Associations between latent profiles of momentary affect and self-injurious behaviors

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ABBREVIATIONS

Negative Affect → NA
Positive Affect → PA
Self-injurious urge → SIU
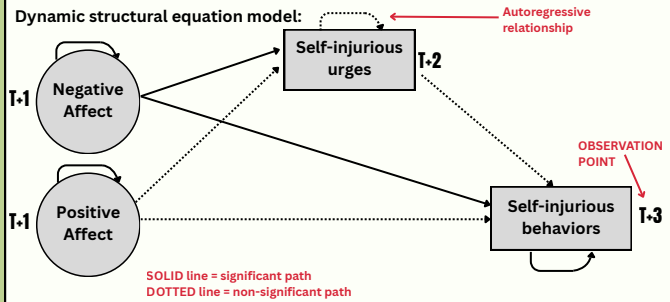Self-injurious behavior → SIB

Introduction:

Affect and self-injurious urges (SIUs) are known risk factors for self-injurious behaviors (SIBs). While studies have established these risk factors are temporally associated, studies have examined these relationships over long periods of time (e.g., months or years); Yet urges and affect can appear and change within minutes or even seconds. As a result, these risk factors appear inert or weak when examined within these longer time point studies. Thus, it may be useful to examine these behaviors in shorter time points (i.e., ecological momentary assessments).

Methods:

Participants (N = 124) who engaged in at least three SIBs (i.e., NSSI and/or ED behaviors) in the past month completed EMA for 14 days reporting on affect (N = 6600 observations) and SIBs. Dynamic structural equation modeling was used to examine 1) how SIUs mediate the relationship between affect and SIBs and 2) how each variable predicts SIBs individually. Multilevel models were used for sensitivity analyses.

Discussion:

- Negative affect may lead to urges and even predict SIBs outside of urges
- Urges may not be predictive of SIBs alone or when accounting for subsequent urges
- Holistically, all variables may contribute to SIB engagement.

Dynamic structural equation model:

Autoregressive relationship

Negative Affect — T+1

Self-injurious urges — T+2

Positive Affect — T+1

Self-injurious behaviors — T+3

OBSERVATION POINT

SOLID line = significant path
DOTTED line = non-significant path

Results:

MAIN PATHWAYS

(#) represents observation point	ESTIMATE
NA(0) → SIU(1)	38.975**
PA(0) → SIU(1)	3.852 (N.S.)
SIU(1) → SIB(2)	0.009 (N.S.)
NA(0) → SIB(2)	8.580**
PA(0) → SIB(2)	1.226 (N.S.)

AUTOREGRESSIVE PATHWAYS

(#) represents observation point	ESTIMATE
PA(0) → PA(1)	0.269**
NA(0) → NA(1)	0.565***
SIU(0) → SIU(1)	0.049 (N.S.)
SIB(0) → SIB(1)	0.332**
SIB(0) → SIB(2)	0.719 (N.S.)

MEDIATION

	INDIRECT	TOTAL
PA	N.S.	0.046*
NA	N.S.	0.001***

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1) Negative affect predicted both self-injurious urges and behaviors

2) Examining *all* predictors of SIBs was significant, while certain *individual* pathways were not.