COGNITIVE DEFICITS AND DISTORTIONS IN THE PREDICTION OF SUICIDE IDEATION

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INTRODUCTION:

- Research has identified numerous risk factors that are associated with suicide ideation, but suicidology literature lacks process theories of suicide ideation.
- Cognitive deficits and distortions have been implicated in the development of numerous psychological disorders but, to date, researchers have not investigated the importance of these factors in the development of suicide ideation.
- Cognitive distortions represent thought processes that are present but skewed and maladaptive, whereas cognitive deficits represent an absence of certain adaptive thought processes (Kendall & Dobson, 1993).

OBJECTIVE: To assess the integrity of a Cognitive Deficits and Cognitive Distortions Model of Suicide Ideation

PARTICIPANTS: 397 (83 male & 314 female) undergraduate students registered in an Introduction to Psychology course
- Age ranged from 17 to 43 with a mean of 18.69

MEASURE	CONSTRUCT
Beck Scale for Suicide Ideation [BSS]: (Beck, Kovacs, & Weissman,1979)	- suicide ideation
Beck Hopelessness Scale [BHS]: (Beck & Steer, 1988)	- hopelessness
General Attitudes Scale – [GAS-S] (Fazakas-DeHoog, 2007)	- positive self appraisal
General Attitudes Scale – [GAS-F] (Fazakas-DeHoog, 2007)	- positive future appraisal
Social Problem-Solving Inventory [SPSI-R] (D'Zurilla, Nezu, & Maydeu-Olivares, 1995)	- rational problem-solving
Social Problem-Solving Inventory [SPSI-A] (D'Zurilla, Nezu, & Maydeu-Olivares, 1995)	- avoidant problem-solving
Embedded Figures Test [EFT] (Oltman, Witkin, Raskin, & Karp, 1971)	- cognitive rigidity

DESCRIPTIVE STATISTICS FOR IDEATING & NON-IDEATING GROUPS

SCALE	NON-IDEATORS			IDEATORS		
	N	MEAN	S.D.	N	MEAN	S.D.
BSS **	365	.22	.94	32	9.81	7.47
BHS *	365	3.02	2.96	32	6.56	5.55
GAS-S **	365	5.12	1.37	32	3.69	1.80
GAS-F **	365	5.42	1.25	32	4.19	1.69
SPSI-R	365	11.09	3.57	32	10 .47	3.28
SPSI-A *	365	5.72	3.84	32	8.50	4.10
EFT	365	3.65	1.09	32	4.12	1.80

NOTE: For group differences equal variances not assumed; ** $p < .001$; * $p < .01$

CORRELATIONS BETWEEN MEASURES OF COGNITIVE DEFICITS, COGNITIVE DISTORTIONS & SUICIDE IDEATION

	BSS	BHS	GAS-S	GAS-F	SPSI-R	SPSI-A	EFT
BSS	-	.41 **	-.29 **	-.34 **	-.03	.21 **	.08
BHS		-	-.53 **	-.63 **	-.16 **	.33 **	.06
GAS-S			-	.62 *	-.48 **	-.21 **	-.02
GAS-F				-	-.20 **	-.28 **	-.03
SPSI-R					-	.15	-.01
SPSI-A						-	-.07
EFT							-

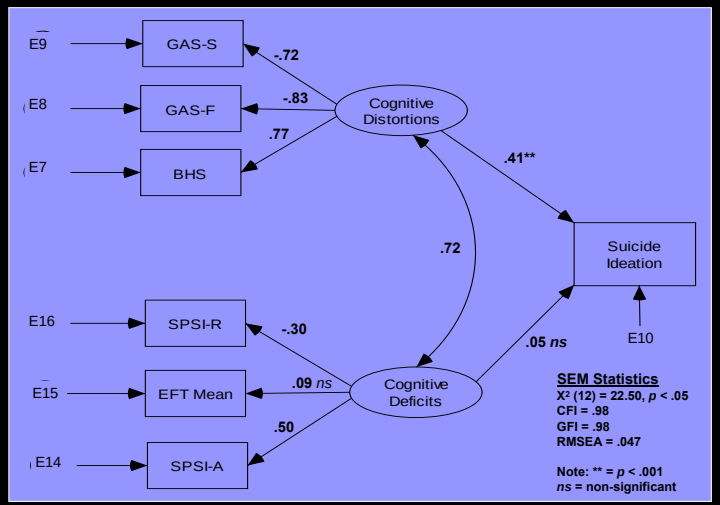
NOTE: BSS = Beck Scale for Suicide Ideation; BHS = Beck Hopelessness Scale; GAS-S = General Attitudes Scale -Self appraisal; GAS-F = General Attitudes Scale-Future appraisal; SPSI-R = Social Problem-Solving Inventory -Rational problem-solving; SPSI-A = Social Problem-Solving Inventory- Avoidant problem-solving; EFT= Embedded Figures Test

NOTE: ** $p < .01$; * $p < .05$

A COGNITIVE DEFICITS & COGNITIVE DISTORTIONS MODEL OF SUICIDE IDEATION

MEASUREMENT MODEL

With the exception of cognitive rigidity, all measures loaded significantly onto the Cognitive Distortions Factor and the Cognitive Deficits Factor.



STRUCTURAL EQUATION MODELING RESULTS

STRUCTURAL MODEL
- The resulting CFI value of .98 indicates an almost perfect fit between the estimated covariance matrix and the data from the sample.
- The resulting GFI value of .98 indicates that the model accounts for 98% of the variance in the data set with minimal residual error (RMSEA = .047).

NOTE: Small non-significant Chi square values or CFI & GFI values greater than .90 indicate a good fitting model (Bentler, & Bonett, 1980).

CONCLUSIONS:

COGNITIVE DEFICITS & DISTORTIONS MODEL
- Cognitive Distortions had a direct impact on suicide ideation indicating that negatively skewed thinking contributes to the development of suicide ideation.
- Cognitive Deficits had an indirect impact on suicide ideation through their impact on cognitive distortions, indicating that problem-solving deficits & an avoidant problem-solving style contribute to the development of cognitive distortions & hopelessness.
- The reciprocal relationship between Cognitive Deficits & Distortions indicated that cognitive distortions also contribute to the development of problem-solving deficits & avoidant problem-solving.

FUTURE DIRECTIONS
- The proposed cognitive deficits and distortions model needs to be tested in samples of fatal and non-fatal suicide attempters to determine how cognitive deficits and distortions contribute to suicide attempts.

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The current findings are a component of the doctoral dissertation of Laura Fazakas-DeHoog

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Ethics approval University of Western Ontario