

Mapping Adolescents' Psychological Inflexibility: A Network Analysis Approach

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INTRODUCTION

Within the **Acceptance and Commitment Therapy (ACT)** framework, Psychological Inflexibility (PI) is defined as **rigid attempts to control, alter or minimize unpleasant internal experiences at the expense of pursuing chosen values**¹, and it has been found to function as a **fundamental, empirically supported, transdiagnostic driver of suffering**^{1,2}.

While PI is conceptualized as a **dynamic system of six interrelated processes** (Fig. 1), research with adolescents e.g.,^{3,4,5} rarely examines all six components simultaneously and frequently relies on analytical approaches that overlook the critical, direct interdependencies between them.

Consequently, we lack insight into the primary drivers of adolescents' PI that could potentially trigger therapeutic cascading effects.

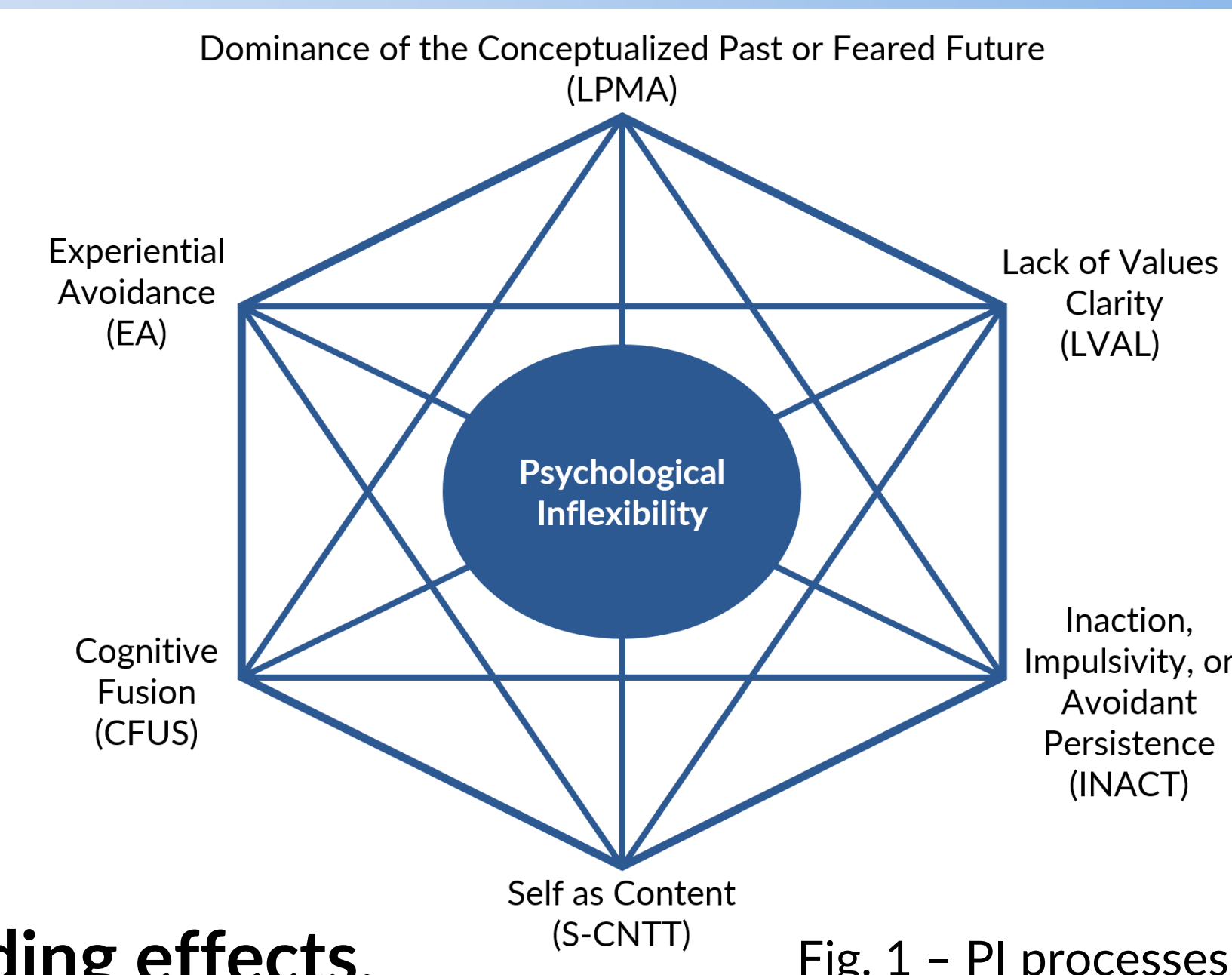


Fig. 1 - PI processes

AIM

This study used a **Network Analysis (NA)** approach to map the **dynamic interdependencies among all six PI processes** in adolescents and identify the most central PI processes.

METHOD

Participants:

Community sample of 573 adolescents aged 14 to 18 years old (M_{age}=15.65, SD=1.21; 57.4% females)

Measure assessing PI processes:

Portuguese adolescents' version of the Multidimensional Psychological Flexibility Inventory - 24⁶ (.60 for self as content < Cronbach's α < .87 for experiential avoidance)

Network Analysis:

Estimation: Gaussian Graphical Model (GGM) via EBICglasso (tuning parameter = 0.5);

Data Preparation: Nonparanormal transformation to account for non-normality;

Centrality: Standardized strength, closeness, and expected influence;

Stability: Bootstrapping analysis (1000 samples) confirmed stability of edges and centrality indices, except for betweenness.

RESULTS

Fig. 2 - Network of PI processes

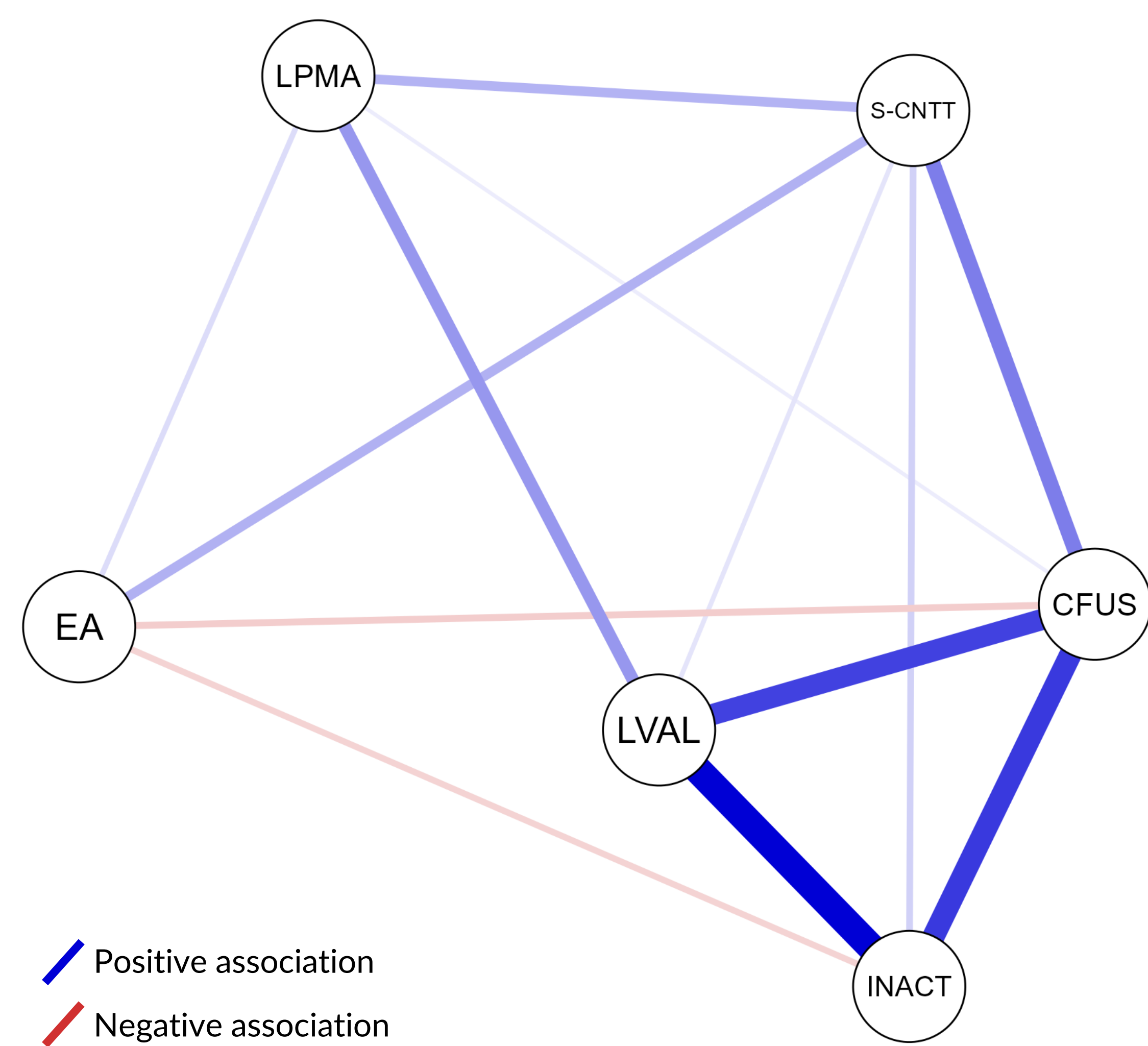
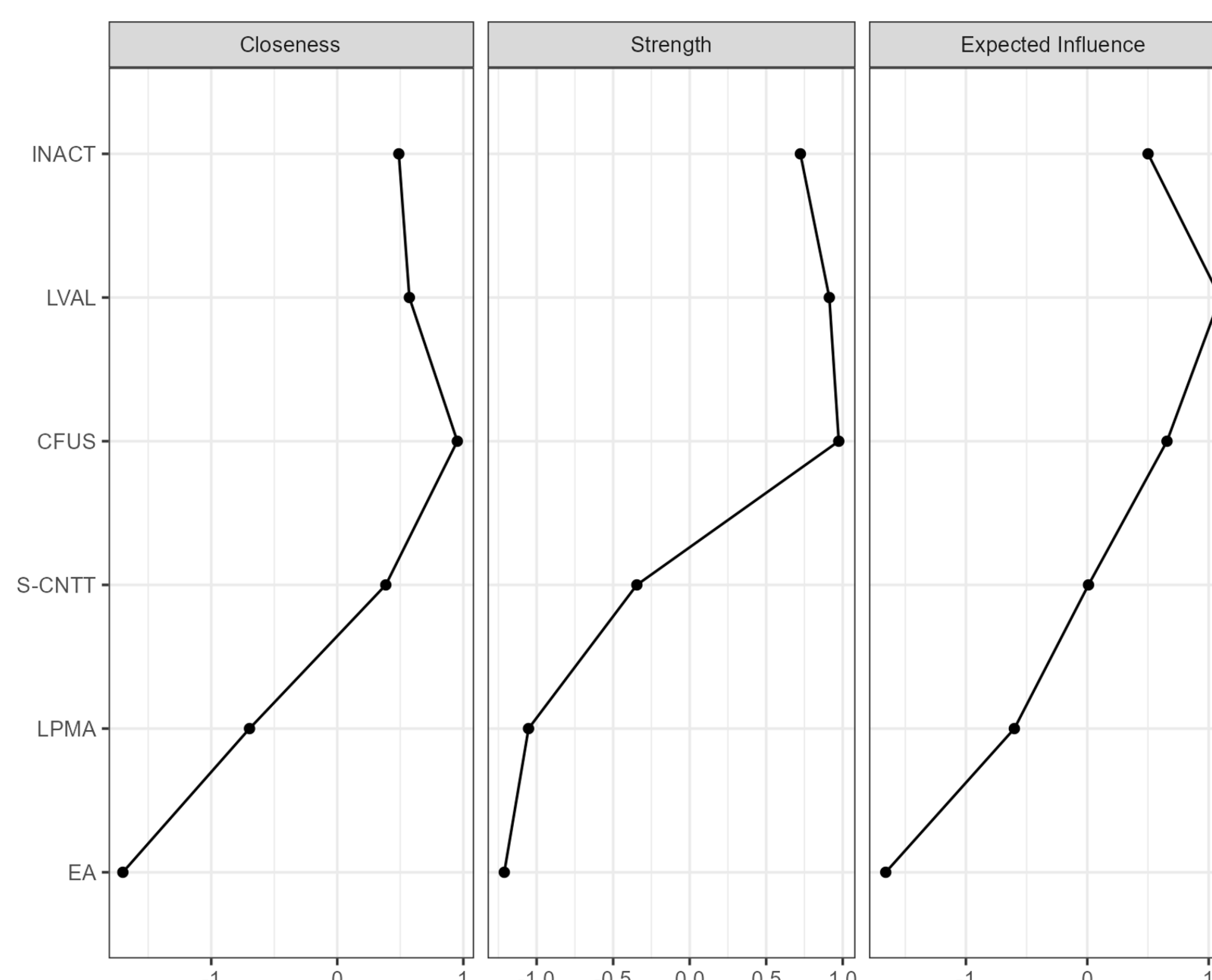


Fig. 3 - Centrality Indices for the PI processes Network



Extensive connections emerged in the network (13 out of 15 non-zero edges).

The **strongest network associations** revealed a **reinforcing feedback loop** between **cognitive fusion, lack of values clarity and inaction, impulsivity, or avoidant persistence**.

These three processes were also the most central in the network across all indices.

Experiential avoidance showed small negative associations with cognitive fusion and inaction, impulsivity, or avoidant persistence and was the least central process in the network.

DISCUSSION

This work offers a preliminary roadmap of how PI processes associate in adolescents, which can potentially inform and refine ACT-based interventions.

Adolescents' PI seems to be actively driven by a **reinforcing loop between cognitive fusion, lack of values clarity, and inaction, impulsivity, or avoidant persistence**. Targeting the entanglement with internal experiences while clarifying adolescents' meaningful life directions and reducing rule governed behavior may **destabilize the PI system more effectively and facilitate meaningful therapeutic change**.

The **low centrality and small negative associations of experiential avoidance** with other PI processes may reflect its **contextually dependent adaptive function and/or short-term relief** that may momentarily reduce entanglement and facilitate helpful action. Thus, these findings **caution against rigidly categorizing all experiential avoidance as inherently maladaptive**.

