Family Wellness Outcome Evaluation

Nine-Hour, Retreat Format
for Military Families

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Introduction

The following report details achieved outcomes using the Family Wellness, Survival Skills for Healthy Military Families curriculum. The curriculum is generally delivered in a three day, retreat-format. In the current study, the presentation of the Family Wellness curriculum took place over a Friday evening, all day Saturday and Sunday morning at three different sites. Together, the parents and children participated in interactive small group activities and role-plays. They received coaching on effective speaking, listening, and cooperating in a variety of typical family situations. Family sculpting and the use of continuums were also utilized to facilitate family changes. Family skills were modeled by the facilitators then practiced in session by the family members. Families are given unstructured 'family time' for a period of three to four hours during the retreat to allow families to integrate and continue practicing the skills they are learning or strengthening. Large and small group discussion was utilized to process information. Groups were composed of same-gender participants, real-life couples, real-life family members, similarly aged young people, unrelated participants, etc. depending upon the topic being processed.

Child supervision was provided as well as meals and snacks. In some cases, lodging was provided to participants and their families. Each adult participant was given a *Survival Skills for Healthy Families Workbook*. There are optional services that may be included using the nine-hour format that include providing transportation, copy services, showing movies, providing recreational opportunities. In addition, in some circumstances, the book, *Raising a Loving Family* is handed to each family.

Demographic Makeup of Participants

All participants were combined into a working data set and are represented simultaneously in this report. Patterns of ethnicity were evaluated with White participants making up the largest percentage (See Table 1 and Figure 1). Family characteristics were also analyzed and an overwhelming majority was married (see Table 4). The length of current relationships was 10.6 years on average with a standard deviation of 6 years (see Table 5). Finally the number of children was

typical with 2.5 children represented per family on average. There were nearly equal numbers of men and women and the average age of participants 34 with a standard deviation of 6 years.

Table 1. Age (in years) distribution

	15-25	26-35	36-45	46-55	56-65
Total: N=116	7	69	34	6	1

Figure 1. Distribution of Ages

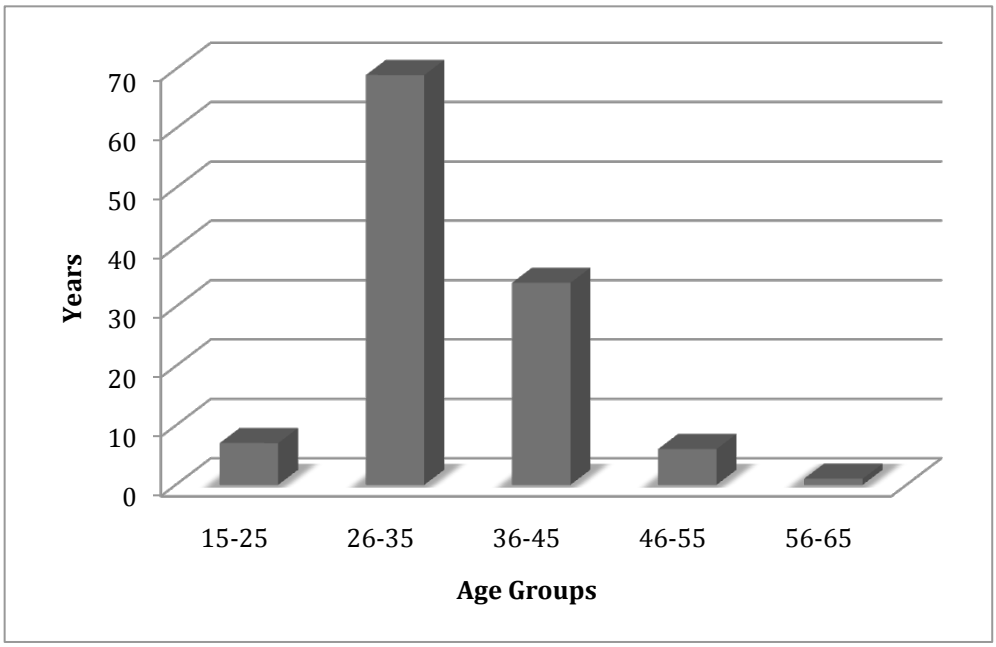


Table 2. Gender

	Male	Female
Number	59	69

Table 3. Ethnicity

	Native Am.	African Am.	Hispanic	Asian	White	Other
Total (N=127)	4	14	16	3	86	4

Figure 2. Distribution of Race and Ethnicity

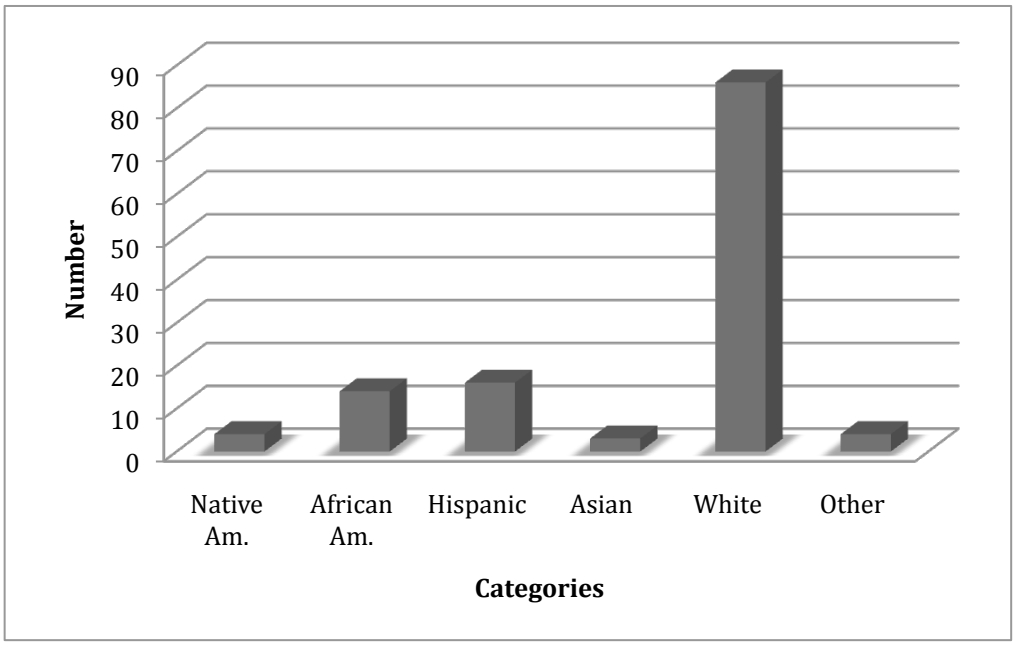


Table 4. Relationship Status

	Married	Cohabitating	Dating	Single	Widowed
Total (N=128)	119	4	4	1	0

Table 5. Family Characteristics

	Participants
Years with current partner	10.6 (N=116)
Number of Children	2.5 (N=128)

Evaluation Instrument

The measurement instrument was the Family Wellness Evaluation Instrument. It is a 48-item questionnaire that asks about each of the major components of the Family Wellness curriculum. It was delivered in Spanish and English on the same pages so that participants can choose to use either one or two languages when reading items. Response ranges cover a scale from 0-10 with higher scores indicating more favorable responses. Subscale scores were calculated by taking the average of the items where no more than 1 item was missing. This scaled the total scores according to the response options. The questionnaire asked about current and retrospective situations and was delivered at the completion of the classes for the intervention group. Previous validation studies (Montañez et al., 2011) of this instrument indicate that a post and retrospective-pre administration is the optimal method of administration because prior to training, people are likely to overestimate their skills and knowledge.

The intervention consisted of several important relationship and family areas where growth is expected to improve the overall emotional and behavioral health of families. These constructs are listed below with brief explanations using the Family Wellness lingo:

1. **Communication** – speak, listen, and cooperate.

2. **Conflict resolution** – it's okay to disagree, avoid blaming, stay physically close, don't try to discuss issues if under the influence of drugs or alcohol, finish the discussion, staying connected is more important than being right.

3. **Stress and change** – Expect change, stress is a signal that change is needed, expect resistance, take one new step at a time, use outside help when you get stuck.

4. **Problem solving** – Know when you are having a hard time, ask for help, talk it over, get clear on the results you want, make a plan, carry out the plan.

5. **Discipline skills** – make rules, stay in charge, stick together, share your values, know alternatives to physical discipline.

6. **Cohesion skills** – plan time with children, encourage children, listen to children, talk to children.

7. **Family dynamics** – adults stay in charge, expect and accept change, allow room to be close and apart.

8. **Couple skills** – commit yourself, be cooperative.

9. **Domestic violence** – understand the difference between equality vs. power and control

Reliability

The Family Wellness (FW) Evaluation Instrument is a summated survey instrument that measures ten constructs that align closely with the FW curriculum. It consists of 48 multi-point items, which are later summed to arrive at a resultant score for every respondent. The scores represent the respondents' relative level of knowledge, attitude or behaviors on the underlying construct. The measure is given directly following the intervention a retrospective pre test is used. Reliability of the scales was determined using Chronbach's alpha, which determines the internal consistency of items in a survey instrument to estimate its reliability.

The reliability analysis revealed that alpha coefficients were between 0.667 to 0.938. Alpha coefficients that are higher than .70 are considered very good when the number of items is fairly large. Scales with relatively few items tend to have smaller alpha coefficients and are evaluated using somewhat lower standards. It was determined that all scales had acceptable alpha coefficients. This means that if the same items were given again, one could expect to achieve a good degree of

stability and replicability in the scores. This allows for the creation of variables that can be used in analysis as dependent and independent variables. Table 1. Lists the standardized alpha coefficient for every construct by pre and post

Table 6. Standardized Alpha Coefficients by Group.

	k	**Pre**	**Post**
Speaking	4	0.784	0.675
Listening	3	0.774	0.772
Family Expressiveness	3	0.774	0.748
Conflict Resolution	5	0.667	0.657
Stress and Change	4	0.835	0.781
Parenting Skills	5	0.789	0.801
Discipline Skills	6	0.859	0.851
Family Dynamics	6	0.849	0.850
Couple Partner Skills	8	0.926	0.938
Domestic Violence	4	0.779	0.828

k= number of items

Validity

The Family wellness instrument went through a validation process prior to being implemented or used for any research purposes. Scales were developed according to the family wellness curriculum so that all of the major components of the curriculum made up the scales of the evaluation inventory. Minor components within each scale were discussed amongst content experts and items were written that represented the appropriate constructs that are included in the Family will Wellness curriculum.

To establish face validity, content experts were asked to review the items to ensure that they matched the operational definitions of the scales for which they belonged. As part of the process, content experts were given a list of items that were randomly sorted and they were asked to determine which scaled the items belong to. To content experts participated in the blind sorting exercise and items

were revised into content experts were able to sort them into their respective scales with 100% certainty.

In addition to the blind sorting exercise, content experts from Family Wellness were asked to review the final list of items and scales for their appropriateness and for their ability to match the intended curriculum. Content experts from Family Wellness were given the list of final items and their respective scales and they were asked to provide feedback regarding whether the items, on face value alone, were reflective of the pieces of the curriculum that they were intended to represent. Once this process was completed, we concluded that the family wellness evaluation instrument had a sufficient degree of face validity to be disseminated.

Outcomes

The primary research question in this study was whether there was a measureable effect of the intervention on participants. It was hypothesized that participants would demonstrate growth on all constructs because they relate directly to the curriculum.

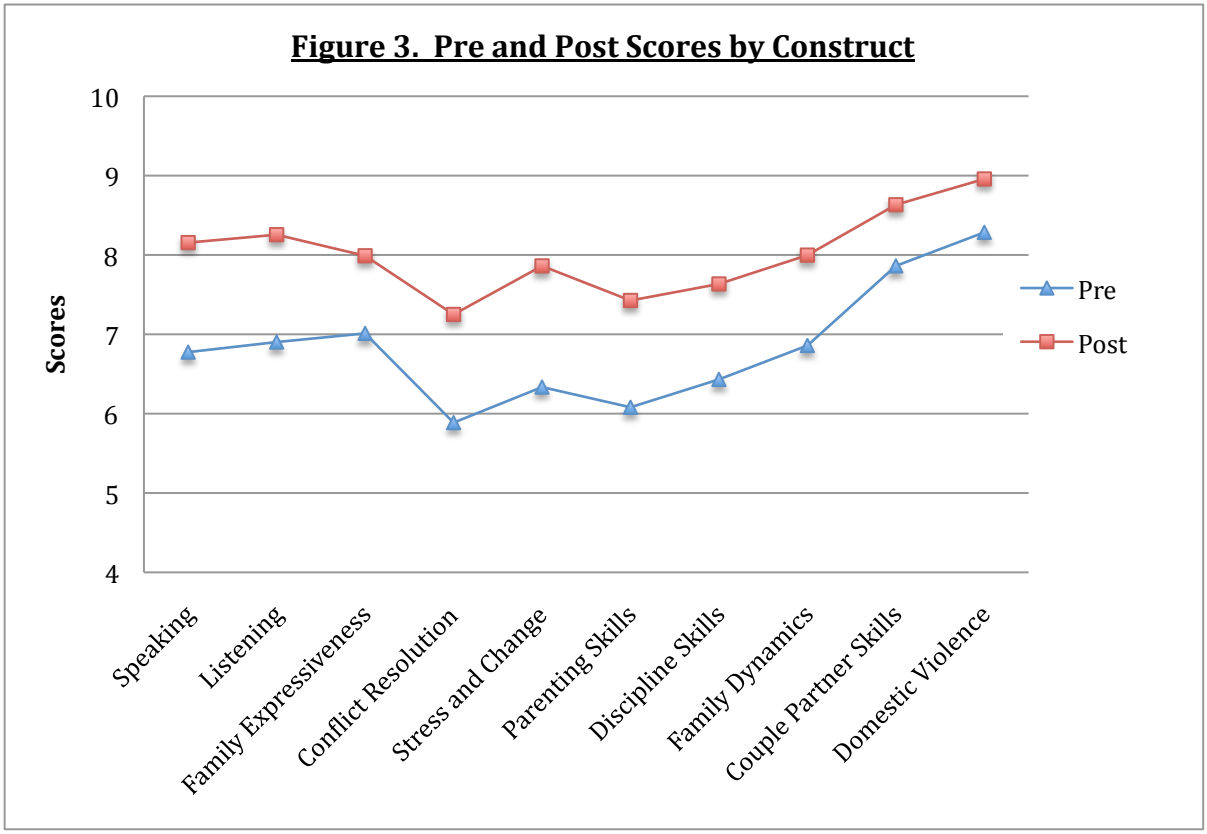
Table 7 is a list of the mean pre and post scores for the participants. The post scores are higher on every construct indicating that growth was made on every family and relationship outcome. Furthermore, the difference in pre and post scores is statistically significant ($p<.05$) on all constructs. These findings indicate that there is a positive and statistically significant effect of the intervention on participants across 10 dimensions of behavioral and emotional health related to family well-being, parenting and intimate relationships.

Figure 4 is a visual depiction of the scores that are listed on Table 7. These scores are the average pre and post scores on all constructs. Higher scores mean better overall health. The distance between pre and post lines for groups on Figure X represents the amount of growth made. The top (post) and bottom line (pre) represent the two different periods that participants reported on.

Table 7. Pre and Post Scores and Corresponding Statistical Tests

	Pre	Post	N	t-value	Sig.	Cohen's d	95% CI Low	95% CI High
Speaking	6.78	8.16	119	-8.01	0.00	0.69	0.43	0.94
Listening	6.90	8.26	128	-7.51	0.00	0.73	0.50	0.96
Family Expressiveness	7.01	7.99	129	-6.52	0.00	0.43	0.15	0.71
Conflict Resolution	5.89	7.25	123	-8.54	0.00	0.71	0.46	0.95
Stress and Change	6.33	7.86	126	-9.13	0.00	0.77	0.52	1.01
Parenting Skills	6.08	7.43	127	-7.82	0.00	0.67	0.42	0.91
Discipline Skills	6.43	7.63	114	-6.84	0.00	0.58	0.32	0.85
Family Dynamics	6.86	8.00	118	-7.43	0.00	0.64	0.41	0.87
Couple Partner Skills	7.86	8.63	127	-6.07	0.00	0.42	0.19	0.64
Domestic Violence	8.28	8.96	129	-5.56	0.00	0.43	0.23	0.62

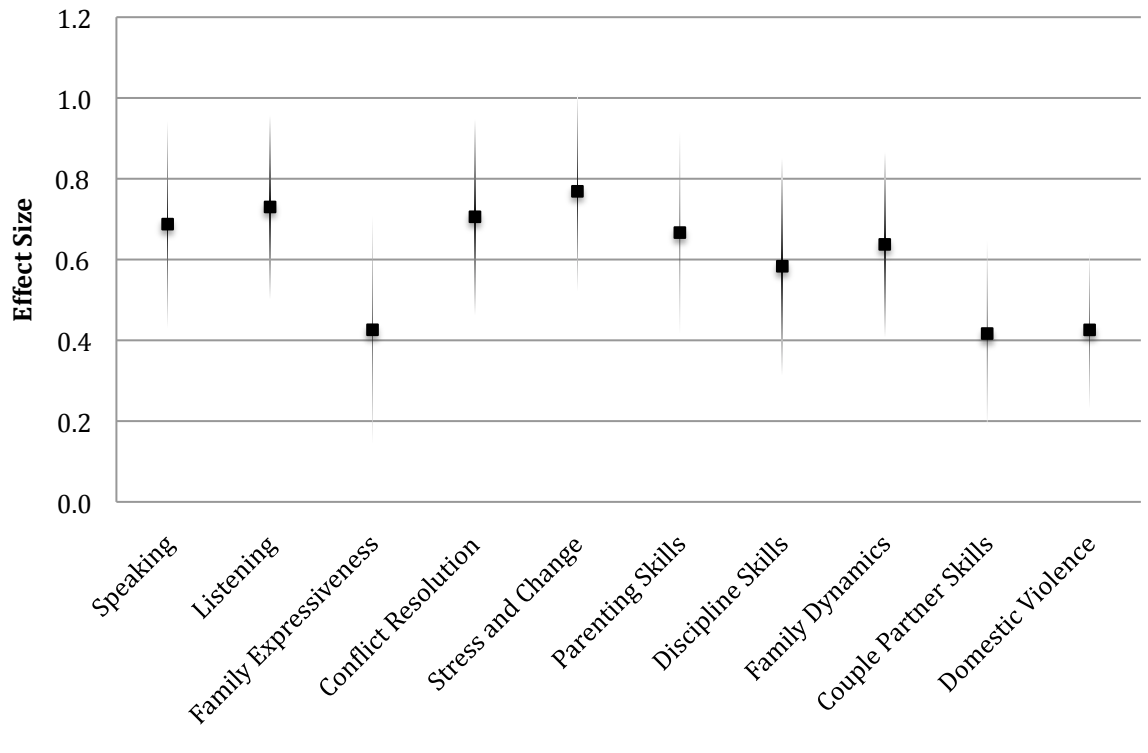
Figure 3. Pre and Post Scores by Construct



Effect Sizes

Effect sizes were calculated using Cohen's d. This effect size uses the standard deviation of the pre scores as a guide for estimating the overall effect of the intervention. Therefore, the effect sizes can be interpreted as the amount of growth that was achieved in units of standard deviations. For this effect size, .2 is considered small; .5 medium and .8 is considered to be a large effect. A 95% confidence interval (CI) was calculated for each effect size. The range of scores within the 95% CI represents a range where the actual effect size is located in the population. In this sample, seven out of ten constructs had CI's that covered the range of scores that included .8. This indicates that if this intervention were to be applied to other military families, we would expect to see relatively large effects of the intervention.

Figure 4. Standardized Effect Size by Construct (95% CI)



Discussion

This study attempted to answer a series of questions relating to the efficacy of an intervention to improve the emotional and behavioral health of individuals and families. In this discussion, these questions are revisited with respect to their implications to the field of family science and family interventions. The analysis showed that participants in a Family Wellness intervention made significant growth in every anticipated growth area

This evaluation provides evidence to support the idea that if the Family Wellness intervention is administered in a nine-hour, retreat format, one can assume growth will be made in participants. This report included a predominately White sample. Although it is assumed that the findings of this study are generalizable to most military families, it cannot necessarily be concluded from the findings of this study. However, findings from other samples, including those with large numbers of Hispanic participants have shown similar results. These findings are similar and demonstrate consistency in patterns of significant and meaningful changes across a range of psychosocial, familial and interpersonal dimensions of relationships constructs.

In summary, families who attended the Family Wellness program improved their marital/couple relationships, their parenting skills and their family functioning as a result of the skills learned from the program. Given that the implementation of this program is highly cost effective (groups of families learning together), and it contributes to breaking down isolation and building a sense of community, the use of this program is highly encouraging not only for the benefit of the participant families but also for the general well-being of our society.