Mathematical model of psychotherapy BIOMATH 2024

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We consider a mathematical model of psychotherapy where the proposed continuous dynamical system describes the relationship between a client and a therapist basing on the dyadic interactions modeling. We also introduce the influence of the external environment of the client's state and we assume that this influence is negative. Additionally, the client can have another problems related to her/his preferable state which could not be unique, reflecting possible instability of the client's state.

We analyse basic properties of the model and on the basis of it we study various scenarios of final result of psychotherapy.

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