

Final Descriptive Evaluation Examining Participant Profiles, Recruitment,
and Retention for Prevention and Relationship Education's (PREP)
Within My Reach in Orlando, FL

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Prepared by

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Structured Abstract: A Descriptive Evaluation of PREP's Within My Reach in Orlando Florida

A primary objective of Project Harmony at the University of Central Florida is to provide individual-oriented relationship education to low-income individuals in the Central Florida community. Key services included 12-hours of Prevention and Relationship Education Program's (PREP's) *Within My Reach* curriculum, case management, and job and career related services. The focus of the current descriptive evaluation was to examine the relationship between participant baseline characteristics and study retention in order to better understand which participants might be at risk for dropping out. Specifically, we sought to understand how participants' baseline profiles, or categories developed based upon their responses to questionnaires, might be related to attendance during the six-month study. In addition, we conducted an implementation analysis that examined overall retention and the quality of services delivered. All program services were delivered on-site at the University of Central Florida. The descriptive evaluation included 1,129 low income individuals who enrolled in the study during the first four years of service delivery. Data was collected on key demographics and outcomes, such as individual psychological distress and emotion regulation. We collected data at study enrollment, 30-, 90-, and 180-days post-enrollment. We identified categories of participants based on their individual psychological distress and emotional regulation scores when they enrolled in the program. We then compared these categories to see if there were differences in program retention. We identified four primary psychological distress group categories, and seven unique emotion regulation group categories. No statistically significant differences existed between profile group categories and study retention, although groups with higher psychological distress, as well as those with lower emotion regulation, demonstrated a higher probability of dropping out of the study after six-months. While originally intended as a preventive intervention, we found specific categories of distressed and emotionally dysregulated participants who chose to attend relationship education. In order to retain these participants, relationship education programmers should implement intentional strategies that might help mitigate some of the stressors that might result from, or contribute to, their enhanced psychological distress or emotion dysregulation. Our implementation analysis found that participants reported being highly satisfied with the program, the quality of services received, and knowledge gained. However, participant drop-out at the six-month follow-up was high. This may be related to the unique stressors that low-income individuals experience. We provide some discussion and strategies to consider for future programming to improve retention.

Contents

I.	INTRODUCTION	1
A.	Introduction and study overview	1
B.	Description of the intended intervention	2
II.	PROCESS/IMPLEMENTATION STUDY	4
A.	Research questions	4
B.	Study design	4
1.	Sample formation	4
2.	Data collection.....	4
3.	Data preparation and measures	6
C.	Findings and analysis approach	8
1.	How were recruitment practices implemented?	8
2.	Were participants satisfied with the services they received?	9
3.	What were contributing factors to participants' decisions to enroll and complete the study?	10
III.	OUTCOME STUDY.....	11
A.	Research questions	11
B.	Study design	11
1.	Sample formation	11
2.	Data collection.....	14
3.	Data preparation and measures	14
C.	Findings and analysis approach	15
1.	Are there baseline profiles for individuals enrolled into the WMR study based on individual distress?	16
2.	Do baseline distress profile groups differ by attendance at the six-month study period?.....	17
3.	Are there baseline profiles for individuals enrolled into the WMR study based on emotion regulation?	17
4.	Do baseline emotion regulation profile groups differ by attendance at the six-month study period?	18
IV.	DISCUSSION AND CONCLUSIONS	19
V.	REFERENCES	21
VI.	APPENDICES.....	23
A.	Outcome analysis.....	23
1.	Psychological Distress Profile Technical Supplement.....	24
2.	Emotion Regulation Profile Technical Supplement.....	26

Tables

I.1.	Description of intended intervention components and target populations	2
I.2.	Staff training and development to support intervention components	3
II.1.	Data used to address process/implementation research questions	5
II.2.	Measures used to address process/implementation research questions.....	7
II.C.2a.	Quality items percentages	9
II.C.2b.	PREP Alliance percentages.....	10
III.1.	Characteristics of participants in implementation/process study.....	13
II.3.a.	Data used to address the outcome research questions	15
VI.C.1a.	Model fit of the latent profile analysis on the four distress subscales.....	24
VI.C.1b.	Profile allocation based on maximum posterior probability for four latent profiles, mean probabilities of latent profiles, and standardized conditional mean scores on the distress subscales	25
VI.C.2a.	Relations of the four latent profiles to the outcome variables.....	25
VI.C.2b:	Omnibus and pairwise Wald test results of the four latent profiles on the outcome variables.....	25
VI.C.3a.	Model fit of the latent profile analysis on the six emotion regulation subscales.....	26
VI.C.3b.	Profile allocation based on maximum posterior probability for six latent profiles, mean probabilities of latent profiles, and mean scores on the emotion regulation subscales	26
VI.C.4a.	Relations of the six profiles to the outcome variables	27
VI.C.4b.	Omnibus and pairwise Wald test results of the six latent profiles on the outcome variables.....	27

Figures

II.C.1.	Percentage of responses to “How did you hear about the program?”	9
III.C.1.	Latent profile results: Mean scores on the distress subscales.....	16
III.C.2.	Latent profile results: Mean scores on the emotion regulation subscales.....	18

Descriptive Evaluation of PREP's Within My Reach in Orlando, Florida

I. INTRODUCTION

A. Introduction and study overview

The descriptive evaluation presented here is based on an analysis of individuals who participated in PREP's *Within My Reach* curriculum as implemented in Orlando, Florida in Project Harmony at the University of Central Florida (UCF). Project Harmony is the name of the funded project that is housed at UCF and provides different types of relationship education programs to people in the Orlando, FL community. This descriptive evaluation focuses on individuals who participated in PREP's *Within My Reach*. Individuals were recruited from the local community to enroll in a six-month evaluation of the 12-hour *Within My Reach* (WMR) curriculum. WMR is an adapted version of the PREP curriculum that is intended for individuals who are attending relationship education without a partner. Individuals may currently be in a relationship, but their partner either cannot attend, or is not willing to attend. Or, individuals may not be in a current relationship. In either case, WMR focuses on healthy relationship skills, as well as emphasizing healthy relationship development.

The current evaluation originally began as an impact evaluation that included random assignment to the treatment (WMR) or to a wait-list control group. During the first three years of random assignment, the project met, or exceeded, all enrollment and random assignment targets suggesting strong demand for the WMR program in the community. However, the project experienced significant retention challenges at the six-month study follow-up period when primary outcome data was collected. These retention challenges are not unique to this project and are often widely experienced by community-based interventions. High levels of attrition can pose challenges for statistical power and the ability to detect intervention effects. Given these concerns, this study focused instead on a descriptive evaluation¹. Focusing on retention provides a learning opportunity because little is understood about the characteristics of participants who choose to enroll in individual-oriented relationship education, as well as what individual-level factors contribute to participant attrition. To date, the limited research that examined retention in relationship education focused on recruitment strategies, but has not addressed specific individual factors that might better predict which participants are at risk for dropping out.

Individual-oriented relationship education (RE) is intended for people who would like to attend relationship skills-training, but are either not currently in a relationship, are not with a committed partner, or have a partner who is unwilling or unable to attend (Rhoades & Stanley, 2009). The potential benefits to individual-oriented RE over couples-oriented RE are (a) it may be more feasible for participants to attend because they are only navigating one schedule; (b) relationship development is emphasized so that attendees can form healthy relationships, or make a decision to leave an unhealthy relationship; and (c) sensitive topics can be addressed safely, such as domestic violence (Stanley et al, 2020). However, individual-oriented RE has not received as much attention as couples-oriented RE in the scholarly literature. Additionally, it is not well understood who chooses to attend individual-oriented RE, and what factors are important in

recruiting and retaining this population. Therefore, the current evaluation aims to explore these factors with a large sample ($N = 1,129$) of low-income individuals who enrolled in individual-oriented RE utilizing PREP's *Within My Reach* curriculum (Pearson, Stanley, & Rhoades, 2008). This descriptive evaluation includes two components: (1) implementation that focuses on actual participant experience with the WMR program; and (2) the assessment of participants' baseline characteristics and their relationship to retention.

B. Description of the intended intervention

The intervention of focus in this report is 12-hours of relationship education utilizing PREP's *Within My Reach* (WMR) curriculum. The relationship education workshops contained a total of 12 hours of content and were delivered to individuals one night per week, three-hours each night, for a total of four week-nights over a 30-day period. Individuals began the relationship education workshops one-to-two weeks after study enrollment.

The relationship education workshops took place in the Project Harmony building located on the main campus of the University of Central Florida in east Orlando. Workshop topics included healthy relationship skill-building techniques, such as healthy communication and communication danger signs, stress and relaxation techniques, and understanding personality, as well as developing clear relationship expectations and symmetrical commitment. Description of the curriculum content can be found in Table I.1.

The workshops were co-facilitated by educators trained in the WMR curriculum. The educators were either family case managers employed by Project Harmony or were contracted relationship educators. All educators participated in regularly scheduled supervision and fidelity meetings. In addition to the 12-hour relationship education curriculum, individuals received case-management services, and two booster workshops (one at 90-days post enrollment and one at 180-day post enrollment) on career pathways and planning. The booster workshops were facilitated by the family case management staff. See Table I.1 for content description of the career pathways program.

The target population was low-income individuals over the age of 18. Low-income typically includes those within 200% of the federal poverty guidelines. However, income was not a formal screening criterion for recruitment or participation. Participants were recruited from organizations that typically served low-income populations. Individuals could have been in a relationship or single at the time of recruitment and enrollment, and may or may not have had children; however, they must have planned to attend relationship education individually.

Table I.1. Description of intended intervention components and target populations

Component	Curriculum and content	Dosage and schedule	Delivery	Target Population
Relationship skills workshops	Healthy relationships curriculum: Fun, Communication Danger Signs, Speaker-Listener Technique, Stress and Relaxation, Issues and Events, Love Styles Personality and Expectations, Commitment	12 hours, with 3-hour sessions occurring once per week for four weeks	Group lessons provided at the intervention's facilities by two trained facilitators in every session	Low-income individuals

Component	Curriculum and content	Dosage and schedule	Delivery	Target Population
Economic stability workshops	My Story, My Career: Exploration of vocational history, identifying transferable skills, determining future goals, and learning about job-search resources; Taking Control of Your Personal Finances: Learning about Budgeting, saving, setting financial goals, managing debt, and financial additional resources)	Two 90-minute workshops at 3-month and 6-months post enrollment (2 and 4 months after the relationship education workshops)	Career Development workshops are provided by two facilitators. Financial Literacy workshops are provided by one facilitator.	Low-income individuals

Table I.2. Staff training and development to support intervention components

Component	Education and initial training of staff	Ongoing training of staff
Relationship skills workshops	Facilitators are male and female, hold at least an Associate's Degree and received a minimum of one day of initial training, in addition to a minimum of 12 hours of shadowing prior to teaching.	Facilitators receive a half-day of annual refresher training in the intervention's curricula from study staff. Facilitators also attend a monthly supervision meeting to address content fidelity.
Economic stability workshops	Facilitators are male and female, hold at least an Associate's Degree and received a minimum of one day of initial training, in addition to a minimum of 12 hours of shadowing prior to teaching.	Facilitators receive a half-day of annual refresher training in the intervention's curricula from study staff.

II. PROCESS/IMPLEMENTATION STUDY

For the implementation analysis, we focused on the quality of the services provided, as well as recruitment, engagement, and retention. We focused on these areas because Project Harmony experienced retention challenges for individuals enrolled in WMR. The primary aim of the implementation analysis was to understand participants' actual experiences with the program, beginning with recruitment and through study completion. Thus, we posed the following overarching questions:

A. Research questions

1. How were recruitment practices implemented?
2. Were participants satisfied with the services they received?
3. What were the contributing factors to participants' decisions to enroll and complete the study?

B. Study design

The implementation analysis included descriptive data that examined how participants were recruited into the study, participants' perspectives about the quality of the services they received, and strategies for program engagement. To conduct the implementation analysis, we used data from several sources that began with recruitment information and ended with a post-program satisfaction survey. Thus, the data collection encompassed the six-month study time frame. Below, we describe the sample, data collection process, analyses, and results.

1. Sample formation

The sample for the implementation analysis was created by utilizing available responses from participants on the specific data sources listed in Table II.1 All enrolled participants (1,129) were eligible to be included in the implementation analysis. The recruitment and enrollment process is described in more detail in Section III. Data sources included information collected at enrollment and after completing the WMR workshops. Table III.1 provided in the outcome analysis section below includes participant demographic information. Some participants chose not to answer demographic questions, and thus did not have a response included in the table, but their data may still have been included in the implementation analysis.

2. Data collection

Data sources for the above research questions stem from three primary sources: (a) the nFORM applicant characteristics form; (b) the Project Harmony participant satisfaction survey; and (c) the researcher-developed supplemental information management system (SMIS). Participants were administered all questions at either enrollment (data for everyone); 30-day follow-up; or 180-day follow-up. All data was collected electronically in either English or Spanish.

Table II.1. Data used to address process/implementation research questions

Implementation element	Research question	Data source	Timing/frequency of data collection	Party responsible for data collection
Recruitment	What were the primary recruitment sources?	nFORM	Enrollment	Program staff
Recruitment	Additionally, were any recruitment methods (i.e., passive versus active) more reliable (i.e., related to study completion)?	nFORM, then group sources into passive or active categories	Enrollment	Program staff
Quality	How satisfied were study participants with the overall program model?	Participant satisfaction survey	Twice for treatment participants (30 days and 180-days post-enrollment); Once for control participants (180-days post-enrollment)	Program staff
Quality	What relationship did participants have with program staff, including relationship educators?	Participant satisfaction survey; Working alliance inventory	Twice for treatment participants (30 days and 180-days post-enrollment); Once for control participants (180-days post-enrollment); 30-day follow-up for treatment participants	Program staff
Engagement/Retention	What were primary motivators for enrolling in the program?	nFORM; Participant satisfaction survey	Enrollment; Twice for treatment participants (30 days and 180-days post-enrollment); Once for control participants (180-days post-enrollment)	Evaluation staff
Engagement/Retention	What were the main reasons for missing scheduled workshops?	Participant satisfaction survey	Twice for treatment participants (30 days and 180-days post-enrollment); Once for control participants (180-days post-enrollment)	Program staff

Implementation element	Research question	Data source	Timing/frequency of data collection	Party responsible for data collection
Engagement/Retention	How did participants respond to their intention to return to their next scheduled visit?	SMIS (supplemental management information system)	Enrollment; 30-day follow-up; 90-day follow-up; and 180-day follow-up	Evaluation staff; program staff
Engagement/Retention	What proportion of participants actually continued to participate in the study when they indicated that they would?	SMIS (supplemental management information system)	Enrollment; 30-day follow-up; 90-day follow-up; and 180-day follow-up	Program staff

3. Data preparation and measures

Recruitment. Items used to assess participant recruitment came from the nFORM applicant characteristics survey, attendance records, and internal program tracking documents. In order to understand the recruitment sources from which enrolled participants first heard about the study, we examined a frequency distribution for the coded responses from enrolled participants. Next, we coded attendance at each round of data collection (1-4) as either attended (1) or not attended (0). We also categorized each of the recruitment sources into a binary variable to represent the two primary recruitment strategies of active (1) or passive (0). Recruitment strategies were considered active if a program staff member actively recruited a participant by describing the study, collecting their contact information, and following-up with them at a later time. Examples of active recruitment strategies included talking to people at the library, community events, or in waiting rooms at partner agencies. A strategy was considered passive if the participant learned about the study on their own and called the program office unsolicited to find out about the study (e.g., website, word or mouth, flyers posted in the community). Once we coded attendance and recruitment strategy, we estimated a binomial logistic regression to examine the relationship between recruitment strategy and attendance.

Quality. We administered a program satisfaction survey to all study participants. Responses to each question were indicated on a Likert scale from (1) *Strongly Agree* to (5) *Strongly Disagree*. We examined the distribution of responses to these items. Additionally, we examined responses to the PREP Alliance Measure that was administered to participants at the one-month follow-up immediately following participation in the WMR curriculum. The PREP Alliance Measure assesses the strength of the working relationship between the participant and the relationship educator. Participants indicated responses on a 7-point Likert scale from (1) *Strongly Disagree* to (7) *Strongly Agree*. We presented the distribution of responses to items 3, 7, and 9 on the PREP Alliance Measure because those items deal specifically with participants' beliefs about the workshop leaders.

Engagement/Retention. To understand participant motivation for attending and completing the study, we examined participant responses on the nFORM applicant characteristics questionnaire (E2) as well as the participant satisfaction survey for all program participants who enrolled and provided responses on these instruments. Item E2 in nFORM provides a list of options that

participants may select from, and the participant satisfaction survey asked participants to rank order pre-identified reasons that motivated them to start the study. The nFORM data was collected at baseline, while the participant survey data was collected at the six-month follow-up point, thus allowing us to visually compare the distribution of responses. Below, we provided a distribution of responses for each item in figure C.5. To understand why participants may have missed a scheduled meeting, we provided a distribution of responses to the participant satisfaction survey where participants were asked to rank order pre-selected items that best described why they missed a meeting. Finally, at baseline, one month, and three month follow-up, we asked participants to rate the likelihood they would attend their next scheduled meeting, with 1 indicating not at all likely and 5 indicating very likely. We presented the distribution of responses for this question at each of the first three data collection time points (baseline, one month, and three months). We also assessed how closely responses corresponded with actual attendance.

Table II.2. Measures used to address process/implementation research questions

Implementation element	Research question	Measures
Recruitment	What were the primary recruitment sources for enrolled participants?	Responses on nFORM applicant characteristics question asking participants to list how they heard about the program Recruitment staff tracking spreadsheet
Recruitment	Were recruitment strategies (i.e., passive versus active) related to study completion?	nFORM attendance records We grouped recruitment sources into either active or passive categories
Quality	How satisfied were study participants with the overall program model?	Select responses from the PH Participant satisfaction survey items: I am satisfied with the content of the workshops I am satisfied with the person(s) who taught my workshops I am satisfied with the services provided by my family case manager Would you recommend (or have you recommended) this study to your family or friends?
Quality	What relationship did participants have with program staff, including relationship educators?	Select responses from the PREP Alliance Measure: I believe the educators liked me I felt that the educators appreciated me The educators and I trusted one other
Engagement/Retention	What were primary motivators for enrolling in the program?	Question E2 from nFORM applicant characteristics survey: Why did you choose to enroll in this program? Question 4 from PH Satisfaction Survey: Please rank order the primary reasons that motivated you to start the program
Engagement/Retention	What were the main reasons for missing scheduled workshops?	Question 5 from the PH Satisfaction Survey: Please rank order the primary reasons that motivated you to complete the program?

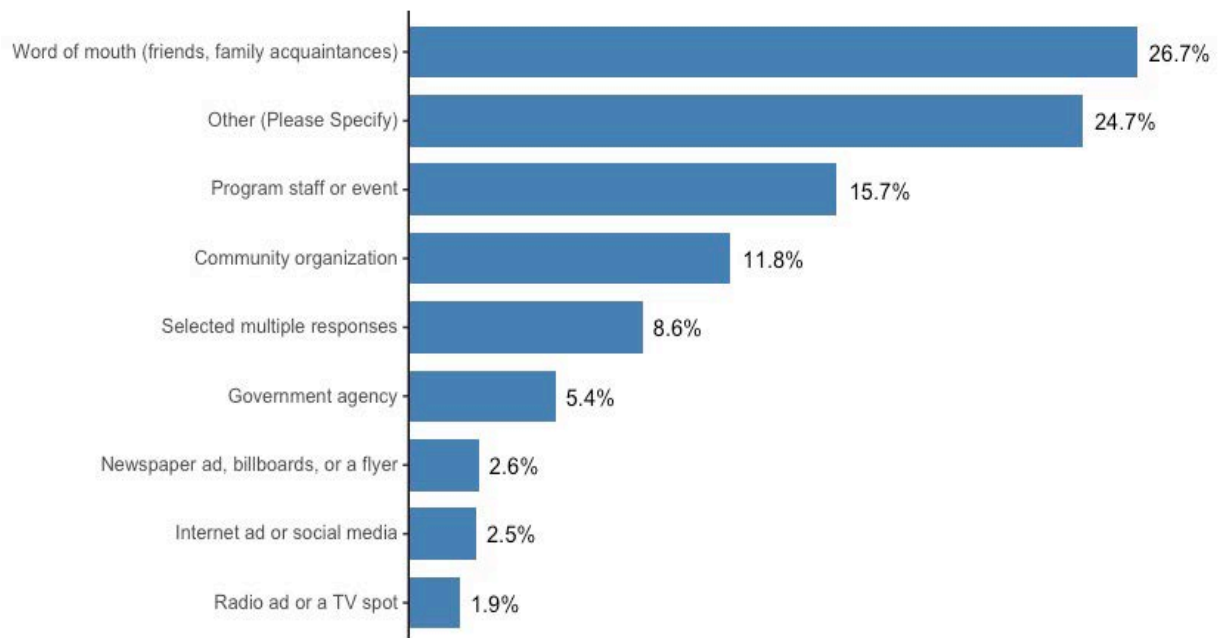
Implementation element	Research question	Measures
Engagement/Retention	Did participants plan to continue participating in the study when asked about their future intentions to return to their next scheduled workshop?	Intent to Attend question: How likely is it that you will attend your next scheduled visit?

C. Findings and analysis approach

1. How were recruitment practices implemented?

- a. *The primary recruitment source for enrolled individuals was word of mouth (27%).*
- b. *Individuals were as likely to respond to active (34%) as passive (34%) recruitment.*

Recruitment. Program recruitment staff engaged in numerous methods to identify prospective study participants. These methods ranged from advertisements, to attending community events, partnering with community organizations, and promoting word of mouth among current study participants. We asked participants how they heard about the program from a list of supplied options. Participants could select multiple options as it is possible they heard about the program from more than one source. We categorized recruitment responses as either active (initiated by program staff), passive (heard about the program on their own), multiple responses (more than one response with at least one response in each active and passive category), and other (a free response category). The percentage of responses categorized as active (34%) and passive (34%) are nearly identical with 26% categorized as other and 6% as multiple responses. Many examples of responses from the ‘other’ category duplicated some of the pre-existing categories, but participants chose to list as other. Examples include Facebook, Google search, spouse/partner, or program staff. Participants also listed community organizations, such as the library, Goodwill, Catholic Charities, or WIC. The distribution of responses is presented in Figure II.C.1:

Figure II.C.1: Percentage of responses to “How did you hear about the program?”

2. Were participants satisfied with the services they received?

Quality. We assessed the quality of services received by asking all study participants a series of program satisfaction questions at the completion of the study. Overall, participants reported being highly satisfied with the quality of the services they received. The majority of individuals (94%) were satisfied with the content of the relationship education workshops. Most (98%) reported a positive experience participating in the workshops; 97% of respondents reported having enough information to participate in the program (e.g., date/time of workshops, how random assignment worked; 95% would recommend (or did recommend) the program to family or friends; and 99% thought the program was important or worthwhile. The majority of participants were satisfied with the person(s) who taught the workshops and with the services provided by the family case managers (98% and 94%, respectively). Table II.C.2a provides a distribution of participant responses by quality indicator.

Table II.C.2a. Quality items percentages

	SD	Disagree	Undecided	Agree	SA
I am satisfied with the content of the workshops.	0	0.7 (3)	2.8 (12)	22.7 (97)	73.8 (316)
I am satisfied with the person(s) that taught my workshops.	0	0.2 (1)	1.9 (8)	18.2 (78)	79.7 (341)
I am satisfied with the services provided by my Family Case Manager	0.5 (2)	0.7 (3)	5.2 (22)	18.1 (77)	75.5 (321)

Note: Percentages are outside of brackets; sample sizes are presented within brackets.

SA = Strongly Agree; SD = Strongly Disagree.

We administered the PREP Alliance Measure (Owen, Antle, & Barbee, 2013) to treatment group participants after completing the four-week relationship education intervention. Participants were

asked to rate their response to each item. The responses were coded on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*), and then summed. Higher scores indicate a stronger alliance. Table II.C.2b presents the distribution of responses for each question. Overall, the average scores were 6.1, ($SD = 1.3$), which indicates a strong alliance between participants and workshop facilitators.

Table II.C.2b. PREP Alliance percentages

	SD	2	3	Neither agree nor disagree	4	5	SA
I believe the educators liked me.	2 (10)	0.6 (3)	0.6 (3)	12.4 (61)	5.7 (28)	19.4 (95)	59.2 (289)

Note: Percentages are outside of brackets; sample sizes are presented within brackets.

SA = Strongly Agree; SD = Strongly Disagree.

3. What were contributing factors to participants' decisions to enroll and complete the study?

Most participants (57%) enrolled because they wanted to learn about how to improve personal relationships. Most participants (92%) said they were extremely likely or very likely to return to their next scheduled visit (intent to attend) after their first visit to the center, and more than 90% of people who said they were 'very likely' or 'extremely likely' to return to their next visit, did return. Despite these high stated intentions to return, study retention for the second and third follow-up surveys was low (50% and 52%, respectively). As part of our implementation data collection process, we asked participants about some of the primary reasons for missing a workshop and the most frequent response was the open response category 'Other' (38%). The most frequently selected options among those provided were 'The day the workshops were held did not work with my schedule' (13%) and 'The time the workshops were held did not work with my schedule' (12%). This suggests that although people planned to return, unscheduled events appeared to contribute to missed sessions.

As part of our assessment of participants' intention to return, we asked people to respond to one question: "How likely is it that you will attend your next scheduled workshop?" Participants responded on a scale of 1 (not at all likely) to 5 (extremely likely). We assessed responses at three times (baseline, 30-days, and 90-days). The majority of participants indicated being at least very likely to return each time they were asked: 93% at baseline; 96% at 30-day follow-up; and 97% at 90-day follow-up. We then examined the probability of responses of at least 'very likely' and attendance at the next assessment time point. Results indicated that 97% of people at baseline who indicated being at least 'very likely' to return actually attended the 30-day follow-up; 92% of people who responded to this question at the 30-day follow-up attended the 90-day; and 148% of people at the 90-day attended the 180-day follow-up (more people attended than indicated they were at least 'very likely' to do so).

III. OUTCOME STUDY

The primary outcome research questions address whether specific participant profile categories can be created based on enrollment responses, which can then be used to assess the likelihood of retention in the WMR program. We focus on two different sets of categories. The first uses questions that assess general psychological distress symptoms, such as anxiety and depression. We call these ‘distress profiles’, and they are represented in the first two research questions. The second categories focus on initial responses aimed at assessing participants’ ability to regulate emotions. Emotion regulation is a process of being able to manage emotions that include awareness, setting goals, being accepting, demonstrating emotional clarity, accessing emotion regulation strategies, impulse control behaviors, and goal-directed behavior. Emotion regulation categories are reflected in the third and fourth research questions. The first and third research questions ask about the existence of the categories, and the second and fourth questions ask about whether study retention (coded as having attended or not attended at each assessment time point) differs between the respective categories identified for distress and emotion regulation.

A. Research questions

1. Are there baseline distress profiles for individuals enrolled into the WMR study?
2. Do baseline distress profile groups differ by attendance at the six-month study period?
3. Are there baseline profiles for individuals enrolled into the WMR study based on emotion regulation?
4. Do baseline emotion regulation profile groups differ by attendance at the six-month study period?

B. Study design

1. Sample formation

Project Harmony employed a team of recruiters who regularly visited local county health departments, libraries, women infants and children (WIC) waiting rooms, back to school and other community events (i.e., active strategies) that traditionally target ethnically diverse and low-income participants. When engaged in such active recruitment activities, the recruitment team very briefly presented the WMR program through a scripted pitch, then collected basic information from interested participants. The recruitment team then followed-up by phone with each participant to provide additional project information and scheduled the enrollment appointment. In addition to active recruitment strategies, many people learned about Project Harmony programs from previous participants, the project website and other social media websites (i.e. Facebook and Instagram), or fliers (i.e., passive strategies) posted throughout the community. When prospective participants called to find out more information about Project Harmony, the recruitment team conducted a brief eligibility screening (e.g., verified that prospective participants were over the age of 18; were participating voluntarily; were available to participate; and would attend the workshops individually) and then scheduled the individual for their enrollment appointment in the WMR program.

During the first three years of study implementation, Project Harmony included an impact evaluation study design that involved randomly assigning eligible participants to receive the

treatment intervention (i.e., WMR) immediately, or to a six-month wait-list control group. Randomization occurred during the enrollment process at a 1:1 ratio, and study participants were informed of this process prior to being enrolled. Retention for the six-month follow-up presented a significant challenge for the impact evaluation. In addition to overall attrition, differential attrition was also high, as more wait-list control groups participants remained in the study compared to treatment group participants. The overall and differential attrition rates presented concerns about the ability of the study to be sufficiently powered to detect intervention effects at the six-month follow-up. As a result, the study transitioned from an impact evaluation to a descriptive evaluation at the beginning of the fourth grant year.

This transition meant that all enrolled participants began the WMR intervention within two weeks of enrollment, rather than the possibility of being assigned to a six-month wait-list control group. Retention has been a noted challenge for relationship education programmers who enroll low-income participants from the community. Given the original impact study's challenges, and the noted challenges within the field of RE more generally, we focused this descriptive evaluation primarily on understanding how participant characteristics might help predict who stays engaged in programming.

The enrollment appointment was conducted in a group with other people representing a cohort. The cohorts did not necessarily reflect people recruited during a specific time period, but instead were filled based upon participant availability for study enrollment. Cohorts were assigned a number and tracked throughout the study so that appropriate timing for data collection could be implemented. Cohort sizes varied, with around 40 individuals scheduled for each enrollment appointment, but only those who actually enrolled comprised the cohort group. Childcare for children under 12 was provided for those who needed it, as well as a hot meal as the meeting was held in the evenings. The meeting was facilitated by family case coordinators, and the data coordinator. Each individual was checked-in, provided with a name tag, and then participants received their dinner. While eating and after checking-in all individuals, the meeting facilitators began with an ice-breaker activity. They then provided a brief overview of the six-month study, including the random assignment process (when applicable). Next, all participants were provided with the informed consent form and after consenting, were given an Apple iPad and began by completing the Entrance Survey, which was hosted on the nFORM platform. The nFORM system was the federally-managed, web-based, platform where participant information was tracked and managed for all participants who enrolled. After completing the nFORM questions, participants completed outcome evaluation questions on an app-based supplemental management information system (SMIS) developed by the research team.

The total sample of participants included in the current descriptive evaluation is 1,129. This represents the total number of people enrolled in the study during the first four years of enrollment. The majority of participants reported being between 35 and 54 years of age, but ranged from 18 to over 65. Additionally, most participants identified as female (84%), Hispanic (60%), single (70%), and with no children (61%). Over half the respondents (57%) reported a monthly income of less than \$1,000 per month, were employed part-time (15%) or were unemployed (39%), and held less than a bachelor's degree (59%). See table III.1 for the distribution of participant characteristics. Of note is that participants were not required to respond to the items that asked about their personal characteristics. As a result, there are fewer responses on these questions than in the analytic sample for the descriptive evaluation.

The University of Central Florida's institutional review board (IRB) approved the study (IRB number: SBE-15-11828). All study processes were approved prior to beginning the study and collecting data. Any federally-approved changes to the study, or marketing material, have also been approved by the UCF IRB.

Table III.1. Characteristics of participants in implementation/process study

Characteristic	Counts	Percent
Age		
18-20 years	54	5%
21-24 years	71	6%
25-34 years	194	17%
35-44 years	269	24%
45-54 years	267	24%
55-64	181	16%
65 years or older	90	8%
Gender		
Male	180	16%
Female	949	84%
Race/ethnicity		
Hispanic	711	63%
Non-Hispanic White	143	13%
Non-Hispanic Black	191	17%
Non-Hispanic Asian	22	2%
Non-Hispanic American Indian or Alaska Native	14	1%
Non-Hispanic Other	43	4%
Relationship status (%)		
Married or partnered	331	30%
Single	786	70%
Child Status		
No Children	692	61%
Children	437	39%
Education		
No degree or diploma earned	43	5%
High school General Education Development or GED	47	5%
High school diploma	118	13%
Vocational/technical certification	80	9%
Some college but no degree completion	134	14%
Associate's degree	117	13%
Bachelor's degree	255	28%
Master's/advanced degree	131	14%

Characteristic	Counts	Percent
Employment		
Full time employment	365	33%
Part time employment	159	15%
Employed, but number of hours changes from week to week	60	5%
Temporary, occasional, or seasonal employment, or odd jobs for pay	72	7%
Not currently employed	427	39%
Selected multiple responses	16	1%
Income		
Less than \$500	387	36%
\$500–\$1000	228	21%
\$1001–\$2000	262	24%
\$2001–\$3000	118	11%
\$3001–\$4000	39	4%
\$4001–\$5000	26	2%
More than \$5000	26	2%

Source: nFORM Applicant Characteristics Survey.

2. Data collection

There were two primary data sources for the WMR descriptive evaluation. The first was the nFORM platform, which includes the pre-and post-surveys, as well as baseline characteristics, and program-related information such as workshop attendance. The second data source was the supplemental management information system (SMIS), which is a web and app-based platform used to collect outcome measure responses from participants, such as their psychological distress and emotion regulation responses.

Data was collected at four time-points across the study: 1) time 1- initial enrollment; 2) time 2 - 30-days post-enrollment; 3) time 3 - 90-days post-enrollment; and 4) time 4 - 180-days post-enrollment.

3. Data preparation and measures

There were two measures that assessed individual functioning, which all participants completed upon study enrollment. The first assessed emotion regulation and the second measured individual psychological distress. Table II.3.a below provides a more detailed description of each of the measures.

Table II.3.a. Data used to address the outcome research questions

Measure	Description of the outcome measure	Source	Timing of measure
Emotion Regulation	The Difficulties in Emotion Regulation Scale (DERS) is a 36-item measure of emotional awareness, acceptance, goal-directed behavior, and emotion regulation strategies. Respondents indicate the frequency with which items apply. Responses range from almost never (1) to almost always (5). Total scores are calculated by summing scores from all items. Higher scores indicate greater difficulty with regulating emotion. Example items include: I am clear about my feelings; I pay attention to how I feel; I have difficulty making sense out of my feelings; or, When I'm upset, I become out of control. The DERS demonstrates high internal consistency (.93), construct validity with the Negative Mood Regulation Scale, and test-retest reliability (.88) (Gratz & Roemer, 2004). Alpha reliabilities for the current evaluation are .94 at enrollment.	Local survey	Enrollment
Individual Distress	The Outcomes Questionnaire (OQ) 45.2 is a 45-item measure of individual psychological distress symptoms, such as anxiety and depression. The OQ includes three sub-scales (symptom distress, interpersonal relationships, and social role), as well as a total distress score. Responses range from never to almost always. The total score is calculated by summing the scores from all responses. Higher scores indicate greater overall distress. Example items include: I get along well with others; I tire quickly; I feel no interest in things; I feel fearful; I am a happy person; or I feel my love relationships are full and complete. The OQ demonstrates high internal consistency (.93), rest-retest reliability (.84), and concurrent validity with the Zun anxiety scale (.81) and the Social Adjustment Scale (.65) (Lambert et al., 2004). Alpha reliabilities in the current evaluation are .94 at enrollment.	Local survey	Enrollment

C. Findings and analysis approach

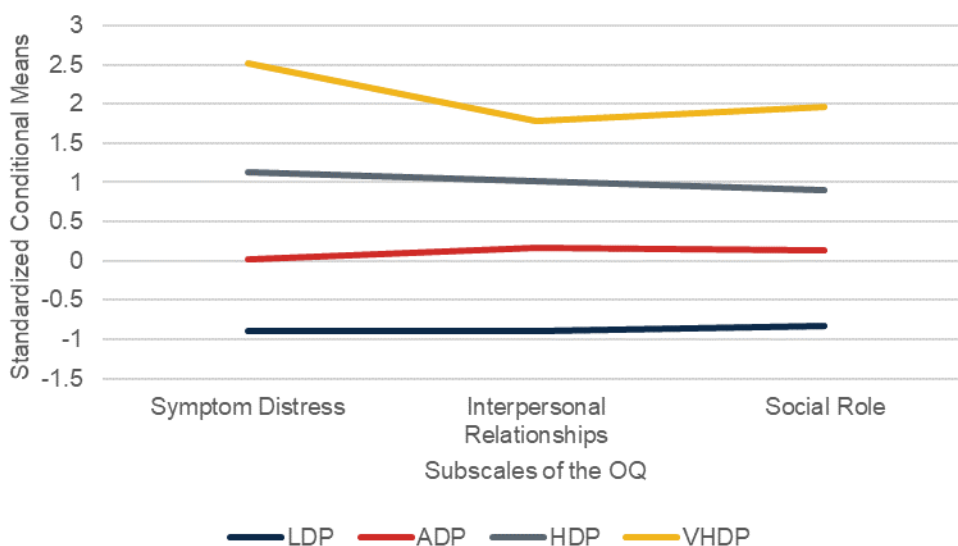
The primary aim of the outcome analysis presented here was to understand what individual characteristics might influence participant retention in a six-month study of relationship education. To accomplish this aim, we focused on two aspects of participants' individual functioning: individual psychological distress and emotion regulation. We then used a statistical analytic approach that groups participants' responses into categories, called profiles, based on their unique responses. Because the profiles group participant responses together, they provide a detailed picture of the variety of ways in which participants view themselves as it relates to the areas being assessed (in this case, psychological distress and emotional regulation). Based on those distinct profile groups, we examined study attendance to determine if participants' unique profiles could help explain study attrition. Results of the profile analysis indicated several unique groups based on psychological distress, as well as unique emotion regulation categories. We found no statistically significant differences in study attendance between psychological distress categories or emotion regulation categories. Below, we discuss the profiles for psychological distress and emotion regulation separately. We include technical documentation and tables for each analysis in the appendix.

1. Are there baseline profiles for individuals enrolled into the WMR study based on individual distress?

We identified four overall classes, or latent profiles, of participants based on their baseline individual psychological distress responses. Responses were grouped based on the mean scores for each of the subscales associated with the Outcomes Questionnaire (symptom distress, interpersonal relationships, and social role). The model we tested indicated that a four class (profile) solution was the best fitting model. We labeled the four profiles as follows: Low Distress Profile (LDP); Average Distress Profile (ADP); High Distress Profile (HDP); and Very High Distress Profile (VHDP).

The majority of participants (41%) were assigned to the Average Distress Profile. This means that most participants who enrolled in the relationship education program demonstrated average levels of psychological distress across the three sub scales when compared to their enrolled counterparts. Conversely, only 4% of respondents were grouped in the Very High Distress Profile. Their scores across the three sub scales consistently demonstrated very high distress when compared to enrolled counterparts. Figure II.C.1 presents a graph of the four profiles across standard deviations for each of the three psychological distress sub scales. The Very High Distress Profile is indicated by the yellow line at the top. This profile describes participants who indicated high levels of symptom distress (e.g., symptoms of anxiety and depression), high on interpersonal relationships (e.g., problems with personal relationships), and high on social role (e.g., problems at work or school). The Low Distress Profile is marked by the black line at the bottom and indicates responses that fell below the mean. The y-axis reflects standard deviations. Lines that fall below '0' indicate that the profile was below the mean score. The Low Distress Profile was about one standard deviation below the mean. The variance in distress responses indicates that people attend relationship education experiencing different levels of psychological distress. But, most report low or average distress responses. It is important to note that these profiles were created based upon a comparison of other participant responses and not the general population as a whole. Please see the appendix for tables VI.C.1a and VI.C.1b. for technical information related to model fit.

Figure III.C.1. Latent profile results: Mean scores on the distress subscales



2. Do baseline distress profile groups differ by attendance at the six-month study period?

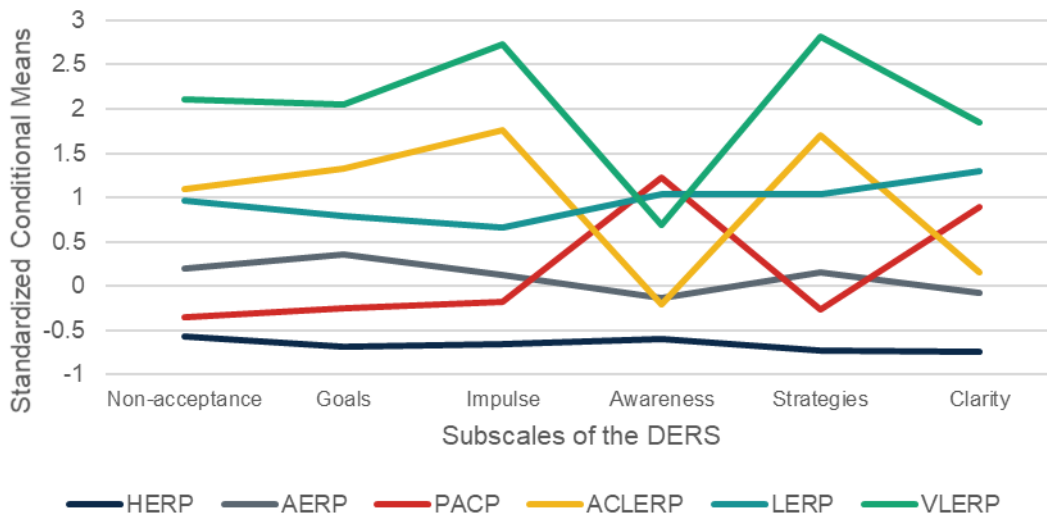
We next compared the four psychological distress profiles based upon their attendance in the six-month study. No statistically significant differences existed in baseline distress profile groups and attendance at any of the three follow-up time points in the six-month study. Table VI.C.2a in the appendix shows the probability of attendance based on profile for each time point. The Low Distress Profile group demonstrated the highest probability of attending at each follow-up time point. Table VI.C.2b in the appendix shows the comparison of profile groups and attendance at each follow-up time point.

3. Are there baseline profiles for individuals enrolled into the WMR study based on emotion regulation?

We identified six overall classes, or latent profiles, of participants based on their baseline emotion regulation responses. Participant responses were grouped based on the mean scores for each of the subscales (non-acceptance, goals, impulse, awareness, strategies, and clarity) associated with the Difficulties in Emotion Regulation Scale (DERS)) that are used to construct the overall emotion regulation measure. The six profile groups are as follows: High Emotion Regulation Profile (HERP); Average Emotion Regulation Profile (AERP); Poor Awareness and Clarity Profile (PACP); Awareness and Clarity but Low Regulation Profile (ACLERP); Low Emotion Regulation Profile (LERP); and Very Low Emotion Regulation Profile (VLERP).

The six profiles emerged because they demonstrated the best overall fit according to model fit indices (see table VI.C.3a in the appendices). The largest profile was the Average Emotion Regulation Profile (33%), while the Very Low Emotion Regulation Profile contained the fewest participants (4%; see Table VI.C.3b). Figure III.C.2 demonstrates the variance in profile groups across the six DERS subscales (x-axis). The y-axis represents standard deviations from the mean scores. Higher scores indicate greater dysregulation. The VLERP (top line on the graph), depicts participants who responded with the highest dysregulation scores on each of the six categories, except emotional awareness. This indicates that the participants categorized in VLERP reported more non-acceptance of emotional responses (non-acceptance), greater difficulty in goal directed behavior (goals), more impulsive control difficulties (impulsive), higher lack of emotional clarity, and limited access to emotion regulation strategies (strategies) when compared to responses from participants in the other categories. Although participants in VLERP also reported high lack of emotional awareness (awareness), participants in two other groups (PACP and HERP) reported higher scores on lack of emotion clarity. Conversely, the HERP (bottom line on the graph) participants indicated scores that demonstrate greater emotion regulation on all six categories when compared to the mean responses of the other profiles. The profiles are based on mixtures of scale scores, which creates nuances within the profiles. For example, the ECLRP includes participants with the second-highest non-acceptance of emotional responses, but near the average with emotional awareness. Viewing emotion regulation responses according to profiles helps provide a more in-depth picture of the complex nature of participants' emotion regulation at the start of the evaluation.

Figure III.C.2. Latent profile results: Mean scores on the emotion regulation subscales



4. Do baseline emotion regulation profile groups differ by attendance at the six-month study period?

We compared attendance at the one-month (time 2), three-month (time 3), and six-month (time 4) follow-up points across the six emotion regulation profile groups. Overall, results indicated no statistically significant differences between baseline emotion profile groups and attendance. We did, however, observe some probability trends between profiles and attendance patterns. For example, the VLERP participants were the least likely to respond at the three and six-month follow-up surveys (see Table VI.C.4a in the appendix).

IV. DISCUSSION AND CONCLUSIONS

The overall aim of the current descriptive evaluation was to examine process factors that contributed to participants' retention, engagement, and quality of service delivery. To accomplish this goal, we examined baseline characteristics for 1,129 individuals enrolled in the WMR curriculum, and identified separate profiles based on individual distress and emotion regulation in order to better understand which participants may be at risk of dropping out of a community-based intervention. We then compared those profiles by retention at the six-month follow-up period of the study. We also examined recruitment sources to examine any trends in retention by recruitment mode. Finally, we reported on participants' overall satisfaction with the services, and the quality of the relationships that participants experienced with program staff.

We identified distinct participant profiles for participants at enrollment. The four distress profiles provided evidence that participants vary in their levels of baseline distress when attending relationship education. Specifically, the very high distress profile ($n = 41$) and high distress profile ($n = 212$) indicated that about 22% of the enrolled sample began the program already experiencing individual distress symptoms that were higher than the average participant across the three scales of symptom distress, interpersonal relationships, and social role. However, those in the low distress group had a higher probability of completing the study (although not statistically different than other groups). As a result, it may be important for program staff to consider what unique needs participants with higher levels of distress may have in order to remain engaged in a relationship education intervention. For example, providing more individualized coaching, or check-ins with greater frequency may help proactively identify any unforeseen events that might contribute to program dropout.

Next, we examined emotion regulation responses from participants. Emotion regulation is important because it can correlate with individual distress, and describes a process of being aware of and managing emotions, which directly influences behaviors. We identified six distinct participant profiles established from baseline emotion regulation scores. The large number of profiles may be due to the inclusion of the six emotion regulation sub scales from the Difficulties in Emotion Regulation Scale, and also demonstrated the variance in baseline emotion regulation for participants who enrolled in the WMR workshops. The majority of participants were classified in the average emotion regulation profile (AERP). Their scores were in the average range across the six scales when compared to other enrolled participants. Only 4% of participants were grouped in the very low emotion regulation profile (VLERP), but they were associated with the highest probability of dropout at the six-month follow-up. Similar to the very high distress profile noted above, there may be unique factors contributing to higher dropout with these participants. For example, participation in WMR may present opportunities for participants to become more aware of relationship behaviors associated with previous unhealthy relationships, or even current unhealthy relationships. This awareness may be challenging for participants who are emotionally dysregulated. It is also possible that there were contextual and environmental factors that contributed to dropout for these participants, and that these environmental stressors are related to emotion dysregulation on their own. We did not examine any cross-over between the two sets of profiles. In other words, we did not examine whether there were participants in the very high distress profile group who were also profiled as very low emotion regulation. However, it may be important to pay particular attention to participants who experience high distress when beginning relationship education in order to help retain them in the program for as long as possible.

Given that many participants reported high distress and low emotion regulation, RE may be more of a responsive intervention than a preventive treatment for some who enroll (33% of our sample was classified as high, or very high, distress). Yet, relationship education is typically delivered in a manner that is consistent with its early roots in serving mostly non-distressed couples and individuals who seek to be proactive about their relationship problems. As such, RE is implemented universally to everyone enrolled. Given that a number of people who enroll are experiencing more distress than their counterparts (as was the case in this evaluation), and that those with more distress appear less likely to be retained, programmers should consider flexible strategies so that people with more challenges to attending have opportunities to complete the intervention. For example, providing online make-up sessions, or considering a mixed-methods delivery that includes a combination of in-person and online, might provide such flexibility. Shorter interventions, or those that include one-on-one coaching may also be better suited for participants who experience more distress.

Results from the implementation analyses provided insight into how people were recruited, and their perceptions about the quality of the services delivered. Results indicated that the majority of participants learned about the program from word of mouth, although active and passive recruitment methods equally accounted for participants who enrolled. However, study retention was not predicted by recruitment method. Additionally, over 90% of participants were satisfied with the information taught, childcare, and quality of services. And, over 70% reported a strong relationship with the relationship educators. Thus, attrition, or incomplete attendance, may not be associated with the quality of services but more likely to be associated with participant life circumstances and unexpected events.

This evaluation has limitations that should be noted. The measures we included were generally long, and participants provided feedback at times that they wished they did not have to answer so many questions. Future studies should consider concise measures that do not require significant time to complete. Additionally, participants completed assessments on-site rather than electronically, at home, and at their own pace. Future studies may consider alternative and flexible options for collecting follow-up data that provide participants with options to complete at home. Another limitation is that we did not include other variables in the profile development that could provide additional insight into participant characteristics. For example, we did not include participant demographic information in the development of the profiles. Including demographic information, such as age, race, ethnicity, education, income, and relationship status, to name a few, could provide more specific information about participant characteristics that influence study retention. We also did not map demographics onto the profiles as this would have further limited our sample size because there was missing data on demographic questions. We chose the specific measures of individual distress and emotion regulation because they were administered to every participant who enrolled in the study, and because there is theoretical justification supporting the influence of these measured constructs on participants' behavior. However, our evaluation and analysis are starting points for the field of individual-oriented relationship education that has received less scholarly attention than couples-oriented relationship education. Finally, although we identified trends in study attendance according to the profiles, we did not find statistically significant differences between the profile groups and the trends identified should be interpreted with caution.

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VI. APPENDICES

A. Outcome analysis

We used Mplus version 8.4 to conduct two latent profile analyses (LPA) to identify distinct subgroups of participants based on (1) their scores on the three subscales (symptom distress, interpersonal relationships, and social role) of the OQ psychological distress scale; and (2) their scores on the six subscales (non-acceptance, goals, impulse, awareness, strategies, and clarity) of the DERS emotion regulation scale.

The first stage in LPA was to determine the number of classes with well-defined differentiated profiles across the sample. Thus, LPA models were fit in a series of modeling steps, including (1) starting with the specification of a one class model; (2) subsequently increasing the number of classes until there was no further improvement in the model, meaning adding another class would result in meaningless classes (Lubke & Muthén, 2007); (3) we increased the random start values to 1000 (with the best 100 of these starts being retained for final stage optimization), increased the number of iterations to 100 in the first steps of the optimization procedure, and checked the replicability of best log likelihood value (Morin, 2016) to avoid local likelihood maxima; and (4) a robust maximum likelihood estimator was used to produce parameter estimates with standard errors that are robust to non-normality. Bandalos (2014) showed that this estimator performed better than the unadjusted maximum likelihood, having both more power and better control of Type I error.

The adjustment of the models and the decision about model selection were then judged by the following guidelines proposed by Ran and Grim (2009). We first compared models with different numbers of classes using Information Criteria (IC) based on fit statistics; i.e., Bayesian Information Criteria (BIC), Akaike Information Criteria (AIC), and Sample-Size-Adjusted BIC (SSA-BIC). Lower values on these fit indices indicate better model fit; i.e., an optimum trade-off between model parsimony and residuals, with BIC being considered a better fit statistic index than the other IC indices (Nylund, Asparouhov, & Muthén, 2007). Next, we examined entropy values, which assess the accuracy with which models classify individuals into their most likely class. Entropy ranges from 0 to 1, with higher scores representing greater classification accuracy. Entropy values superior to 0.70 are preferable, indicating clear classification and greater power to predict class membership (Muthén, 2001). Then we tested the statistical significance to determine whether a more complex model (k classes) would fit the data significantly better than a more parsimonious model ($k - 1$ classes) by using the Lo-Mendell-Rubin test (LMR) and the Bootstrap Likelihood Ratio Test (BLRT). The LMR and BLRT tests provide p -values that can be used to determine if there is a statistically significant improvement in fit for the inclusion of one more class. For statistical model comparisons, the BLRT is generally preferred over the LMR test (Nylund, Asparouhov, & Muthén, 2007). The sample size of the smallest class was then evaluated, specifically deciding that models with a class of $< 1\%$ and/or numerically $n < 25$ should be rejected or rigorously grounded by theory and research (Bauer & Curran, 2004). Finally, since LPA is a probabilistic approach, we considered the average probabilities of class membership (Rost, 2006). The more distinct the average latent class probabilities for the most likely class membership are, the more useful and accurate the latent profile solution will be. Thus, average probabilities equal to or larger than 0.80 indicate a good class solution (Rost, 2006).

After determining the optimal number of classes, we tested for significant differences on the outcome variables (program completion at Times 2, 3, and 4) across the profiles. Traditional analyses (e.g., logistic regression, ANOVA) have been questioned when applied to mixture modeling because they may introduce error and decrease precision by fixing an individual's probability of their highest class to 1 and all others to 0. Different approaches have been proposed to remedy these problems, such as using the auxiliary variable function in Mplus (Asparouhov & Muthén, 2014). This function allows for comparisons between classes while taking into account participants' partial membership in classes. We utilized this function in Mplus with the DCAT method (Lanza, Tan, & Bray, 2013), which is the preferred method to accommodate categorical distal outcomes across latent profiles. We did not use any other covariates in the model.

1. Psychological Distress Profile Technical Supplement

Table VI.C.1a shows the LPA model fit outcomes for the sample on the three subscales of the OQ. The IC based fit statistics (particularly BIC), along with entropy values and LMR/BLRT tests, indicated that a four-class solution was the best model for allocating cases to profiles in the sample. Moreover, the LMR and BLRT tests were not significant for the five-class solution, entropy decreased, and the average probability of class membership for one class was lower than 0.80 (ranging from 0.79 to .90).

Table VI.C.1b reports profile allocation based on maximum posterior probability for the four latent profiles across samples. Taking into account the factor mean scores for symptom distress, interpersonal relationships, and social role, the four profiles were labeled as: Low Distress Profile (LDP); Average Distress Profile (ADP), High Distress Profile (HDP), and Very High Distress Profile (VHDP). The VHDP was the profile with the lowest percentage (4%) of participants, and the ADP was the one with the highest percentage of participants. The average probabilities of class membership were always superior to 0.80. Table 2 also presents the factor mean scores for the three centered subscales across the four latent profiles.

Table VI.C.1a. Model fit of the latent profile analysis on the four distress subscales

	Log-likelihood (number of replications)	AIC	BIC	SSA-BIC	Entropy	LMR p	BLRT p
1 Class	-4751.94 (100/100)	9515.89	9546.05	9526.99	-	-	-
2 Classes	-4187.39 (100/100)	8394.78	8445.05	8413.28	0.79	<.001	<.001
3 Classes	-3974.44 (100/100)	7976.87	8047.24	8002.77	0.81	<.001	<.001
4 Classes	-3900.50 (100/100)	7837.01	7927.48	7870.31	0.80	0.157	<.001
5 Classes	-3861.67 (100/100)	7767.34	7877.92	7808.04	0.77	0.241	0.069

Note: AIC = Akaike Information Criteria; BIC = Bayesian Information Criteria; SSA-BIC = Sample-Size Adjusted BIC; LMR p = p value of the Lo-Mendell-Rubin test; BLRT p = p value of the Bootstrap Likelihood Ratio test. Optima models are highlighted in boldface.

Table VI.C.1b. Profile allocation based on maximum posterior probability for four latent profiles, mean probabilities of latent profiles, and standardized conditional mean scores on the distress subscales

	N	%	Latent Profile*				Symptom Distress	Interpersonal Relationships	Social Role
			LDP	ADP	HDP	VHDP			
LDP	407	36%	0.91				-0.89 (0.05)	-0.90 (0.07)	-0.83 (0.06)
ADP	466	41%		0.88			0.03 (0.13)	0.17 (0.12)	0.13 (0.12)
HDP	212	19%			0.85		1.14 (0.24)	1.02 (0.16)	0.91 (0.15)
VHDP	41	4%				0.86	2.52 (0.33)	1.79 (0.21)	1.97 (0.31)

Note: LDP = Low Distress Profile; ADP = Average Distress Profile; HDP = High Distress Profile; VHDP = Very High Distress Profile. Information for the distress subscales is presented as M (SE). * Average probabilities of profile membership.

Table VI.C.2a reports the relationships between the four distress severity profiles and the outcome variables (attendance at Times 2, 3, and 4) as the probability of completion, and Table VI.C.2b shows the chi-square statistics for the omnibus Wald test and pairwise differences. While there were no significant differences at a Bonferroni-adjusted p-value of 0.008, we see descriptively that the LDP had the highest probability of attending at each time point (tied with the HDP at Time 3). We used an adjusted p-value in order to provide a more conservative estimate of statistical significance and avoid the potential for a Type I error (finding statistical significance when none exist).

Table VI.C.2a. Relations of the four latent profiles to the outcome variables

	LDP (n = 407)	ADP (n = 466)	HDP (n = 212)	VHDP (n = 41)
Completion at Time 2	0.70 (0.02)	0.66 (0.03)	0.65 (0.04)	0.65 (0.09)
Completion at Time 3	0.51 (0.03)	0.49 (0.03)	0.51 (0.06)	0.46 (0.11)
Completion at Time 4	0.54 (0.03)	0.51 (0.03)	0.51 (0.04)	0.51 (0.09)

Note: LDP = Low Distress Profile; ADP = Average Distress Profile; HDP = High Distress Profile; VHDP = Very High Distress Profile. Information for relations of the four latent classes to categorical outcome variables is presented as probability, Standard Error (SE).

Table VI.C.2b: Omnibus and pairwise Wald test results of the four latent profiles on the outcome variables

	Completion at Time 2	Completion at Time 3	Completion at Time 4
Omnibus	2.41 (3)	0.26 (3)	1.12 (3)
LDP vs ADP	1.59 (1)	0.17 (1)	0.89 (1)
LDP vs HDP	1.04 (1)	0.02 (1)	0.53 (1)
LDP vs VHDP	0.33 (1)	0.18 (1)	0.13 (1)
ADP vs HDP	0.003 (1)	0.12 (1)	0.01 (1)
ADP vs VHDP	0.004 (1)	0.08 (1)	0.002 (1)
HDP vs VHDP	<0.001 (1)	0.15 (1)	<0.001 (1)

Note: LDP = Low Distress Profile; ADP = Average Distress Profile; HDP = High Distress Profile; VHDP = Very High Distress Profile. Wald test results are represented as chi square value (Degrees of Freedom). No chi square values were significant at Bonferroni-adjusted p-value of 0.008.

2. Emotion Regulation Profile Technical Supplement

Table VI.C.3a shows the LPA model fit outcomes for the sample on the six subscales of the DERS. The IC based fit statistics (particularly BIC), along with entropy vales and LMR/BLRT tests, indicated that a seven-class solution was the best model for allocating cases to profiles in the sample. Moreover, the LMR and BLRT tests were not significant for the eight-class solution, entropy decreased, and the average probability of class membership for one class was lower than 0.80 (ranging from 0.73 to .96).

Table VI.C.3b reports profile allocation based on maximum posterior probability for the seven latent profiles across samples. Taking into account the factor mean scores for non-acceptance, goals, impulse, awareness, strategies, and clarity, the seven profiles were labeled as: High Emotion Regulation Profile (HERP), Emotion Dysregulation Profile (EDP), Average Emotion Regulation Profile (AERP), Poor Goals, Awareness, and Strategies Profile (PGASP), Emotion Clarity but Low Regulation Profile (ECLRP), Low Emotion Regulation Profile (LERP), and Very Low Emotion Regulation Profile (VLERP). The VLERP was the profile with the lowest percentage (4%) of participants, and the AERP was the one with the highest percentage (33%) of participants. The average probabilities of class membership were always superior to 0.80 (ranging from .82 to .96). Table C.3b also presents the factor mean scores for the six centered subscales across the seven latent profiles.

Table VI.C.3a. Model fit of the latent profile analysis on the six emotion regulation subscales

Classes	Log-likelihood (number of replications)	AIC	BIC	SSA-BIC	Entropy	LMR p	BLRT p
1	-6341.09 (100/100)	12706.18	12766.53	12728.41	-	-	-
2	-5260.48 (100/100)	10558.96	10654.52	10594.17	0.92	<.001	<.001
3	-4829.58 (100/100)	9711.16	9841.92	9759.33	0.85	0.010	<.001
4	-4643.49 (100/100)	9352.98	9518.94	9414.12	0.86	0.005	<.001
5	-4521.88 (100/100)	9123.76	9324.93	9197.88	0.84	0.004	<.001
6	-4429.68 (100/100)	8953.35	9189.72	9040.43	0.85	0.2694	<.001
7	-4365.26 (97/100)	8838.52	9110.09	8938.57	0.85	0.2208	0.0847

Note: AIC = Akaike Information Criteria; BIC = Bayesian Information Criteria; SSA-BIC = Sample-Size Adjusted BIC; LMR $p = p$ value of the Lo-Mendell-Rubin test; BLRT $p = p$ value of the Bootstrap Likelihood Ratio test. Optima models are highlighted in boldface.

Table VI.C.3b. Profile allocation based on maximum posterior probability for six latent profiles, mean probabilities of latent profiles, and mean scores on the emotion regulation subscales

	Latent Profile*								Non-accept	Goals	Impulse	Aware	Strat	Clarity
	N	%	HERP	AERP	PACP	ACLERP	LERP	VLERP						
HERP	470	42	0.93						-0.57 (0.02)	-0.69 (0.03)	-0.65 (0.02)	-0.60 (0.03)	-0.73 (0.02)	-0.74 (0.02)
AERP	295	13		0.84					0.19 (0.07)	0.35 (0.05)	0.12 (0.06)	-0.13 (0.07)	0.15 (0.05)	-0.08 (0.08)
PACP	149	26			0.85				-0.35 (0.06)	0.25 (0.05)	-0.17 (0.05)	1.23 (0.12)	-0.26 (0.04)	0.89 (0.05)
ACLE RP	57	5				0.93			1.09 (0.17)	1.33 (0.08)	1.76 (0.17)	-0.21 (0.10)	1.71 (0.11)	0.15 (0.11)

Latent Profile*														
	N	%	HERP	AERP	PACP	ACLERP	LERP	VLERP	Non-accept	Goals	Impulse	Aware	Strat	Clarity
LERP	114	10					0.85		0.97 (0.16)	0.79 (0.08)	0.66 (0.07)	1.04 (0.14)	1.03 (0.11)	1.30 (0.10)
VLERP	44	4						0.96	2.12 (0.12)	2.05 (0.10)	2.73 (0.11)	0.69 (0.14)	2.81 (0.08)	1.85 (0.16)

Note: HERP = High Emotion Regulation Profile; AERP = Average Emotion Regulation Profile; PACP = Poor Awareness and Clarity Profile; ACLERP = Awareness and Clarity but Low Regulation Profile; LERP = Low Emotion Regulation Profile; VLERP = Very Low Emotion Regulation Profile. Information for the emotion regulation subscales is presented as M (SE). * Average probabilities of profile membership.

Table VI.C.4a reports the relationships between the seven emotion regulation profiles and the outcome variables (completion of program at Times 2, 3, and 4) as the probability of completion, and Table VI.C.4b shows chi-square statistics for the omnibus Wald test and the pairwise differences. While there were no significant differences at a Bonferroni-adjusted *p*-value of 0.002, descriptive results at Time 3 indicate that those in the ECLERP and VLERP had the lowest likelihood of attending six-month follow-up at less than 50%.

Table VI.C.4a. Relations of the six profiles to the outcome variables

	HERP	AERP	PACP	ACLERP	LERP	VLERP
Completion at Time 2	0.72 (0.02)	0.62 (0.05)	0.65 (0.03)	0.68 (0.07)	0.67 (0.05)	0.62 (0.08)
Completion at Time 3	0.52 (0.03)	0.43 (0.05)	0.51 (0.04)	0.48 (0.10)	0.57 (0.08)	0.40 (0.15)
Completion at Time 4	0.53 (0.02)	0.52 (0.05)	0.51 (0.04)	0.53 (0.07)	0.56 (0.06)	0.44 (0.09)

Note: HHERP = High Emotion Regulation Profile; AERP = Average Emotion Regulation Profile; PACP = Poor Awareness and Clarity Profile; ACLERP = Awareness and Clarity but Low Regulation Profile; LERP = Low Emotion Regulation Profile; VLERP = Very Low Emotion Regulation Profile. Information for relations of the six latent classes to categorical outcome variables is presented as probability, Standard Error (SE).

Table VI.C.4b. Omnibus and pairwise Wald test results of the six latent profiles on the outcome variables

	Completion at Time 2	Completion at Time 3	Completion at Time 4
Omnibus	6.30 (5)	4.34 (5)	1.53 (5)
HERP vs AERP	3.46(1)	2.46 (1)	0.02 (1)
HERP vs PACP	2.98 (1)	0.03 (1)	0.29 (1)
HERP vs ACLERP	0.20 (1)	0.11 (1)	0.001 (1)
HERP vs LERP	0.71 (1)	0.39(1)	0.17 (1)
HERP vs VLERP	1.57 (1)	0.53 (1)	1.01 (1)
AERP vs PACP	0.17 (1)	1.30 (1)	0.05 (1)
AERP vs ACLERP	0.60 (1)	0.24 (1)	0.006 (1)
AERP vs LERP	0.42 (1)	2.32 (1)	0.18 (1)
AERP vs VLERP	0.002 (1)	0.03 (1)	0.73 (1)
PACP vs ACLERP	0.24 (1)	0.07 (1)	0.08 (1)
PACP vs LERP	0.12 (1)	0.37 (1)	0.51 (1)
PACP vs VLERP	0.12 (1)	0.37 (1)	0.50 (1)
ACLERP vs LERP	0.03 (1)	0.33 (1)	0.08 (1)
ACLERP vs VLERP	0.42 (1)	0.14 (1)	0.58 (1)
LERP vs VLERP	0.29 (1)	1.46 (1)	1.24 (1)

Note: HERP = High Emotion Regulation Profile; AERP = Average Emotion Regulation Profile; PACP = Poor Awareness and Clarity Profile; ACLERP = Awareness and Clarity but Low Regulation Profile; LERP = Low Emotion Regulation Profile; VLERP = Very Low Emotion Regulation Profile. Wald test results are represented as chi square value (Degrees of Freedom). No chi square values were significant at Bonferroni-adjusted *p*-value of 0.003.