



HFM-275 Symposium on Military Suicide
Prevention, 3-5 April 2017, Riga, LATVIA



Utility of Pathological Personality Traits in Predicting Suicidal Ideation in Civil, Military and Clinical Sample

Viktorija Perepjolkina, Jeļena Koļesņikova,
Kristīne Mārtinsonē, Ainārs Stepens,
Elmārs Rancāns, Anita Čodere



RĪGAS STRADIŅA
UNIVERSITĀTE

VITA BREVIS ARS LONGA

Research was funded by the Latvian National Research Programme
BIOMEDICINE 2014 – 2017 (sub-project Nr.5.8.2.)



Introduction

- Suicide occurs throughout the lifespan and was the second leading cause of death among 15–29-year-olds globally in 2015 (WHO, 2017).
- According to European Detailed Mortality Database (DMDB) in 2014 in Latvia there were **382** death by suicide, which comprise 1.35% of all deaths, and 19.16 death by suicide per 100 000 inhabitants, which is the second highest suicide rate among EU countries in general population (WHO DMDB, 2017).
- 1994 - 2016 in Latvian military settings were 22 suicide mortality.

Suicidal Ideation and Risk Factors for Dying by Suicide

- **Suicidal ideation** is generally associated with major depressive disorder, panic disorder (and other anxiety disorders), schizophrenia, PTSD, substance use disorder (particularly alcohol), borderline personality disorder and some other mental disorders.



Source: <http://meganli.deviantart.com/art/Suicidal-Ideation-511252992>

Theories of Suicide (1): *Fluid Vulnerability Theory*

- **Fluid vulnerability theory** (Rudd, 2006) posits that acute suicidal episodes increase in severity when trait-based and state-based risk factors interact, especially among individuals who have been previously suicidal.
 - » Some individuals are innately at increased risk for suicide due to their **dispositional factors**.

Personality-based risk factors of suicidal behaviour

- One of the underlying factors in suicidal behaviour is individuals' **personality**.
- Identifying personality-based risk factors for suicide attempts and suicidal ideation is an important consideration for research, prevention and clinical care alike.



Source: <https://www.verywell.com/youth-suicide-facts-1066787>

Personality-based risk factors of suicidal behaviour

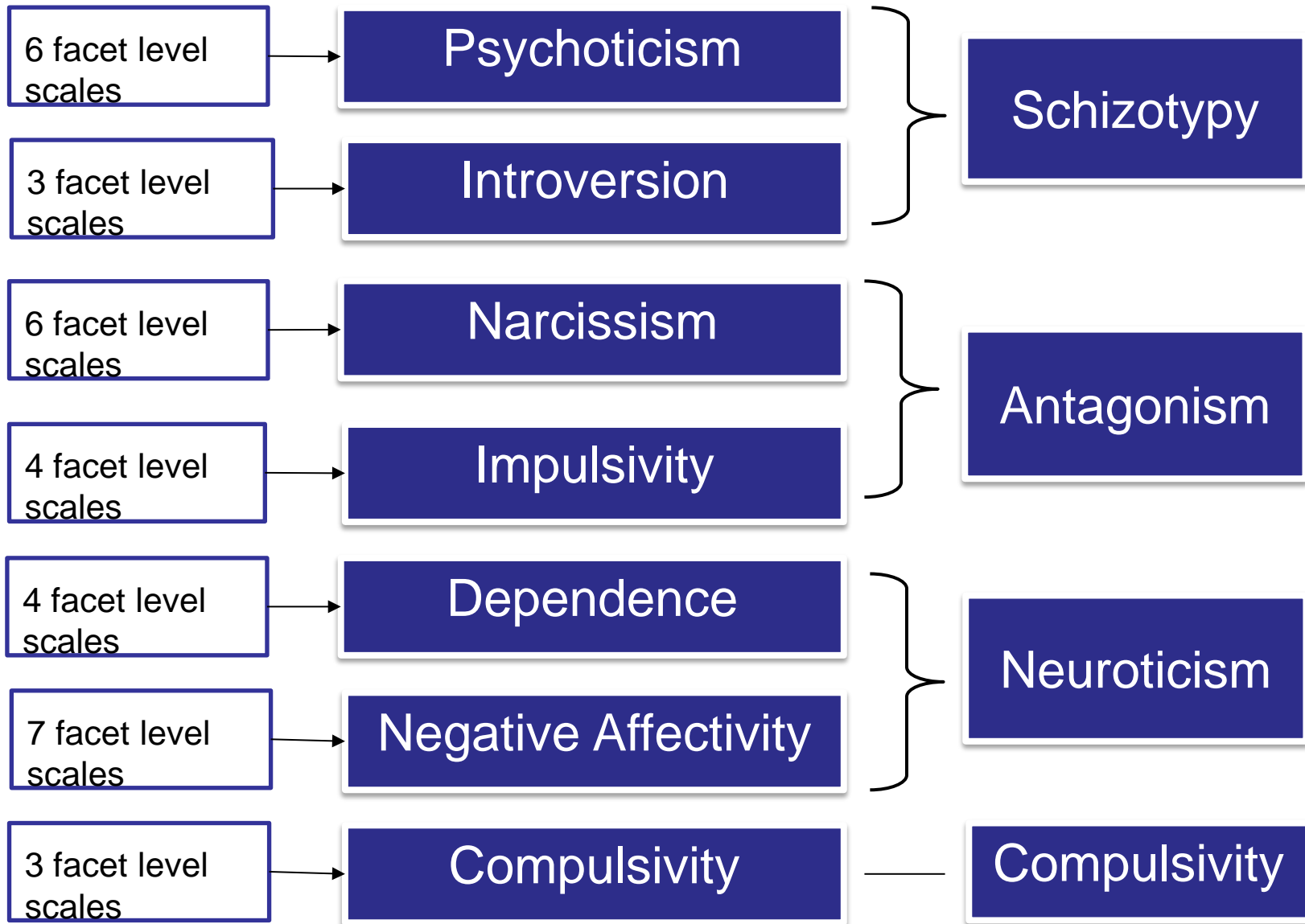
- Low self-esteem
- Trait-hopelessness
- Excessive guilt
- Personality disorders
 - » **Borderline personality disorder**

It was found that 73% of patients with borderline personality disorder have attempted suicide, with the average patient having 3.4 attempts (Soloff et al., 2000).

Multidimensional Models of Pathological Personality Traits

- In the alternative DSM-5 model for personality disorders (PDs), PDs are characterized by impairments in personality functioning and particular constellations of *pathological personality traits*.
- During past decades, different models of pathological or maladaptive personality traits have been developed.
 - » One of such models was developed in the frame of **Latvian Clinical Personality Inventory (LCPI)**.

Hierarchical model of Pathological Personality Traits in the LCPI



Personality Traits Related to the Borderline Personality Disorder

■ Personality traits



Emotional lability
Anxiousness
Separation insecurity
Depressivity
Impulsivity
Risk taking
Hostility
Self-harm
Aggression
Dissociation proneness

(DSM-5 Section III, APA, 2013, p.766-767; Samuel at al, 2012, p.32-33)

Theories of Suicide (2):

The Interpersonal-Psychological Theory

- **The interpersonal-psychological theory** holds that an individual will engage in serious suicidal behavior if he or she has both the ***desire to die*** and ***the capability*** to act on that desire.
- The theory proposes that convergence of three factors — ***perceived burdensomeness*** (*‘My existence is a burden on friends, family members, and/or society’*), ***thwarted belongingness*** (*feelings of being alienated from friends, family, or other valued social circles*), and the ***acquired capability to engage in lethal self-injury*** — is sufficient to result in serious suicidal behaviour.

(Joiner, 2005; Ribeiro & Joiner, 2009)

Aim of this study

- The main objectives of this study was
 - » (1) to evaluate utility of pathological personality traits in predicting suicidal ideation especially in combination with other well known risk factors, such as severity of symptoms of general depressive disorder and prior attempts of suicide, as well as such interpersonal risk factors as feelings of inferior self-worth (low self-esteem), low level of perceived social support, and self-esteem-by-perceived social support interaction,
 - » (2) to determine the generality of observed results.

Method: Participants

Table 1: Demographic characteristics of participants.

Sample	<i>N</i> (%)		Age in years	
	Total	Male	<i>M</i> (<i>SD</i>)	(<i>n</i>) ^a
Total sample	719	37.7	33.25 (14.68)	46 (6.4%)
Clinical sample	131	32.8	43.55 (14.37)	26 (19.8%)
Civil sample	461	24.7	31.74 (14.85)	19 (4.1%)
Military sample	127	89.8	28.11 (8.00)	1 (0.8%)
Peace keeping mission experience	26	100	37.12 (7.75)	0

Note. ^aHad had a suicide attempt.

Method: Measures

- **Latvian Clinical Personality Inventory (LCPI)**, 4-point response format: from 0 – ‘totally disagree’ to 3 – ‘totally agree’.
 - » LCPI scales used in this study:
 - **Suicidal ideation scale (SI)** ($k = 6$)
 - **Depression symptoms scale (DP)** ($k = 24$)
 - **Self-esteem scale (SE)** ($k = 9$)
 - **Perceived social support scale (PSS)** ($k = 4$)
 - **33 full version facet-level pathological personality trait scales**
- Past suicide attempt – one-item:
 - *“I have tried to attempt a suicide.”*

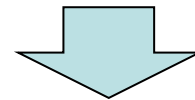
Method: Procedure

- All participants were required to meet the following criteria:
 - to be 18 years of age or older,
 - to be able to consent and complete the study protocol in Latvian.
- For psychiatric inpatient sample additional criteria were:
 - to endorse or exhibit current psychiatric symptoms,
 - attending physician's admission for a patient to participate in the study.
- Data were collected from January 2016 to November 2016 and all procedures were approved by the RSU Ethical board.

This study formed part of a LCPI development and validation research carried within the framework of Latvian National Research Programme Biomedicine for Public Health (BIOMEDICINE) 2014 – 2017 (sub-project Nr.5.8.2.).

Data Analysis Strategy and Main Results

- **Step 1.** To find which pathological personality traits are associated with severity of current suicidal ideation (in each sample separately).
- **Step 2.** To find which pathological personality traits are predictive of suicidal ideation and how stable are obtained results across different samples.
 - » A series of stepwise linear regression analysis was conducted.



Pathological personality traits found to be predictive of suicidal ideation

Civil sample

- Depressivity
- Self-harm
- Submissiveness
- Dissociation proneness

Military sample

- Depressivity
- Self-harm
- Irresponsibility

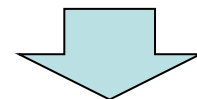
Clinical sample

- Depressivity
- Self-harm
- Suspiciousness
- Impersistence

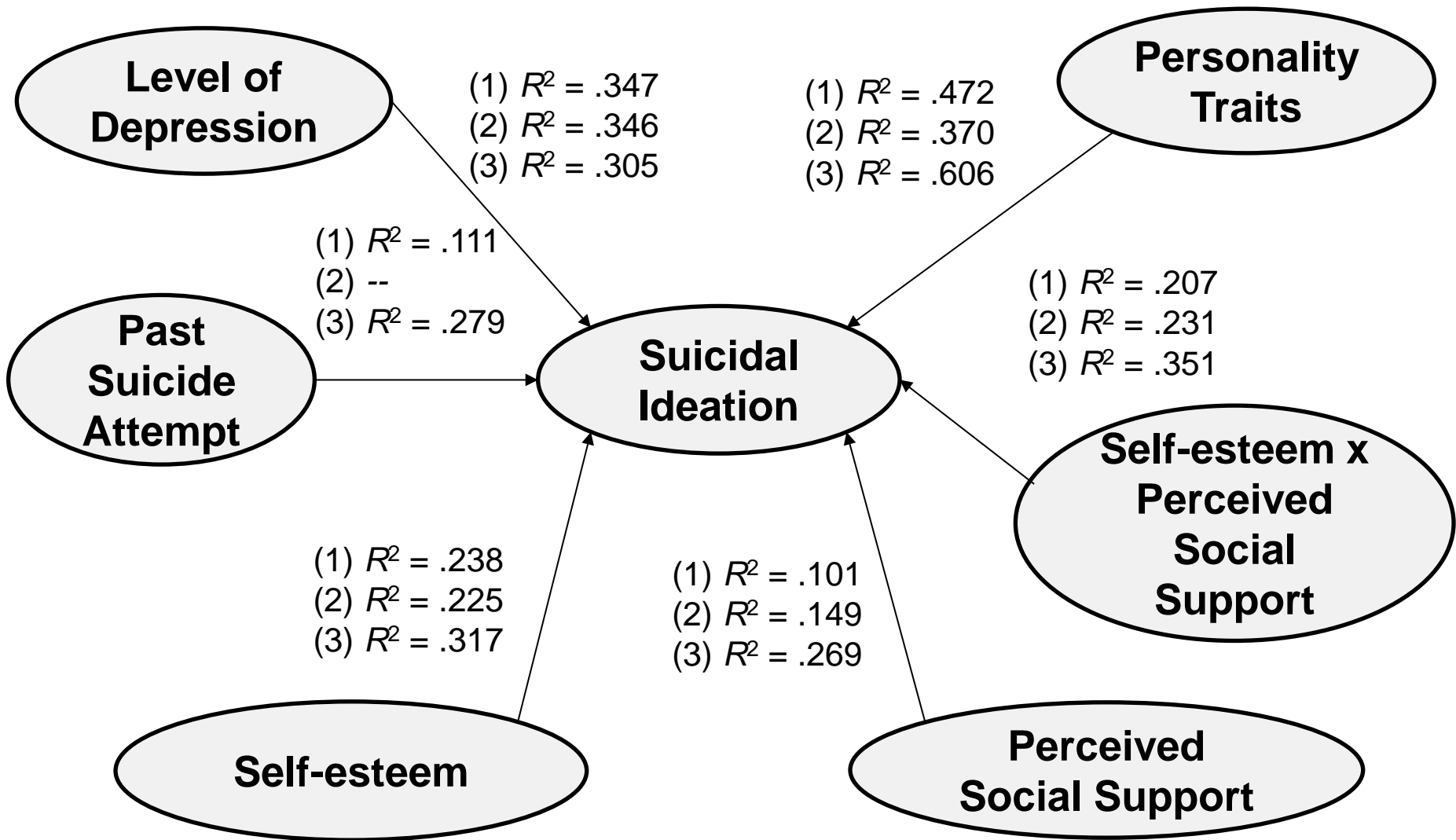
Data Analysis Strategy and Main Results (cont.)

- **Step 3.** To find out how much does each risk factor (level of depression, past suicide attempt, (lack of perceived social support, low self-esteem, perceived social support-by-self-esteem interaction, and personality traits account for level of suicidal ideation alone.

How stable are obtained results across different samples?



- (1) Results obtained in the civil sample
- (2) Results obtained in the military sample
- (3) Results obtained in the psychiatric inpatient sample



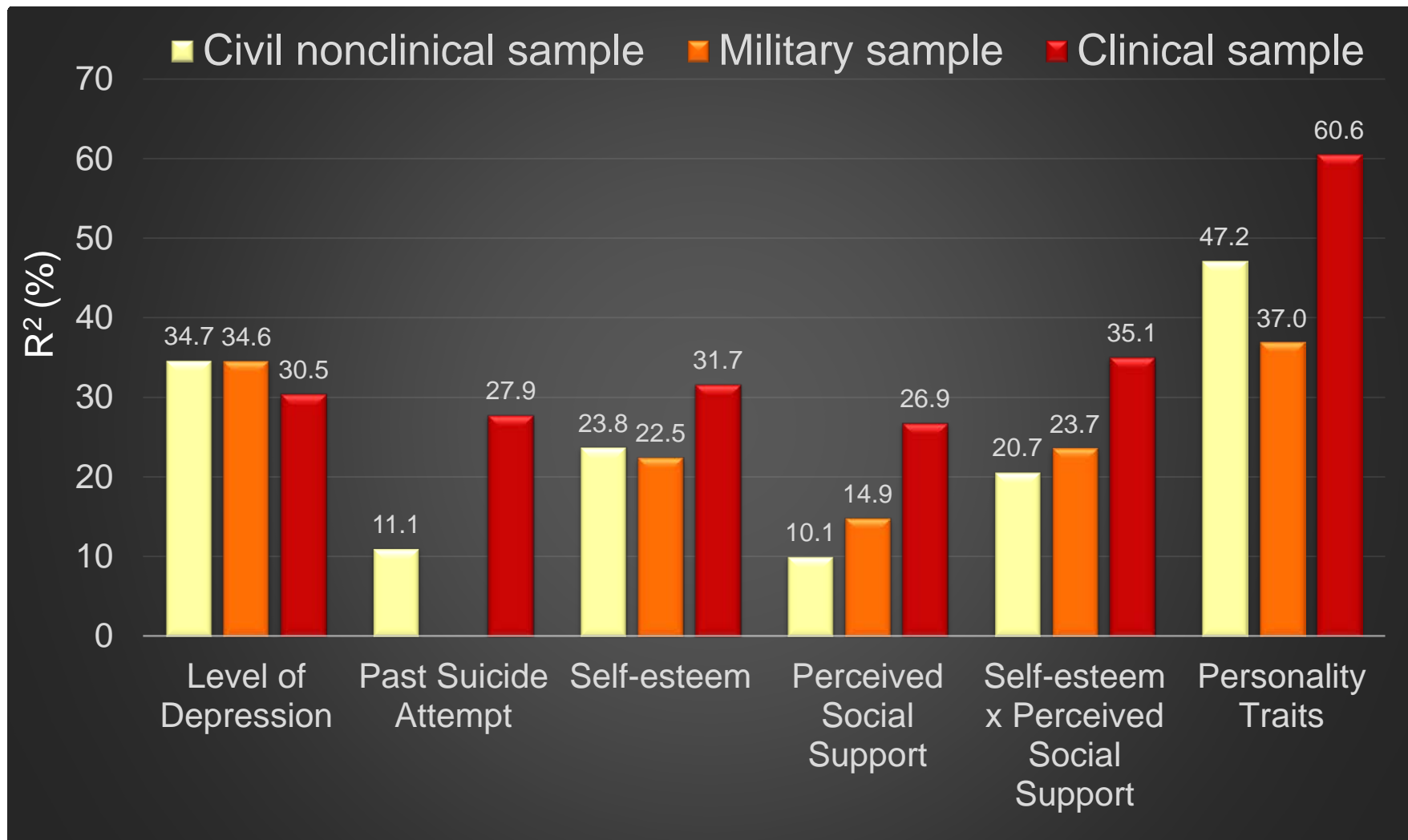
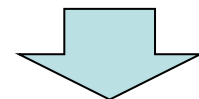
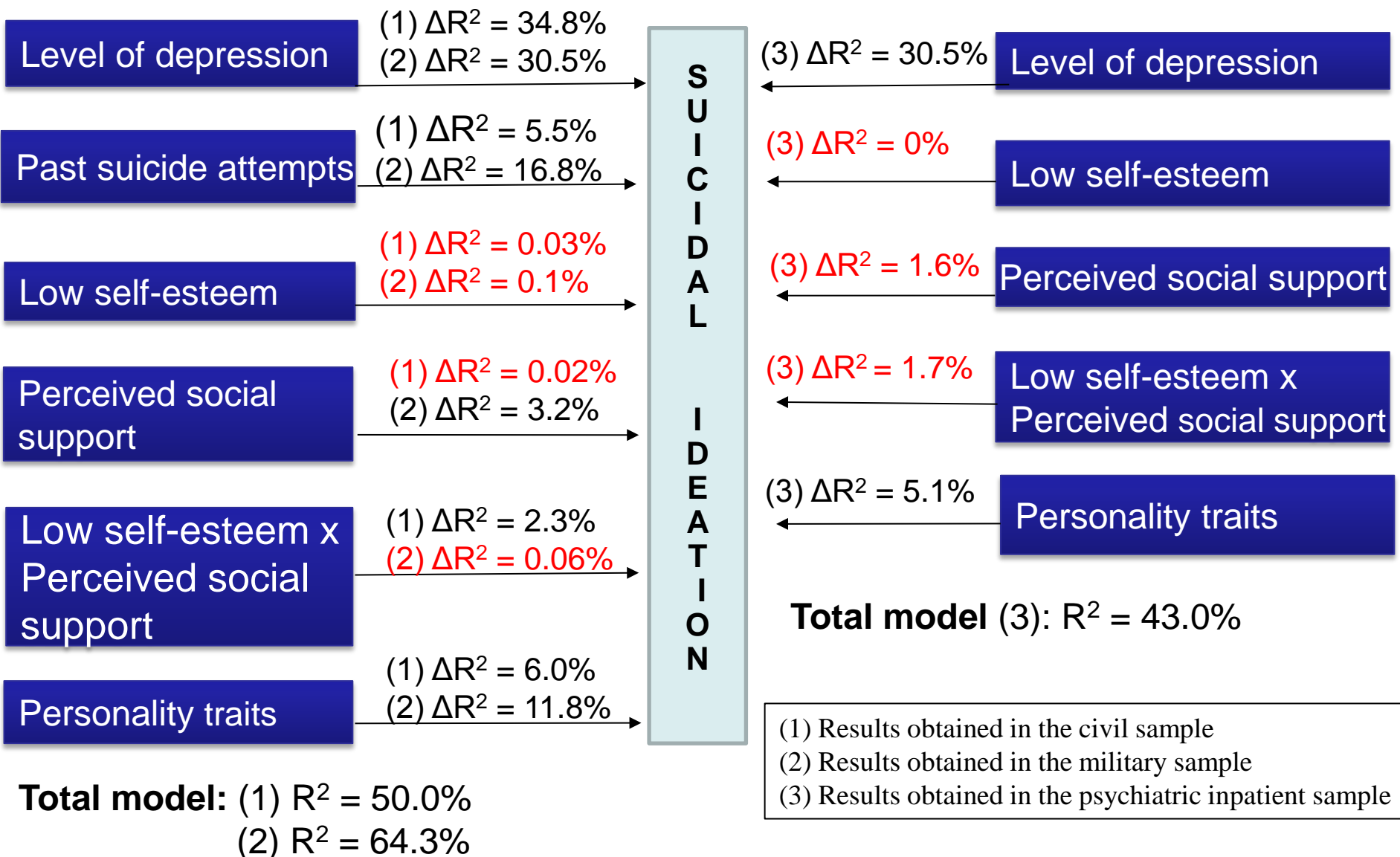


Fig. 1. Results of Series of Simple Linear Regressions for Suicidal Ideation (Effect size indices)

Data Analysis Strategy and Main Results (cont.)

- **Step 4.** To find out are pathological personality traits able to account for level of suicidal ideation after controlling for other risk factors?
 - » If there is an incremental effect of pathological personality traits on current suicidal intent, is there difference in effect size across civil, military and psychiatric inpatient sample?





(1) Results obtained in the civil sample
 (2) Results obtained in the military sample
 (3) Results obtained in the psychiatric inpatient sample

Total model: (1) $R^2 = 50.0\%$
 (2) $R^2 = 64.3\%$

Conclusions

- Results suggest, that some individuals indeed may be long-term vulnerable to suicidal ideation and to suicide risk, due to their personality-based enduring and stable characteristics.
 - » *Depressiveness* and *self-harm* turned to be the main personality traits, which are predictive for the severity of current suicidal ideation over and above other well known risk factors. This findings were stable across all three sample.
 - Some other traits are predictive for suicidal ideation within particular population (civil, militar or psychiatric).

Implication

- Knowing such latent personality-based factors would be useful in determining targets for preventive efforts and for proper psychological assessment especially in the military settings.
 - » Findings of this study may assist in early screening for persons at higher risk of suicide and planning prevention programs in the army and similar settings.

Limitations of the present study

- Relatively small sample size from a clinical and military settings.
- Very uneven distribution of gender in the compared samples.
- Conclusions are limited to the prediction of the severity of current suicidal ideation only.
- Used instrument were not designed primarily to directly tap the particular risk factors of suicidal behaviour.

5. no 322. jautājumiem

25%

Es varu atrast pareizo pieeju
gandrīz jebkuram cilvēkam, lai
panāktu no viņa to, kas man ir
vajadzīgs.

Nepiekrītu



Piekrītu

Fig.2. A sample of an item of the computerised version of LCPI.

Thank you for your attention!