



Suicide Prevention among at-risk Adolescents: Research and Evaluation (SPARE)

Ralph E. Cash, Ph.D.

Erin Shae Johns, M.S.

Lindsay Lennertz, M.S.

Nova Southeastern University

Center for Psychological Studies

Florida Initiative for Suicide Prevention

Literature Review

- In 2007, the United States experienced an 8% increase in completed suicides among 10- to 24-year-olds, the greatest increase in 15 years (Centers for Disease Control and Prevention [CDC], 2007).
- Suicide is the third leading cause of death among 15- to 24-year-olds (CDC, 2005).
- There are approximately 32,000 suicides yearly in the U.S., with a disproportionate majority represented by males (78.8%) (CDC, 2005; American Association of Suicidology [AAS], n.d.).
- Each suicide leaves behind at least 6 intimately affected survivors of suicide (AAS, n.d.) .

Literature Review (continued)

- A warning sign is something that occurs within the minutes, hours, or days preceding a suicide attempt and, presently, there controversy exists as to what the most salient warning signs are.
- Risk factors affecting youth include: access to guns/other lethal weapons, risky behaviors (e.g., physical fights, unprotected sexual activity, use of drugs and alcohol), poor school attendance, contact with the legal system, impulsive behavior, limited problem-solving skills, and conflictual family functioning.
- Family dysfunction is a more potent risk factor for suicide than lack of family intactness (Miklowitz & Taylor, 2006).

Literature Review (continued)

- Family dysfunction has been found to: (a) significantly influence adolescent suicidality in both normative and clinical populations, (b) distinguish between suicidal adolescents and normative and clinical controls, and (c) impact rates of suicidal ideation and behavior (Kidd, et al., 2006).
- Gould et al. (2003) suggested that it is not the actual communication and problem-solving patterns in the family that are important, but the perception of these factors by the adolescent.
- Suicidal adolescents describe their families as lacking the ability to adapt to change and lacking effective problem-solving strategies (Adams, Overholser, & Lehnert, 1994).
- Esposito and Clum (2003) identified the link between families and problem-solving, reporting that suicidal adolescents perceived their mothers as being less capable of solving problems and more susceptible to being overwhelmed by stress, which tended to lead to crises within the home.
- Adolescents who have attempted suicide self-reported significantly more impaired problem-solving skills than adolescents who had suicidal ideation without a suicide attempt (McDermut et al., 2001).

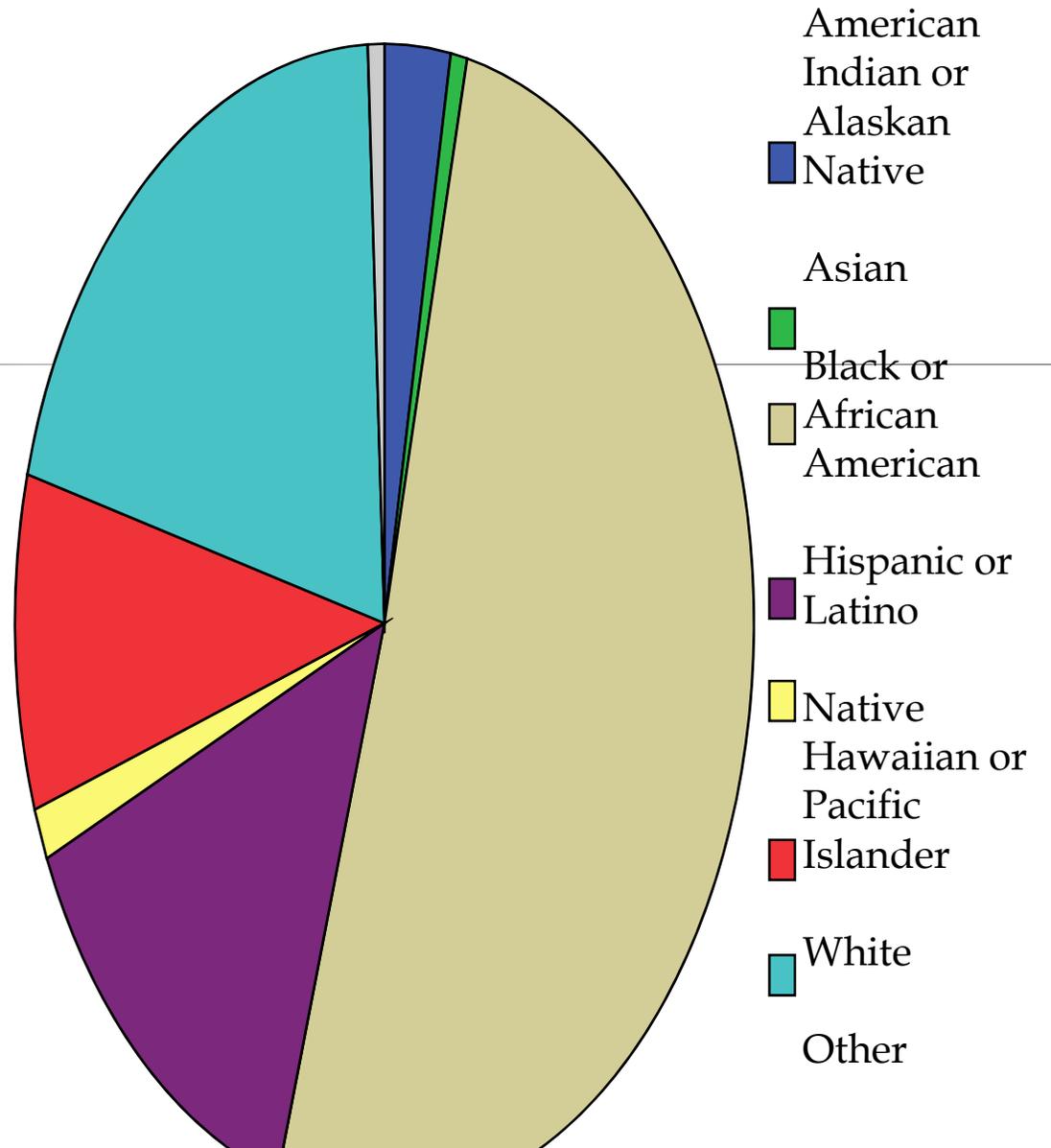
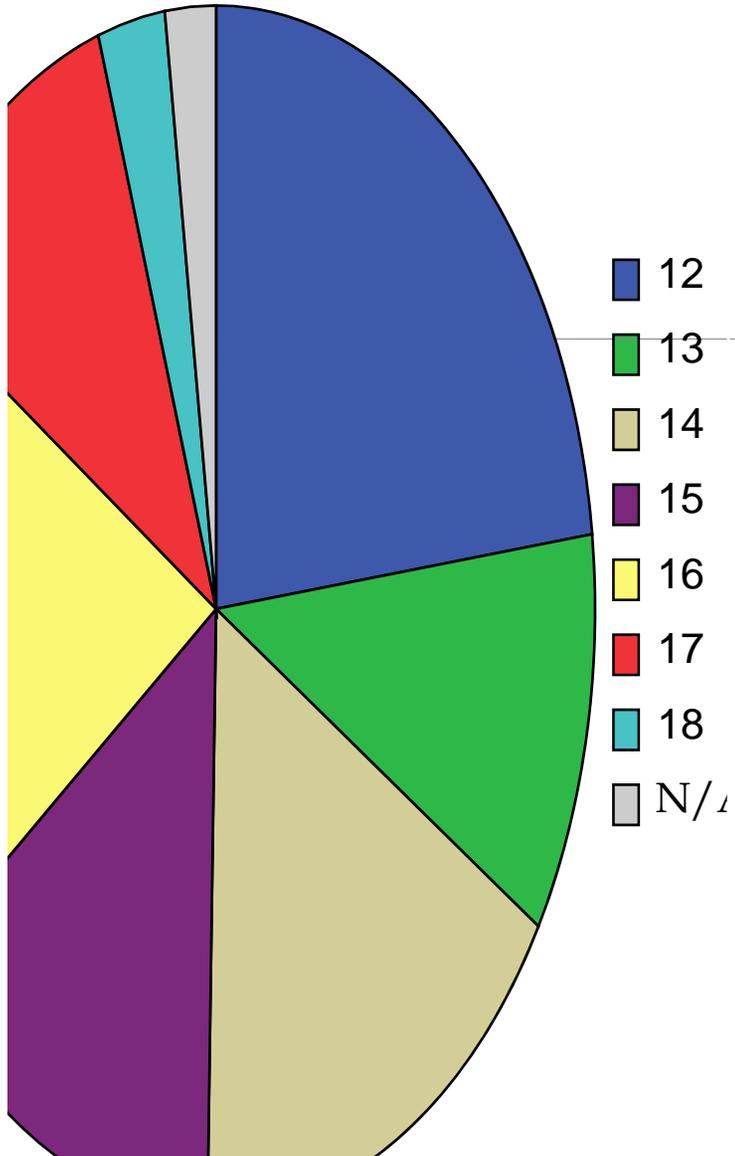
Hypotheses and Methods

- Hypotheses: (a) family functioning will predict problem-solving knowledge and suicidal ideation and problem-solving will, in turn, predict suicidal ideation; and (b) when family functioning and problem-solving were combined as predictors for suicidal ideation, the relationship between problem-solving and suicidal ideation would no longer be significant, providing support for problem-solving knowledge as a mediator of family functioning on suicidal ideation.
- Groups consisted of ten 1.5-hour sessions that were typically held weekly that utilized the Solutions Unlimited Now (SUN) 10-step model of problem-solving (Tellerman, 2001).
- Participants were taught to identify presenting problems in phases: (1) recognize there is a problem, (2) identify the problem, (3) bring the problem to the group, (4) have other participants pretend the problem is their own, (5) brainstorm solutions, (6) discuss the pros and cons of each solution, (7) choose a good solution, (8) plan in detail how to carry out the solution, (9) carry out the solution, and (10) report back to the group about the results of the plan.

Methods (continued)

- Groups also focused on building social skills, behavior control, empathy, and self-esteem, as well as bolstering relationships among group members.
- Facilitators were six doctoral-level trainees in clinical psychology, each of whom were trained by the Florida Initiative for Suicide Prevention (FISP) in accordance with the SUN program curriculum.
- Participants completed the following evaluation measures during the first and last sessions: the Suicidal Ideation Questionnaire, Jr. (SIQ-Jr.), Health Risk-Taking Assessment (HRTA), the Problem-Solving Skills Test (PSST), and one question assessing participants' perception of their family functioning.

		Relationship with Parents	SIQ-Jr. Total Score	Problem- Solving Skills
Relationship with Parents	Pearson Correlation	1	.353	-.210
	Sig. (2-tailed)		.000	.021
	N	135	124	121
SIQ-Jr. Total Score	Pearson Correlation	.353	1	-.243
	Sig. (2-tailed)	.000		.010
	N	124	125	112
Problem-Solving Skills	Pearson Correlation	-.210	-.243	1
	Sig. (2-tailed)	.021	.010	
	N	121	112	121



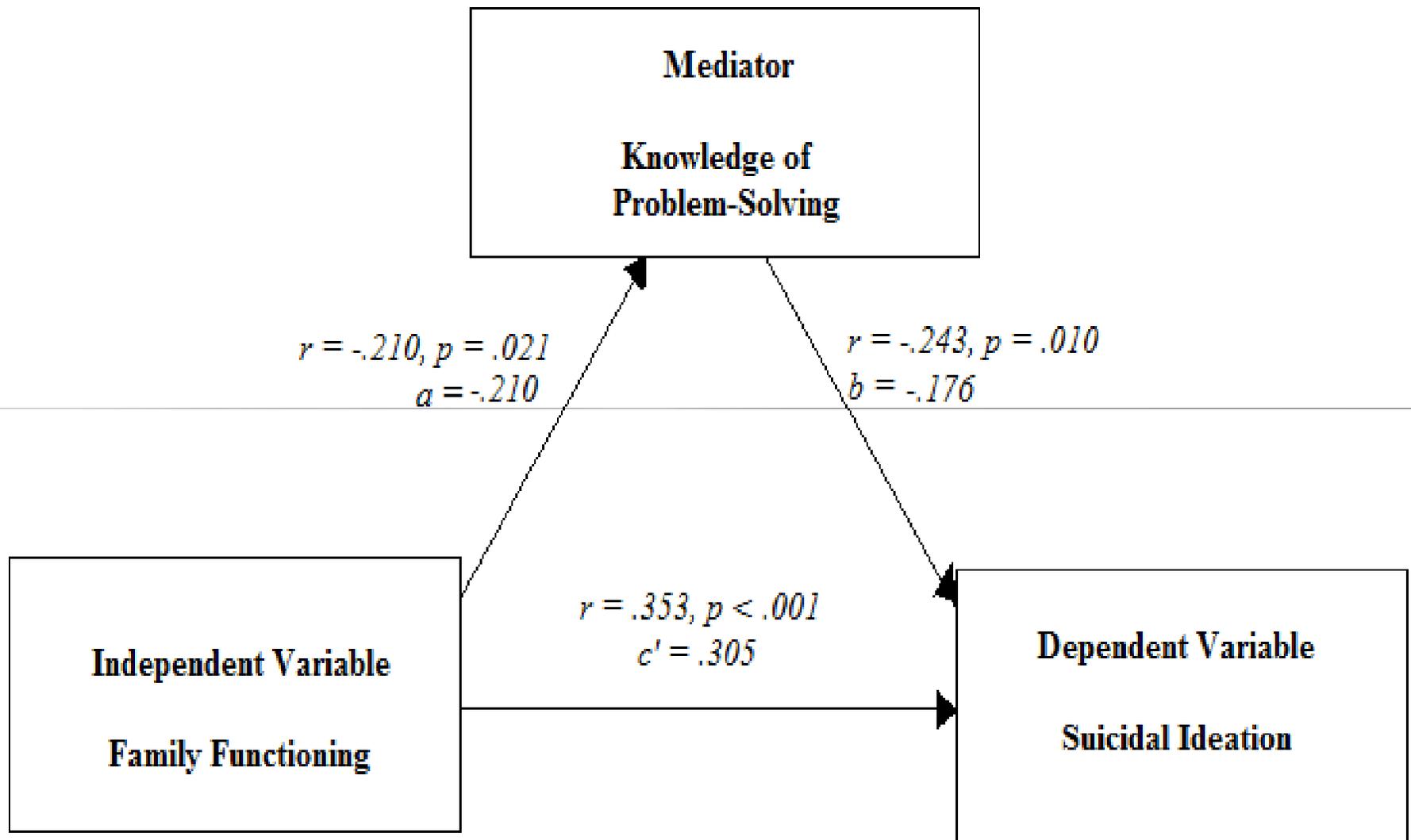


Figure 3. Path diagram for the simple mediated model of knowledge of problem-solving on family functioning and suicidal ideation, where a , b , and c' are standardized beta coefficients.

DISCUSSION

Data collected in this investigation are intended to contribute to the growing body of literature concerning suicide prevention among adolescents, particularly those who are most at risk as a consequence of their present life circumstances.

As indicated in Figures 1 and 2, the participants represented a wide variety of cultures and ages. Furthermore, females represented 34.5% of the sample and the majority of the group was in 8th, 9th, or 10th grade ($M=8.78$, $SD=1.48$).

As hypothesized, all three outcome measures were found to be significantly correlated with one another (Table 1). Thus, the current data support previous research which has concluded that problem-solving, family functioning, and suicidal ideation are related.

Although the first two conditions required to confirm the presence of a mediator provided significant results, the final step did not substantiate our second hypothesis (Baron & Kenny, 1986; Figure 3).

Discussion (continued)

- Despite failure to attain a significant improvement in problem-solving skills, results suggest that the adolescents tended to gain more knowledge of the problem-solving process over the 10-week period, as predicted.
- Although suicidal ideation did not change significantly, the mean pre-post difference was in the predicted direction. The researchers hypothesized that the results may be attributable to trust issues. Means by which a safe, trusting atmosphere may be fostered quickly within the group should be identified and employed, and the anonymity of responses should be even more emphasized in order to elicit accurate responding to the questionnaire during the first session.

Discussion (continued)

- High attrition (36.7%), use of only one question to assess family relationships, lack of control condition, and differences in facilitator style and competence were also limitations.
- Future directions: analyze control group data; obtain more details regarding perceived family relationships (i.e., use more questions); use video or live observation to ensure fidelity of implementation; and develop new ways to facilitate trust, attendance, and participation within groups.

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