

Comments and Conclusion

Taken individually, we hope that each of these study components as well as the marketing report are useful in their own way. Every service delivery system is like a large machine. Tweaking and improving the machine for maximum capacity is an ongoing process. Perhaps these studies can be used as tools for the next corrective action in your own program.

However, we would also like to point out that taken as a whole, there is information as well. After completing these projects and stepping back a bit, our final thoughts continue to gravitate toward one central theme: Every community is different, and understanding the unique qualities of that community...KNOWING that community seems to be the key for successful recruitment processes.

After this study, we believe that while there is no magic formula for every community, there could be formulas that would improve or perhaps greatly improve recruitment efforts as long as the population is well understood. And, we hope this report was a helpful step in your own understanding of your own community. Good luck with the task at hand.

Brandt Gardner, Ph.D.

(405) 744-5061 Brandt.gardner@okstate.edu

Kelly Roberts, M.S.

(405) 744-3683 Kelly.m.roberts@okstate.edu

References

Adler-Baeder, F., & Higginbotham, B. (2004). Implications of remarriage and stepfamily formation for marriage education. Family Relations, 53, 448-458.

Baron, J. & Sylvester, K. (2002). Expanding the goals of "responsible fatherhood" policy; Voices from the field in four cities. Washington, DC: Social Policy Action network and National practitioner's network for Fathers and Families.

Biocca, F., David, P., & West, M. (1994).

Continuous response measurement
(CRM): A computerized tool for research on the cognitive processing
of communication messages. In A.

Lang (Ed.), Measuring psychological responses to media messages
(pp. 15-64). Hillsdale, NJ: Lawrence Erlbaum.

Braver, S.L. (1989). Selection issues in children of divorce interventions. In I.N. Sandler, M.W. Roosa, S.A. Wolchick, S.G. West, & S.L. Braver, Center for the Prevention of Child and Family Stress (pp. 112-129). NIMH Grant Proposal Number MH3926.

Brenner, E., & Smeets, J. B. J. (2003). Fast corrections of movements with a computer mouse. Spatial Vision, 16, 365-376.

- Dickerson, S. S., & Kemeny, M. E. (2004). Acute stressors and cortisol responses: A theoretical integration and synthesis of laboratory research. Psychological Bulletin, 130, 355-391.
- Edin, K. & Kefalas, M. (2005). Promises I can keep: why poor women put motherhood before marriage. University of California Press: Berkeley and Los Angeles, CA.
- Fournier, D. G. & Roberts, K. (2003).

 Examination of help seeking for couple relationships in Oklahoma:

 Marital Education Form (Tech.

 Rep. No. HE-03-RS-038). Stillwater,

 Oklahoma State University, Human

 Development and Family Science.
- Gottman, J. M., & Levenson, R. W. (1985). A valid procedure for obtaining self-report of affect in marital interaction. Journal of Consulting and Clinical Psychology, 53, 151-160.
- Heyman, R. E. (2001). Observation of couple conflicts: Clinical assessment applications, stubborn truths, and shaky foundations. Psychological Assessment, 13, 5-35.
- Heyman, R. E., Chaudhry, B. R., Treboux, D., Crowell, J., Lord, C., Vivian, D., & Waters, E. B. (2001). How much observational data is enough? An empirical test using

- marital interaction coding. Behavior Therapy, 32, 107-123.
- Johnson, M. D., Cohan, C. L., Davila, J., Lawrence, E., Rogge, R. D., Karney, B. R., Sullivan, K. T., & Bradbury, T. N. (2005). Problem-solving skills and affective expressions as predictors of change in marital satisfaction. Journal of Consulting and Clinical Psychology, 73, 15-27.
- Kiecolt-Glaser, J. K., Bane, C., Glaser, R., & Malarkey, W. B. (2003). Love, marriage, and divorce: Newlyweds' stress hormones foreshadow relationship changes. Journal of Consulting and Clinical Psychology, 71, 176-188.
- Mathematica Policy Research, Inc. (2003, August). Supporting Healthy Marriage and Strengthening Relationships of Unwed Parents: Technical Assistance Available. Retrieved July 20, 2005, from www.mathematica-mpr.com/publications/PDFs/bsfisbr2.pdf
- MDRC. (2005, May). Guidelines for Supporting Healthy Marriage Demonstration Programs. Retrieved July 17, 2005, from www.mdrc.org/publicatons/shm_guidelines.pdf
- Ooms, T., & Wilson, P. (2004). The challenges of offering relationship and marriage education to low-income

populations. Family Relations, 53, 440–447.

Public Strategies. (2003). [Project 450 internal report]. Unpublished raw data.

Schuldberg, D., & Gottlieb, J. (2002).

Dynamics and correlates of
microscopic changes in affect.

Nonlinear Dynamics, Psychology,
and Life Sciences, 6, 231-257.

Silliman, B., Stanley, S.M., Coffin, W., Markman, H.J., Jordan, P.L. (2002). Preventive interventions for couples. [Supported in part by a National Institute of mental healthy, Prevention Research Grant, Grant 5-RO1-MH35525-12, Long Term Effects of Premarital intervention]. In Liddle, H.A., Santisteban, D.A., Levant, R.F. 7 Bray, J.H. (Eds.), Family Psychology: Science Based Interventions. American Psychological Association: Washington, DC.

Stanley, S.M., Markman, H.J., St.
Peters, M., & Leber, D. (1995).
Strengthening marriages and preventing divorce: New directions in prevention research. Family Relations, 44, 392-401.

Story, L. B., & Bradbury, T. N. (2004). Understanding marriage and stress: Essential questions and challenges. Clinical Psychology Review, 23, 1139-1162.

APPENDIX A

Literature Review "Since 2005" with Annotated Bibliography Notes and Connections made to our Project "Prior to 2005" Literature Review

- Bishop, Bryant, Giles, Hansen & Dusenbury, 2006
 - Bishop, D., Bryant, K., Giles, S., Hansen, W., & Dusenbury, L. (2006). Simplifying the delivery of a prevention program with webbased enhancements. *The Journal of Primary Prevention*, *27*(4), 433-444.
 - All Stars is prevention program taught in schools meant to help teens make positive choices. When the program piloted a webbased version, it was successful in making tasks associated with delivery for teachers easier. The majority of teachers said they preferred to teach the program online, that the enhancements made the program more appealing, and the overall delivery was easier. The easier a program is to implement, the great the likelihood it will be implemented as intended by the program developers.
 - Web-based technologies
 may be useful for in-school

prevention programs that require teachers to complete paperwork, word-processing, and other administrative tasks associate with delivery.

- Heinrichs, 2006
 - Heinrichs, N. (2006). The effects of two different incentives on recruitment rates of families into a prevention program. *Journal of Primary Prevention*, *27*(4), 345-365.
 - **Study conducted in Germany
 - Payment is an effective strategy to increase the recruitment rate and initial attendance of low-income families. Offering low-income family's payment for their participation in a parenting prevention program resulted in a 20% increase in recruited families.
 - Payment is most effective for motivating low-income parents to come to at least one session (usually the first on). Once parents experience the context of the training, they seemed to become self-motivated to attend regularly and the payment became less pertinent.
 - Setting- individual vs. group; home vs. public- does not influence recruitment. From a cost-effectiveness standpoint, this result is promising.
 - Appropriate incentives as well as a foreseeable number of program hours may lead to good participant

involvement.

- Fernandez, Warren, Vagra, Prado, Hernandez, & Bowen 2007
 - Fernandez, M., Warren, J., Vagra, L., Prado, G., Hernandez, N., & Bowen, G. (2007). Cruising in cyber space: comparing internet chat room versus community venues for recruiting Hispanic men who have sex with men to participate in prevention studies. *Journal of Ethnicity in Substance Abuse, 6*(2), 143-162.
 - Internet recruitment of Hispanic men who have sex with men for prevention programs was more efficient and required less staff time than community recruitment.
 - Using both internet and community recruitment venues in studies help to gain a more representative group of men who have sex with men.
 - When using internet chat rooms to recruit, researchers have only seconds to hook the potential participants due to the fast paced nature of chat rooms.
 - The internet should not supplant existing recruitment approaches but should be added to current tools.
 - Authors encourage other researchers to consider the characteristics of their population and the goals of their work when

- selecting the most appropriate recruitment modality.
- Clemson, Cumming, & Swann 2007
 - Clemson, L., Cumming, R. & Swann, M. (2007). Recruiting older participants to a randomized trial of a community-based fall prevention program. *Australasian Journal on Ageing*, 26, 35-39.
 - Databases and mail outs using personalized letters were the most effective recruitment strategies for a community-based preventive program.
 - Multiple sources of databases will more likely yield a representative sample.
 - Poor returns resulted from group presentations, flyers, and newspaper advertizing.
 - Referrals to a fall prevention program by a health professional was the least useful recruitment method among mail-outs, flyers, newspaper advertisements, newspaper editorials, news stories and group presentations. Persons referred by health professionals were a particularly frail group and had a lower SES.
- Robinson, et. al. 2007Robinson, J., Fuerch, J.,
 - Winiewicz, D., Salvy, S., Roemmich, J., Epstein, L. (2007). Cost effectiveness of recruitment

- methods in an obesity prevention trial for young children. *Preventive Medicine*, 44, 499-503.
- Direct mailings were the most cost-effective method to recruit families from an obesity prevention program.
- Newspaper advertisements became less effective overtime compared to mail-outs.
- Posters and brochures were distributed to over 150 community settings, but only 2.9% of the final sample cited the posters as their recruitment source.
- Thompson, et. al., 2006
 - Thompson, D., Canada, A., Bhatt, R., Davis, J., Plesko, L., Barannowski, T., Cullen, K., & Zakeri, I. (2007). eHealth recruitment challenges. *Evaluation* and *Program Planning*, 29, 433-440.
 - Effective focused recruitment strategies:
 - Identify key organizations and gatekeepers, and focus on building relationships with them.
 - Utilize existing communication channels and networks within the organization to promote the program
 - Allow ample time for recruitment
 - Be flexible and adaptable, and modify recruitment strategies to fit in with the existing structure of the organization.

- Ensure that recruitment materials and strategies are culturally sensitive, developmentally appropriate, and speak to the needs and interests of the intended audience.
- Le, Lara, & Perry 2007
 - Le, H., Lara, A., & Perry, D. (2007). Recruiting Latino women in the U.S. and women in Mexico in postpartum depression prevention research. *Womens Mental Health*, 11, 159-169.
 - The language required by the IRB, when translated into the participant's population, initially contained a number of specific words or phrases that were alarming to the population. Such phrases raised concerns about possible deportation in some women with undocumented immigration status and fear of signing associated forms.
 - There is a crucial need to involve staff members at the respective recruitment sites as a potential way to conduct recruitment that is less costly and time-intensive and demonstrating more successful outcomes.
 - Face-to-face recruitment methods are better than other methods (e.g., mailings, media/print ads).
 - In Latino culture, women's role has been associated with enduring

- suffering; this may prevent them from attending beneficial workshops, etc.
- Peters, Amos, Meshack,
 Yacoubian, & Essien, 2008
 - Peters, R., Amos, C., Meshack, A., Yacoubian, G. & Essien, E. J. (2008). Smoking cessation recruitment among African American youth: what youth think will help them attend. *Journal of Ethnicity in Substance Abuse, 7(4)*, 451-464.
 - Youth in an alternative high school smoking cessation program... current smokers who participated reported greater importance to family and friends asking them to go and concern for their future.
 - The source of the information was important. Overall, current smokers reported significantly lower importance of program information. The highest prevalence of non-importance was assigned to teachers (39% smokers vs. 17% non-smokers) and celebrities (42% smoker vs. 21% non-smoker). The highest importance was given to health educators (88% smoker vs. 96% non-smoker) and people affected by smoking (88% smoker vs. 95% non-smoker).
 - According to Shade (1982) minorities cognitively process

communication differently from mainstream society because they place heavy emphasis on source and message style to determine credibility of the communication. In addition, minorities attend to personal stimuli rather than indirect stimuli. Shade, B. J. (1982). Afro-American cognitive style: A variable in school success. *Review of Educational Research*, 52, 219-244.

- Perez, Diaz, Hermida, Villa,
 Crespo, & Rodriguez, 2008.
 - Perez, J., Diaz, S., Hermida, J., Villa, R., Crespo, J., & Redriguez, O. (2008). Recruitment characteristics influencing parental participation in family-based drug abuse prevention programs: The Spoth and Redmond model in Spain.

 Substance Abuse and Misuse, 48, 850-857.
 - This study (conducted in Spain) measured the results of different types of telephone recruitment scripts attempting to get families to attend a drug-use prevention program. Types of phone call scripts compared
 - Control: This included the basis aspects of a standard flyer sent out by the school, indicating the day and time of the presentation session of the familybased prevention program.

- Sensitization to severity: using the control model as a basis, information was added that stressed the severity of the problem of drug dependence and the social and health consequences of drug use.
- Sensitization to susceptibility: Using the control call model, information was added about drug use among adolescents and about the possibility of tehis problem affecting anyone without their family's awareness.
- Elimination of barriers:
 Using the control call model, a list was added to the main problems parents may have for attending the presentation of the program.
 They were to indicate which of these problems applied to them, and to return the circular to the school.
- No type of phone call was found to be more effective than the other in recruiting participants. The percentage of parents attending all 6 sessions of the program was no more than 5% of the total.
- (Mackenzie, Gekoski,& Knox, 2006)
 - Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging and Mental Health*, 10(6), 575-582.

- The goal of this study was to examine age and gender differences toward seeking professional psychological help and the influence of attitudes on help-seeking intentions. As predicted, the survey revealed that older adults and women help more positive attitudes toward seeking help than younger adults and men.
- Never-married individuals are more likely than married individuals to seek help from mental health professionals (Kessler, R., Demier, O., Frank, R., Olfson, M., Pincus, j., Walters, E., et. al. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. The New England Journal of Medicine, 352, 2515-2523.)
- Women exhibited especially positive help-seeking attitudes, regardless of how well educated they were. In contrast, men's attitudes were positively influenced by higher levels of education.
- Women in the sample were more willing to acknowledge psychological problems and the need for help than men, but they did not differ from men in terms of their propensity to seek help or the extent of which they associate stigma with professional help-seeking.

- Educational incentives aimed at increasing men's use of mental health services should focus on increasing psychological openness, rather than targeting attitudes related to stigma or willingness to help.
- Roberts & Gardner, 2008
 - Low-income survey respondents indicated that they would be most likely to use services sponsored by a private professional- 71% (compared to community sponsored- 54%- or church sponsored- 65%).
 - When the same respondents were broken down into ethnicities, African Americans were significantly more likely to use services sponsored by a church whereas Latinos and Caucasians were more likely to use services sponsored by a private professional.
- Pederson & Vogel, 2007
 - Pederson, E., Vogel, D. (2007). Male gender role conflict and willingness to seek counseling: Testing a mediation model on college-aged men. *Journal of Counseling Psychology*, 54(4), 373-384.
 - Study conducted on **undergraduate** students
 - Men experiencing greater gender role conflict were more

likely to self-stigmatize and less likely to self-disclose. High selfstigma and less disclosure then led to positive attitudes and subsequently to less willingness to seek counseling.

• Gender role conflict may leave men less willing to seek counseling for psychological and interpersonal concerns, especially when the men are uncomfortable with disclosing their distress, when they self-stigmatize about therapy, and when these factors negatively influence their attitudes about counseling.

Recruitment Challenges in Low-Income Marriage Education Programs

Lit Review: Themes and possible links to our initial literature review for this project

- It is difficult to recruit low-income couples to marriage education workshops/classes.
 - Payment is an effective strategy to increase the recruitment rate and initial attendance of low-income families. Offering low-income families payment for their participation in a parenting prevention program resulted in a 20% increase in recruited families (Heinrichs 2006).
 - Payment is most effective for motivating low-income parents

to come to at least one session (usually the first one). Once parents experience the context of the training, they seemed to become self-motivated to attend regularly and the payment became less pertinent (Heinrichs 2006).

- Setting- individual vs. group; home vs. public- does not influence recruitment. From a cost-effectiveness standpoint, this result is promising (Heinrichs 2006).
- Appropriate incentives as well as a foreseeable number of program hours may lead to good participant involvement (Heinrichs 2006).
- The language required by the IRB, when translated into the participant's population, initially contained a number of specific words or phrases that were alarming to the population. Such phrases raised concerns about possible deportation in some women with undocumented immigration status and fear of signing associated forms(Le, Lara, & Perry, 2007).
- In Latino culture, women's role has been associated with enduring suffering, this may prevent them from attending beneficial workshops, etc. (Le, Lara, & Perry, 2007).
- Recruiting both partners in a low-

- income situation is more difficult than recruiting from within the general population.
- Recruiting methods for the general population: Internet recruitment of Hispanic men who have sex with men for prevention programs was more efficient and required less staff time than community recruitment (Fernandez, Warren, Vagra, Prado, Hernandez, & Bowen 2007).
- Using both internet and community recruitment venues in studies help to gain a more representative group of men who have sex with men. (Fernandez, Warren, Vagra, Prado, Hernandez, & Bowen 2007).
- There is a crucial need to involve staff members at the respective recruitment sites as a potential way to conduct recruitment that is less costly and time-intensive and demonstrating more successful outcomes (Le, Lara, & Perry, 2007).
- Face-to-face recruitment methods are better than other methods (e.g., mailings, media/print ads) (Le, Lara, & Perry, 2007).
- Low-income males have attitude barriers about seeking help.
 - The goal of this study was to examine age and gender differences toward seeking

- professional psychological help and the influence of attitudes on help-seeking intentions. As predicted, the survey revealed that older adults and women help more positive attitudes toward seeking help than younger adults and men (Mackenzie, Gekoski, & Knox, 2006).
- Never-married individuals are more likely than married individuals to seek help from mental health professionals (Kessler, R., Demier, O., Frank, R., Olfson, M., Pincus, j., Walters, E., et. al. (2005). Prevalence and treatment of menal disorders, 1990 to 2003. *The New England Journal of Medicine, 352*, 2515-2523.) (Mackenzie, Gekoski,& Knox, 2006).
- Women exhibited especially positive help-seeking attitudes, regardless of how well educated they were. In contrast, men's attitudes were positively influenced by higher levels of education (Mackenzie, Gekoski, & Knox, 2006).
- Women in the sample were more willing to acknowledge psychological problems and the need for help than men, but they did not differ from men in terms of their propensity to seek help or the extent of which they associate stigma with professional help-

- seeking (Mackenzie, Gekoski, & Knox, 2006).
- Educational incentives aimed at increasing men's use of mental health services should focus on increasing psychological openness, rather than targeting attitudes related to stigma or willingness to help (Mackenzie, Gekoski, & Knox, 2006).
- Men experiencing greater gender role conflict were more likely to self-stigmatize and less likely to self-disclose. High self-stigma and less disclosure then led to positive attitudes and subsequently to less willingness to seek counseling (Pederson & Vogel, 2007).
- Gender role conflict may leave men less willing to seek counseling for psychological and interpersonal concerns, especially when the men are uncomfortable with disclosing their distress, when they self-stigmatize about therapy, and when these factors negatively influence their attitudes about counseling (Pederson & Vogel, 2007).
- Recruiting low-income families to all types of prevention programs results in low numbers.
 - Referrals to a fall prevention program by a health professional was the least useful recruitment method among mail-outs, flyers,

- newspaper advertisements, newspaper editorials, news stories and group presentations. Persons referred by health professionals were a particularly frail group and had a lower SES (Clemson, Cumming, Swann & 2007).
- The percentage of minority parents attending all 6 sessions of a prevention program was no more than 5% of the total recruited (Perez, Diaz, Hermida, Villa, Crespo, & Rodriguez, 2008).
- It is helpful to tailor preventative efforts to the particular needs and culture of the couple.
 - According to Shade (1982) minorities cognitively process communication differently from mainstream society because they place heavy emphasis on source and message style to determine credibility of the communication. In addition, minorities attend to personal stimuli rather than indirect stimuli. Shade, B. J. (1982). Afro-American cognitive style: A variable in school success. Review of Educational Research, 52, 219-244. As found in (Peters, Amos, Meshack, Yacoubian, & Essien, 2008).
- Religious organizations may be in an advantageous position to help couples because the couples trust that organization.

- Low-income survey respondents indicated that they would be most likely to use services sponsored by a private professional- 71% (compared to community sponsored- 54%- or church sponsored- 65%) (Roberts & Gardner, 2008).
- When the same respondents were broken down into ethnicities, African Americans were significantly more likely to use services sponsored by a church whereas Latinos and Caucasians were more likely to use services sponsored by a private professional (Roberts & Gardner, 2008).
- Key to recruiting is a sense of trust between the couple and the provider, especially important in men.
 - The source of the information was important. Overall, current smokers reported significantly lower importance of program information. The highest prevalence of nonimportance was assigned to teachers (39% smokers vs. 17% non-smokers) and celebrities (42% smoker vs. 21% non-smoker). The highest importance was given to health educators (88% smoker vs. 96% non-smoker) and people affected by smoking (88% smoker vs. 95% non-smoker) (Peters, Amos, Meshack, Yacoubian, & Essien, 2008).

- Venue of service delivery is important
 - All Stars is prevention program taught in schools meant to help teens make positive choices. When the program piloted a webbased version, it was successful in making tasks associated with delivery for teachers easier. The majority of teachers said they preferred to teach the program online, that the enhancements made the program more appealing, and the overall delivery was easier. The easier a program is to implement, the great the likelihood it will be implemented as intended by the program developers (Bishop, Bryant, Giles, Hansen & Dusenbury, 2006).
 - Web-based technologies may be useful for in-school prevention programs that require teachers to complete paperwork, word-processing, and other administrative tasks associate with delivery (Bishop, Bryant, Giles, Hansen & Dusenbury, 2006).
 - Databases and mail outs using personalized letters were the most effective recruitment strategies for a community-based fall-prevention program for the elderly (Clemson, Taylor, & Cumming, 2007).
- Strongest barrier for couples is a lack of problem solving skills in order to get both members to

jointly agree to go.

- Youth in an alternative high school smoking cessation program... current smokers who participated reported greater importance to family and friends asking them to go and concern for their future (Peters, Amos, Meshack, Yacoubian, & Essien, 2008).
- Recruitment strategies tend to be unclear and inconsistent.
 - Direct mailings were the most cost-effective method to recruit families from an obesity prevention program (Robinson, et. al., 2007).
 - Newspaper advertisements became less effective overtime compared to mail-outs (Robinson, et. al., 2007).
 - Posters and brochures were distributed to over 150 community settings, but only 2.9% of the final sample cited the posters as their recruitment source (Robinson, et. al., 2007).
 - Effective focused recruitment strategies: (Thompson, et.al. 2006)
 - Identify key organizations and gatekeepers, and focus on building relationships with them.
 - Utilize existing communication channels and networks within the organization to promote the program
 - Allow ample time for

recruitment

- Be flexible and adaptable, and modify recruitment strategies to fit in with the existing structure of the organization.
- Ensure that recruitment materials and strategies are culturally sensitive, developmentally appropriate, and speak to the needs and interests of the intended audience.
- This study (Perez, Diaz, Hermida, Villa, Crespo, & Rodriguez, 2008) (conducted in Spain) measured the results of different types of telephone recruitment scripts attempting to get families to attend a druguse prevention program. Types of phone call scripts compared:
- Control: This included the basis aspects of a standard flyer sent out by the school, indicating the day and time of the presentation session of the familybased prevention program.
- Sensitization to severity: using the control model as a basis, information was added that stressed the severity of the problem of drug dependence and the social and health consequences of drug use.
- Sensitization to susceptibility: Using the control call model, information was added

about drug use among adolescents and about the possibility of tehis problem affecting anyone without their family's awareness.

- Elimination of barriers:
 Using the control call model, a list was added to the main problems parents may have for attending the presentation of the program.
 They were to indicate which of these problems applied to them, and to return the circular to the school.
- No type of phone call was found to be more effective than the other in recruiting participants. The percentage of parents attending all 6 sessions of the program was no more than 5% of the total (Perez, Diaz, Hermida, Villa, Crespo, & Rodriguez, 2008).

