# The Immediate Effects of Suicide Hotline Helping Models on Caller Emotional Distress and Suicide Risk

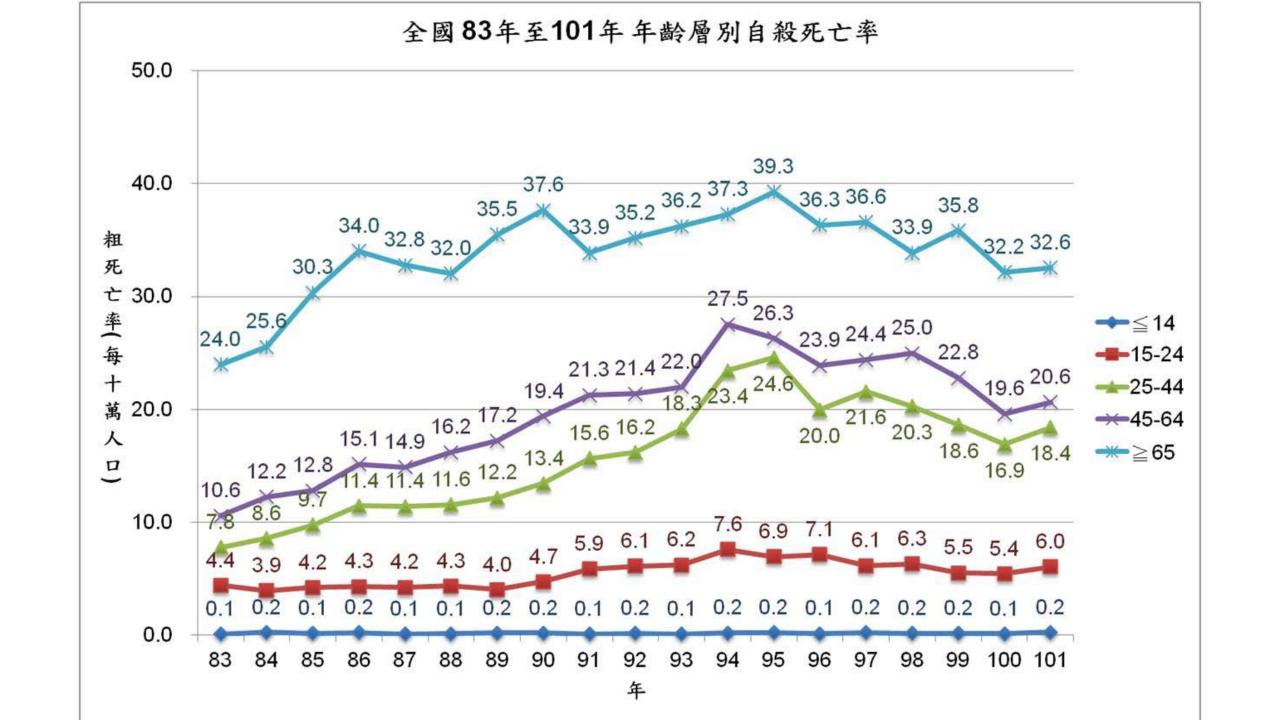
Fortune Shaw National Chi Nan University

Kai-Yu Chu
Taipei Lifeline Association









#### The Taiwan's National Suicide Prevention Hotline

- The Taipei Lifeline Association [TLA] housed Taiwan's first crisis hotline in Mackay Memorial Hospital in 1969.
- The TLA has been undertaking the 24/7 toll-free National Suicide Prevention Hotline (NSPH) from the Department of Health, Taiwan since 2009.
- 61,284 calls to the NSPH in 2009, 71,781 in 2010, and 68,303 in 2011.
- Intervened 143 individuals in the process of a suicide attempt during of right before the call in 2009, 375 in 2010, and 475 in 2011.



#### Previous Research

300 anonymous phone records (including 100 first-ever acute suicidals, 100 first-ever suicidals, & 100 first-ever non-suicidals) were drawn from the NSPH 2009 database.....

- 1. The Modified Mental State Rating Scale (MSRS) and the Modified Suicide Risk Scale (SRS) were able to detect changes within session.
- 2. Many volunteers didn't perform well.
- 3. Some raters reported that they might unintentionally lowered the *MSRS* and SRS scores at the end of calls to prove effectiveness of the service.



#### Research Questions

- Would the NSPH service improve callers' mental state and decrease their suicidality during the call?
- Would helpers' helping behaviors be associated with changes in callers' mental state and suicidality?



#### Methods

- The Suicide Risk Assessment of NSPH was used to classify callers into non-suicidal, suicidal, and acute suicidal groups. A total of 551 anonymous phone records (including 89 first-ever acute suicidals, 67 first-ever suicidals, 83 first-ever non-suicidals, 96 repeat acute suicidal, 141 repeat suicidal, and 75 repeat non-suicidals) were drawn from the NSPH 2010-2011 database.
- The Helper Behavior List, modified from the Helper's Response List (Daigle & Mishara, 1995; Mishara & Daigle, 1997; Mishara et al., 2007a, Mishara et al., 2007b), was used to code NSPH helper's behaviors.





• The Modified Mental State Rating Scale (MSRS), based on the works of KaLafat and colleagues (2007), King and colleagues (2003), and Mishara and colleagues (2007b), was used to evaluate callers' level of emotional disturbance at the beginning and at the end of the call.

		Not at	Vague	Clear in	Strong	Strong
		all in	in	content	in	and
		content	content	or tone	content	frequent
		or tone	or tone		or tone	in
						content
						or tone
1.	confused/ambivalent					
2.	overwhelmed/tired					
3.	angry/irritable					
4.	sad/tearful					
5.	helpless					
6.	guilt/shame					

• The *Modified Suicide Risk Scale* (SRS), based on the work of Gould and colleagues (2007), was used to evaluate callers' suicide risk at the beginning and at the end of the call.

		Not at all in content or tone	Vague in content or tone	Clear in content or tone	Strong in content or tone	Strong and frequent in content or tone
1.	How much does the caller					
	really want to die?					
2.	How likely is the caller to carry out his or her thoughts/plans to kill himself or herself?					
3.	How hopeful does the caller feel about the future?					
4.	How likely does the caller feel he or she could go on?					
5.	How does the caller feel current hurt, anguish, and misery (not physical pain)?					
6.	How likely does the caller could tolerate the way he or she feel if his or her current situation did not change?					

#### Methods

#### Raters

Seventeen independent raters were recruited. All of them were NSPH senior supervisors with a bachelor or master's degree in psychology or related fields. They received an evaluation and coding training until the inter-rater reliability was satisfied with the Kendall = .80.

Five of the raters were responsible for evaluating callers' mental status and risk status using the *MSRS* and *SRS*. Each caller's *MSRS* and *SRS* at the beginning and at the end of calls were coded by different raters. Other 12 raters were responsible for coding helpers' behaviors using the modified *HBL*.

After the raters turned in their coding data, the researchers examined one coding record of each rater to make sure that the inter-rater reliability was good enough. All were satisfied with the Kendall = .80.



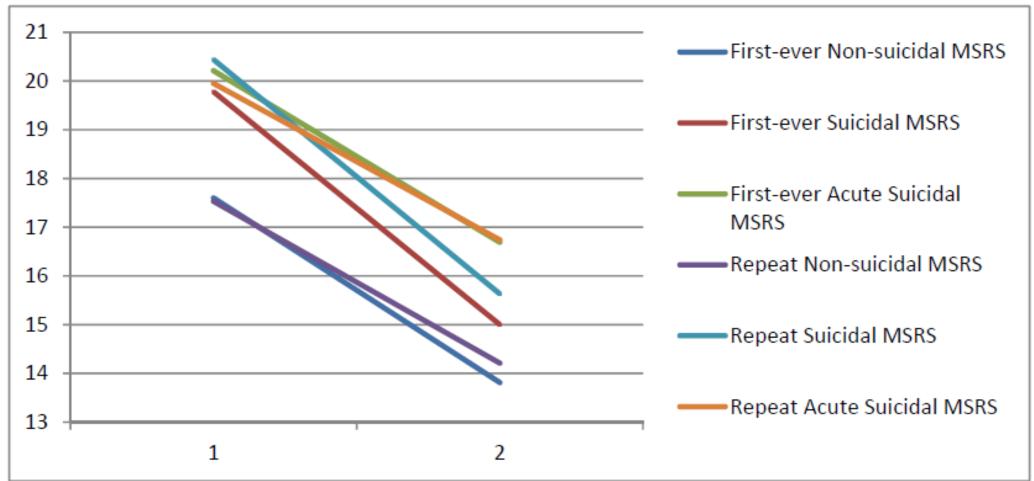


#### Methods

Beginning of the Call End of the Call The *Helper Behavior List* for coding helper's behaviors The MSRS & the SRS for The MSRS & the SRS for coding the mental state coding the mental state and suicide risk at the and suicide risk at the first 5-10 min of the call last 5-10 min of the call





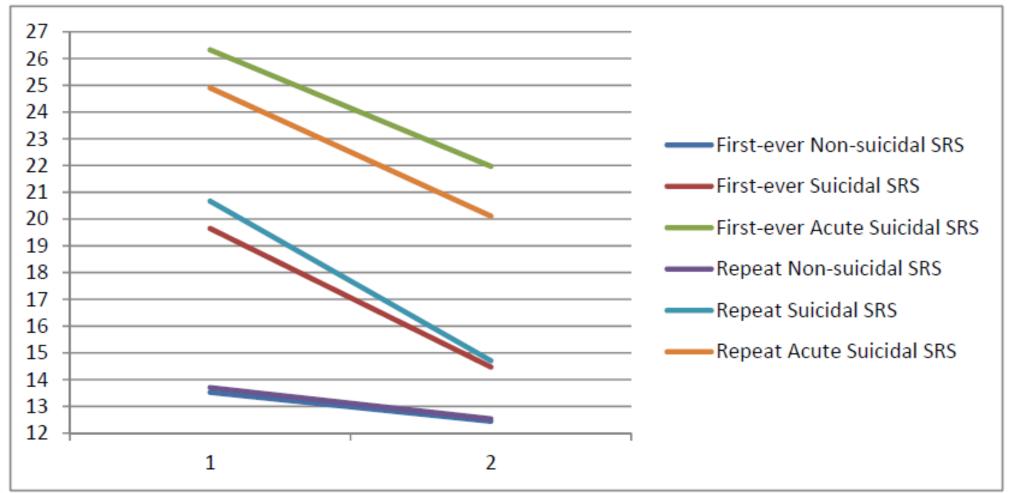




















		Beginning of Calls	End of Calls	t	p
Total	MSRS	19.78	15.27	22.83	< .001
	SRS	20.26	15.87	17.79	< .001
First-ever Non-suicidal	MSRS	17.60	13.81	7.53	< .001
	SRS	13.52	12.44	2.60	.012
First-ever Suicidal	MSRS	19.78	15.00	7.82	< .001
	SRS	19.65	14.47	6.20	< .001
First-ever Acute Suicidal	MSRS	20.21	16.69	6.64	< .001
	SRS	26.32	21.97	5.84	< .001
Repeat Non-suicidal	MSRS	17.53	14.21	5.98	< .001
	SRS	13.70	12.54	2.69	.009
Repeat Suicidal	MSRS	20.44	15.63	11.41	< .001
	SRS	20.67	14.71	10.46	< .001
Repeat Acute Suicidal	MSRS	19.95	16.74	6.03	< .001
	SRS	24.90	20.11	6.55	< .001

	F1	F2	F3	F4	F5	<b>F6</b>	<b>F</b> 7
Questions: Feelings and Emotions	.74						
Challenge and Confrontation	.71						
Moral Lecturing	.69						
Questions: Thoughts	.59						
Questions: Problem-Solving	.42	.33					
Reframing		.74					
Comfort		.44				.30	
Interpretation		.40					
Suggestions for Problem-Solving		.33					
Value Judgment			.70				
Asking Callers to Take Helper's Suggestions			.54				
Disagreement with Callers			.52				
Questions: Issues and Problems				.81			
Summarizing				.58			
Reflections: Thoughts					.75		
Reflections: Feelings and Emotions					.56		
No-Suicide Contract						.53	
Countertransference						.42	
Informing the Crisis Management Process						.42	
Offering Information							.66
Offering Referrels							.44
Note. Loadings less than .30 are not shown.							

Predictor Variables	b	p	b	p	b	p
Constant	0.00	1.000	-0.26	<.001	-0.21	.002
MSRS at the Beginning of Calls (standardized)	0.18	<.001	0.16	<.001	0.16	<.001
First-ever Suicidal			0.18	.225	0.26	.071
First-ever Acute Suicidal			0.67	<.001	0.55	<.001
Repeat Non-suicidal			0.04	.774	-0.06	.660
Repeat Suicidal			0.34	.003	0.26	.019
Repeat Acute Suicidal			0.69	<.001	0.54	<.001
F1. Guidance and Directives (standardized)					0.20	<.001
F2. Problem Solving (standardized)					-0.12	.005
F3. Non-Professional Behavior (standardized)					0.01	.902
F4. Facts Gathering (standardized)					0.04	.347
F5. Empathy (standardized)					-0.18	<.001
F6. Crisis Response (standardized)					-0.00	.976
F7. Offering Resources (standardized)					-0.11	.010
$\mathbb{R}^2$	.03	***	.11	***	.19	***
R <sup>2</sup> Change			.08	***	.09	***

Note. Criterion Variable: MSRS at the End of Calls (standardized)

Predictor Variables	b	p	b	p	b	p
Constant	0.00	1.000	-0.21	<.001	-0.17	.005
SRS at the Beginning of Calls (standardized)	0.51	<.001	0.30	<.001	0.27	<.001
First-ever Suicidal			-0.01	.936	0.01	.928
First-ever Acute Suicidal			1.02	<.001	0.88	<.001
Repeat Non-suicidal			-0.06	.608	-0.09	.468
Repeat Suicidal			-0.02	.856	-0.07	.475
Repeat Acute Suicidal (standardized)			0.75	<.001	0.60	<.001
F1. Guidance and Directives (standardized)					0.03	.500
F2. Problem Solving (standardized)					-0.11	.002
F3. Non-Professional Behavior (standardized)					0.04	.212
F4. Facts Gathering (standardized)					0.07	.087
F5. Empathy (standardized)					-0.07	.043
F6. Crisis Response (standardized)					0.11	.006
F7. Offering Resources					-0.03	.451
$\mathbb{R}^2$	.26	***	.38	***	.40	***
R <sup>2</sup> Change			.11	***	.03	***
Note. Criterion Variable: SRS at the End of Calls (sta	ndardized)					

Note. Criterion Variable: SRS at the End of Calls (standardized)

# Comments, suggestions, or feedback?

Correspondence: Fortune Shaw

1 University Rd., Graduate Institute of Guidance & Counseling

Puli, Nantou 54561, Taiwan

Tel. +886-492910960 ext.2783

Email: ftshaw@ncnu.edu.tw



