



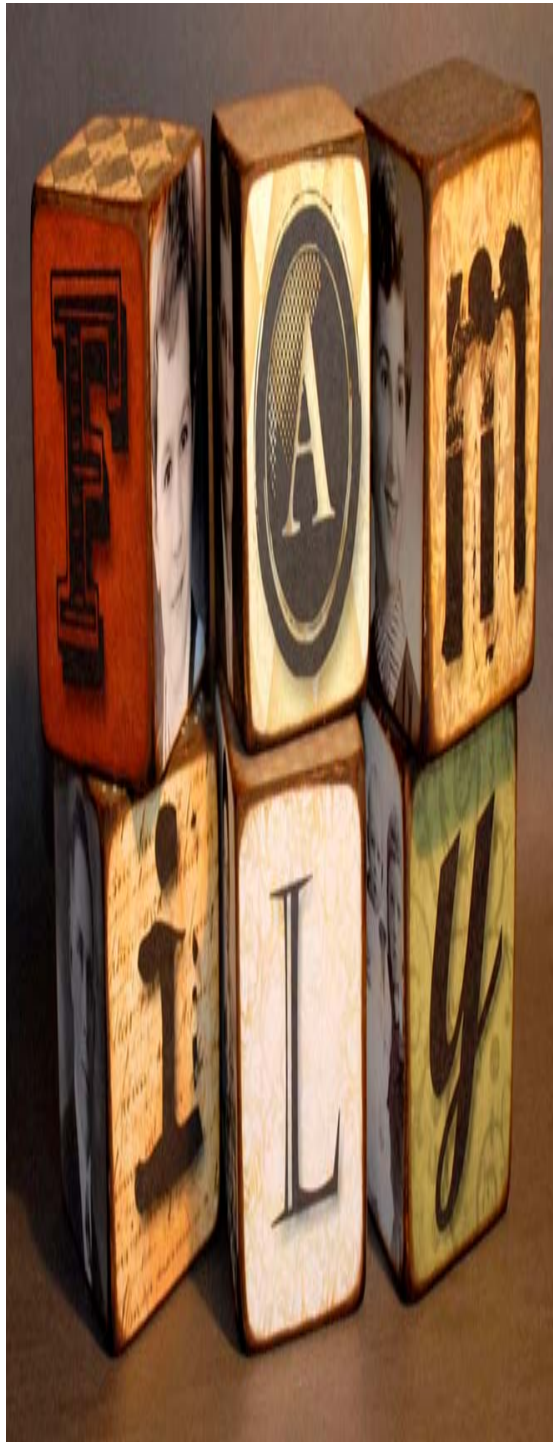
2nd International Conference and Members' Meeting

“Synergy in prevention and health promotion: individual, community, and environmental approaches”

“Family Environmental Influences in Prevention: A study of the Strengthening Families Program 6-12 Years among US Portuguese Immigrant Families and Families in Portugal”

Cátia Magalhães, Karol Kumpfer,
Fernando M., Henry W. and Keely C.

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Background

Comparative effectiveness reviews conclude SFP is:

1. The most effective universal school-based substance abuse prevention (10-14 years) programme according to a Cochrane Collaboration review (Foxcroft, et al., 2003).
2. Cost effective (\$11 saved/dollar spent) (Miller & Hendrie, 2008).
3. One of the most successful EBPs for dissemination to 27 countries if culturally adapted (UNOCD, 2010).

Research Specific Aims:

1. Test effectiveness of SFP for Portugal with Portuguese families in USA and Portugal.
2. To determine if SFP is as effective with girls as with boys (never tested before)
3. To determine effectiveness outcomes when one or both parents attend. One study in Thailand (Pinyuchon, 2010) reported that better outcome when the fathers attended.



Researches Hypotheses

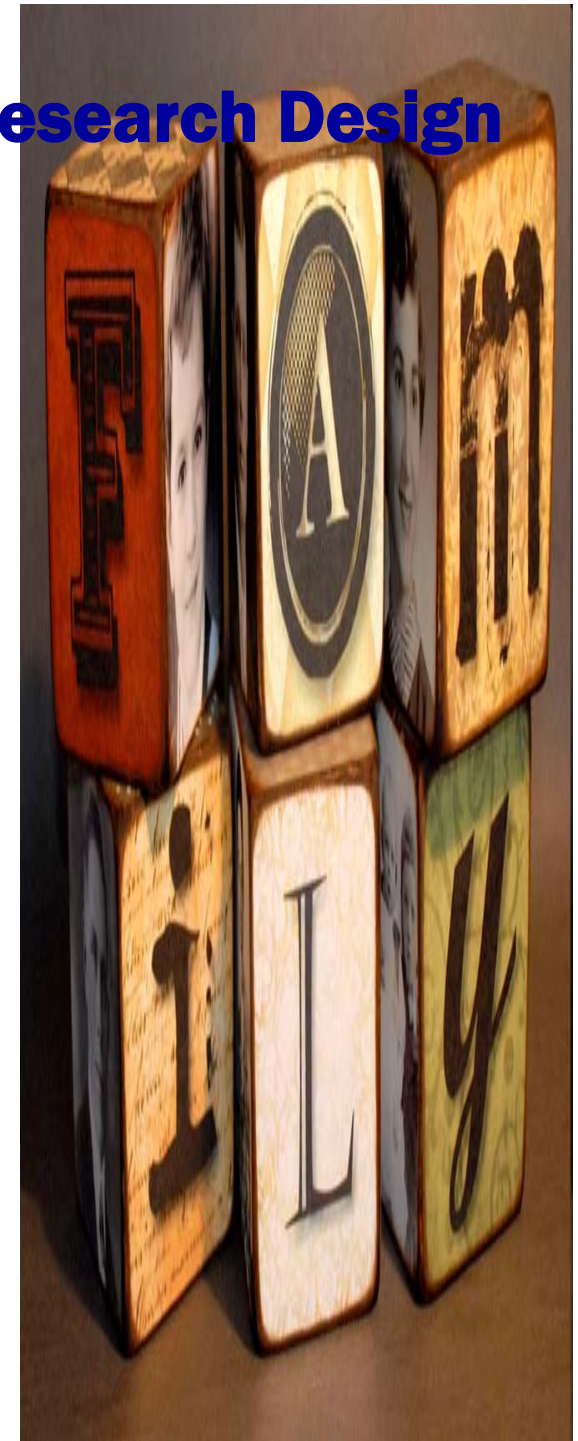
- 1) The SFP will significantly improve parent's, family and children's outcomes from pre- to post-test.**
- 2) There will be no significant difference in the SFP effectiveness for the different cultural groups (eg., Portuguese, US Portuguese and USA normative families).**
- 3) The program pre-to posttest outcomes improve significantly more if both parents attend.**
- 4) SFP will be equally effective for girls as for boys because girls are more impacted by family relationships.**

Research Design

1. For the needs assessments question, a 3 way ANOVA design was employed to compare only the pre-test data for the three selected sub-groups.

2. For the comparisons of the outcome effectiveness questions of the three sub-groups, a post-hoc statistical ANOVA analysis was conducted that created a 3 group by 2 repeated measures quasi-experimental pre-posttest design with post-hoc, sub-group analysis comparisons by ethnicity (Portuguese) and location of country - USA or Portugal (Cook & Campbell, 1979).

3. For the last two research questions related to the differential effectiveness of the SFP by gender of the child and whether fathers attended, the total SFP database of 5000 families was used. The experimental design in each of these cases was a 2 group by 2 repeated measures (pre- to posttest) ANOVA quasi-experimental design with post-hoc, sub-group analysis comparisons by gender of the target child and whether the father attended or two parents (Cook & Campbell, 1979).



Description of Measures

SFP Hypothesized Outcomes matched to Measures

SFP Instrument Battery Outcome Variables

Measures

Parent Immediate Change Objectives

- | | |
|-------------------------------------------------|----------------------------|
| 1. Increase positive parenting (decrease abuse) | 1. SFP parenting skills |
| 2. Increase in parenting skills | 2. SFP parenting skills |
| 3. Increase parental supervision | 3. SFP parenting skills |
| 4. Increase parental efficacy | 4. Alabama Parenting Scale |
| 5. Increase in parental involvement | 5. Alabama Parenting Scale |
| 6. Decrease in parental substance use or misuse | 6. CSAP 30-day use rates |
| 7. Parental depression | 7. Radloff CES-D |

Child Change Objectives

- | | |
|-------------------------------------------------------------------------------------|--------------------------------------------------|
| 1. Increase social skills (cooperation, assertion, responsibility and self-control) | 1. Social Skills Rating Scale (parent and child) |
| 2. Reduced overt aggression | 2. POCA Child Rating Scale |
| 3. Reduced covert aggression | 3. POCA covert aggression scale |
| 4. Reduced concentration problems (ADD) | 4. POCA ADD scale |
| 5. Reduced criminal behavior | 5. POCA criminal behavior scale |
| 6. Reduced hyperactivity | 6. POCA hyperactivity scale |
| 7. Reduced depression | 7. POCA depression scale |

Family Change Objectives

- | | |
|-------------------------------------------------------------------|----------------------------------------------------------|
| 1. Increase positive parent/child relationship or family cohesion | 1. Moos FES cohesion |
| 2. Reduce family conflict | 2. Moos FES family conflict |
| 3. Increase family organization and order | 3. Moos FES family organization |
| 4. Increase family communication skills | 4. Moos FES communication |
| 5. Increase overall family strengths and resilience | 5. Kumpfer & Dunst Family Strengths and Resilience scale |

Retrospective Pre- and Post-tests

Description of outcomes measured

Outcome data analysis procedures included for each 18 outcomes and 3 cluster variables.

Parents

Parent involvement
Parental supervision
Parenting efficacy
Positive parenting
SFP parenting skills
Parent cluster scale

Children

Concentration
Covert aggression
Criminal behavior
Depression
Hyperactivity
Overt aggression
Social skills
Child cluster scale

Family

Family cohesion
Family communication
Family conflict
Family organization
Family strengths/resilience
Family cluster scale

Procedures

Phase I - the Needs Assessment

we used a convenience sample of all Portuguese families with existing archival data in the SFP database compared to US Portuguese families matched sample of USA families. There are no identifiers in this database that would allow the researchers to link individual outcomes to participants. The SFP database consists of data collected for evaluation purposes from agencies all of the United States.

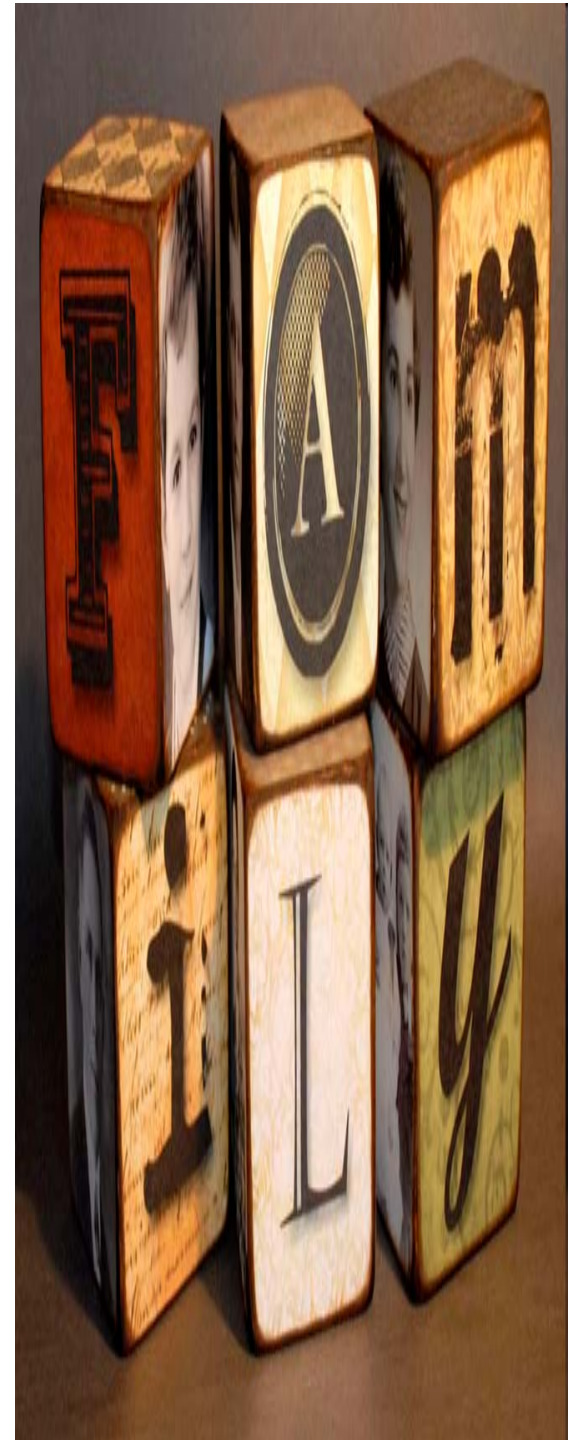
Phase II - Differential Outcome Effectiveness Studies

the different secondary data analyses were conducted as mentioned under the Design section.



“First analysis” – results

- Statistically significant positive results ($p. <.05$) were found for 16 or 76.2% of the 21 outcomes measured for Portuguese families,
- 17 or 80.1% of the 21 outcomes for USA Portuguese families
- In addition, 12 or 57.1% of the USA Portuguese outcomes had effect sizes over Cohen´s $d. >.50$. nine or 42.9% of the Portuguese outcomes had effect sizes over Cohen´s $d >.50$.
- The amount of positive changes for parent, family and child outcomes in USA Portuguese group was larger than SFP norms and Portuguese group.



“First analysis” – results

table 2 - post hoc test for family outcomes

Dependent variable	Group	p	d
Family cohesion	Portuguese SFP	.00	.61
	USA portugueses SFP	.00	.46
	USA families SFP	.00	.52
Family communication	1 Portuguese SFP	.00	.65
	USA portugueses SFP	.00	.71
	USA families SFP	.00	.67
Family conflict	Portuguese SFP	.87	.00
	USA portugueses SFP	.06	.21
	USA families SFP	.00	.21
Family organization	Portuguese SFP	.00	.64
	USA families SFP	.00	.62
	USA portugueses SFP	.00	.68
Family strenghts/resilience	Portuguese SFP	.00	.54
	USA portugueses SFP	.00	.68
	USA families SFP	.00	.66

All family change variables were improved significantly, except family conflict. This area of change had the largest improvements in the effect sizes or amount of change, ranging from Effect Sizes of $d = .71$ for family communication, $d = .68$ for Family Strength and Resilience (US port) $d = .65$ family communication; $d = .64$ family organization (Port) to a low change of $d = .21$ (US port) and $d = .00$ (Port) for Family Conflict.



“First analysis” – results

table 3- post hoc test for parental outcomes

Dependent variable	Group	p	d
Parental involvement	Portuguese SFP	.00	.43
	USA portugueses SFP	.00	.56
	USA families SFP	.00	.52
Parental supervision	1 Portuguese SFP	.00	.62
	USA portugueses SFP	.00	.66
	USA families SFP	.00	.62
Parenting efficacy	Portuguese SFP	.00	.41
	USA portugueses SFP	.00	.61
	USA families SFP	.00	.58
Positive parenting	Portuguese SFP	.00	.56
	USA families SFP	.00	.57
	USA portugueses SFP	.00	.55
SFP Parenting skills	Portuguese SFP	.00	.38
	USA portugueses SFP	.00	.66
	USA families SFP	.00	.48

five of the five outcomes (100%) variables showing significant improvements.

The effect sizes ranging from high values for example, of $d=.66$ parental supervision, $d=.61$ parental efficacy, $d=.66$ parental skills (US Port). $d=.62$ parental supervision; $d=.56$ positive parenting. (Port) And smallest change $d= .38$ (Port)

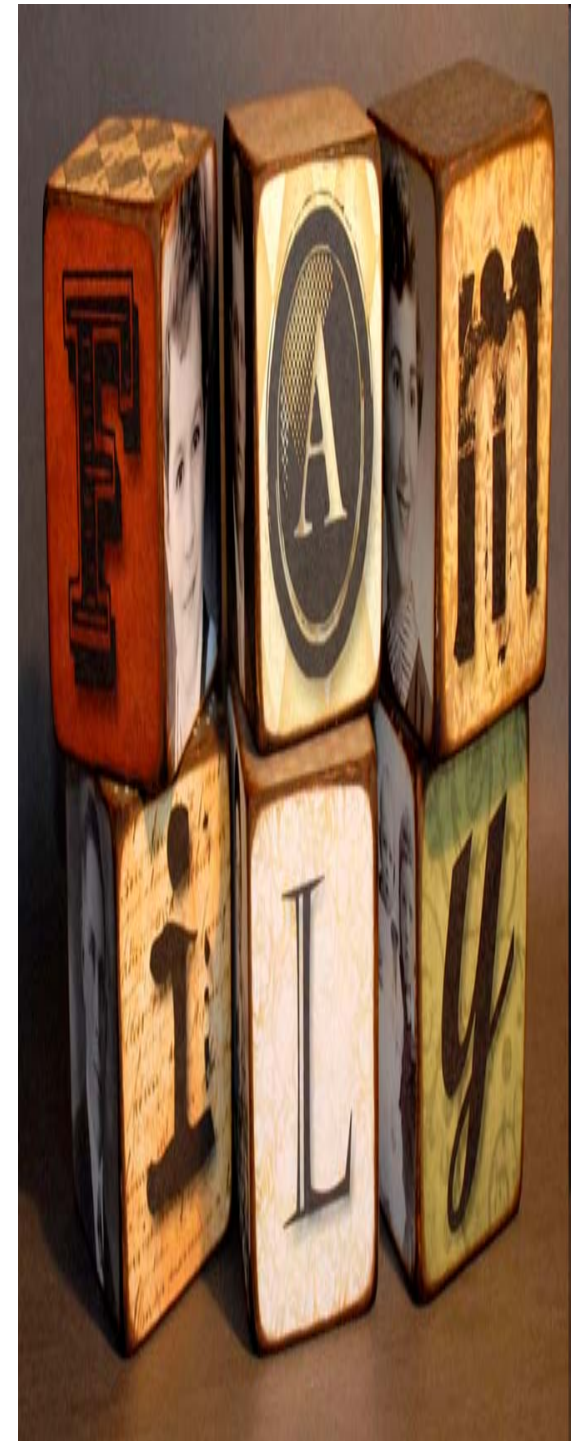


“First analysis” – results

table 4 - post hoc test for children's outcomes

Dependent variable	Group	p	d
Concentration	Portuguese SFP	.00	.52
	USA portugueses SFP	.00	.54
	USA families SFP	.00	.52
Covert aggression	Portuguese SFP	.27	.03
	USA portugueses SFP	.04	.19
	USA families SFP	.00	.17
Depression	Portuguese SFP	.01	.17
	USA portugueses SFP	.00	.39
	USA families SFP	.00	.25
Hyperactivity	Portuguese SFP	.66	.00
	USA families SFP	.11	.13
	USA portugueses SFP	.00	.01
Overt aggression	Portuguese SFP	.00	.29
	USA portugueses SFP	.00	.39
	USA families SFP	.00	.30
Criminal behavior	Portuguese SFP	1.00	.00
	USA portugueses SFP	.58	.02
	USA families SFP	.00	.01
Social behavior	Portuguese SFP	.00	.35
	USA portugueses SFP	.00	.37
	USA families SFP	.00	.37

Four of seven or 57% of the hypothesized child outcome variables were found statistically significantly improved by the post-test, namely decreased Overt Aggression, Depression and increased Concentration and social behavior.



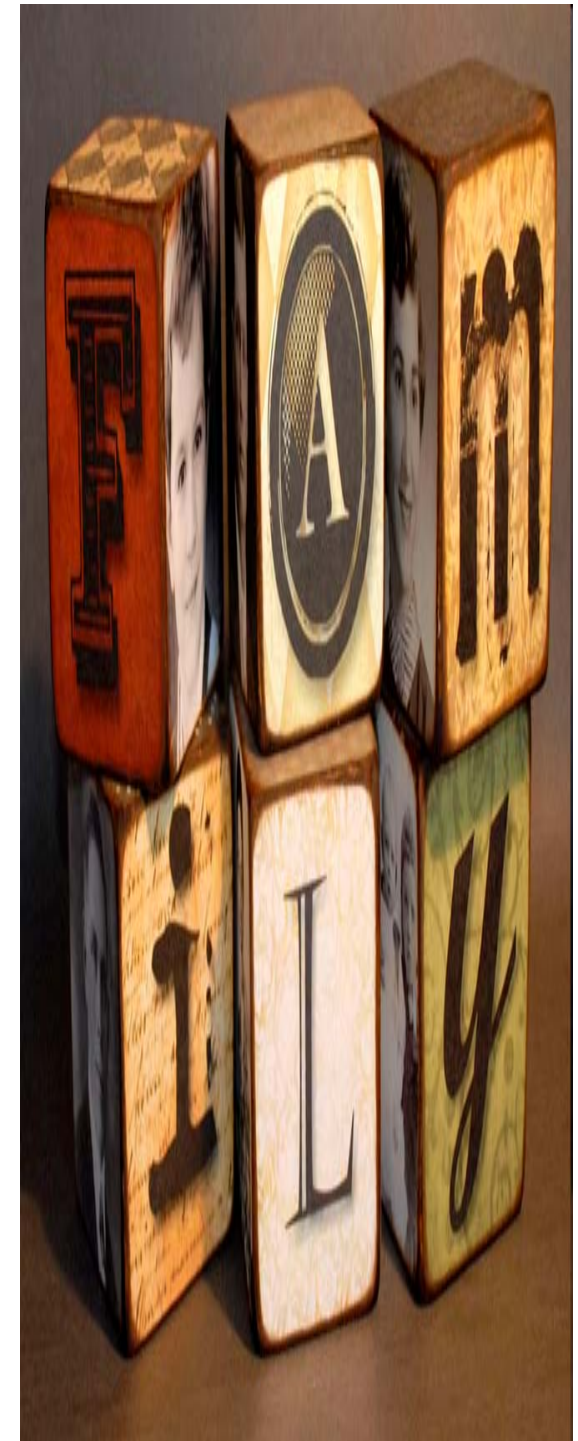
“First analysis” – results

table 5 - total outcomes pre-to posttest changes for portuguese/USA portuguese families

Protective factor	p	Portuguese vs USA portuguese	
		families	effect size
parental involvement	.00	.43	.vs .56
parental supervision	.00	.62	.vs .66
parenting efficacy	.00	.61.	.vs .41
positive parenting	.00	.56	.vs .57
parenting skills	.00	.38	.vs .66
Family Communication	.00	.65	.vs .71
Family Organization	.00	.64	.vs .62
Family Cohesion	.00	.61	.vs .46
Family Conflict	.87	.00	.vs .21
Family resilience	.00	.54	.vs .68
overt aggression	.00	.29	.vs .39
covert aggression	.27	.003	.vs .19
concentration problems	.00	.52	.vs .54
criminal behavior	1.00	.00	.vs .002
hyperactivity	.66	.00	.vs .13
social skills	.00	.35	.vs .37
depression	.00	.17	.vs .39
alcohol and drug use	1.00	.00	.vs .002

Taken as whole, finding positive changes in the outcome variables for suggesting positive changes in the parenting skills of the parents, the family relationships and in the children’s behaviors is an important finding for Portuguese and USA Portuguese.

But best improvement in USA Portuguese families outcomes...





Possible comments at the moment ...

USA Portuguese have higher risks than the Portuguese families possibly because of a less supportive community culture or immigration stress, so can benefit substantially from SFP participation...

Portugese and USA Portugese families can benefit substantially from SFP participation...

About gender...

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Thank you for your attention!

Obrigado!

catiacmagalhaes@gmail.com