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Citation

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Review question

The aim of this review is to provide a narrative synthesis of existing studies on the mediators of psychotherapy of externalizing problems in adolescents (12 – 19 years), by addressing two main research questions: 1. What kind of mediators and theories of change in psychotherapy with adolescents experiencing externalizing problems have been investigated? and 2. Are there any treatment-specific mediators? Furthermore, this review will try to critically evaluate the methodological approach of the existing research on mediators in psychotherapy with this population.

Searches

We searched PubMed and PsycINFO electronic bibliographic databases. The search strategy included the terms related to or describing mediators, psycho-social intervention and/or psychotherapeutic intervention or treatment and target age population (12 – 19 years). Only quantitative studies written in English are to be considered, and there will be no restrictions concerning the year of publishing.

Types of study to be included

Only quantitative studies will be eligible with no restrictions concerning the study design: all the prospective, longitudinal, observational, and randomized-controlled research, which examine mediators of change in psychotherapy of adolescents with externalizing problems, will be included. The studies' outcome measures need to be externalizing problems or disorders in adolescents and young adults.

Condition or domain being studied

Externalizing problems in adolescents (12 – 19 years), which include both individual symptoms (e.g., aggression and impulsivity) and externalizing disorders (oppositional defiant disorder, conduct disorder, antisocial personality disorder).

Participants/population

Adolescents (mean age between 12 and 19 years old) in treatment for externalizing problems.

Exclusion: Children under 12 years and adults over 19 years of age.

Intervention(s), exposure(s)

Interventions should aim at preventing, ameliorating and/or treating externalizing problems of adolescents and young adults by using psycho-social mechanisms and strategies in any setting (i.e., individual, family, group, inpatients, eMental health (i.e., internet- and computer-based interventions), etc.). In other words, these interventions should not be primarily pharmaceutical, biological, or physical. Examples include all branches or types of Psychodynamic therapy, Integrative therapy, Systematic therapies, Behavioral, Cognitive-based, or Cognitive-behavioral therapies, Interpersonal therapies, Humanistic therapies, Psychoeducation, Third-wave therapies (such as ACT (Acceptance and commitment therapy), CFT (Compassion-focused therapy), EMDR (eye movement desensitization and reprocessing)), etc.

Comparator(s)/control

Not applicable as we are investigating mediators of treatment, and we do not compare one treatment with another.

Context

Not applicable.

Main outcome(s)

The outcome of the review is an overview of the mediators and mechanisms of change that have been investigated and which of them turned out to explain change processes significantly.

Measures of effect

This review focuses on the measures of mediators' significance.

Additional outcome(s)

Not applicable

Measures of effect

Not applicable

Data extraction (selection and coding)

Both study selection and data extraction will be carried out by a group of 20 experienced researchers divided into ten pairs who will independently assess the eligibility of studies, retrieved using the search strategy, in two phases. The first phase of screening refers to the selection of the titles and/or abstracts of studies that potentially meet the inclusion criteria outlined above, while in the second phase, each review pair will evaluate the full text of these potentially eligible studies.

Any disagreement between the two members of a pair over the eligibility of particular studies will be resolved through discussion with a third researcher-reviewer. Finally, a fourth, independent reviewer from the group will do an additional quality control check by assessing the eligibility of every 5th excluded study. If some disagreement occurs at this stage, it will be solved through discussion with the original review pair.

A standardized form will be used to extract data for the review. The extracted information will include: 1. study setting; 2. research population (participants demographics and baseline characteristics); 3. details of the intervention and control conditions; 4. study methodology; 5. outcomes and times of measurement; 6. assessed mediators and measures used; 7. type of mediation analysis; 8. significance of mediators, and 9. Information needed for the assessment of the risk of bias. Two review authors will extract data independently. Discrepancies will be identified and resolved through discussion (with a third author where necessary).

Risk of bias (quality) assessment

Since no standard form for evaluating mediation studies has been established, methods of testing mediation effects will be evaluated according to the general criteria for identifying mediators of psycho-social interventions in research (e.g., in Kazdin, 2007 and Lemmens, 2016). When it comes to the overall study quality, we will consider relevant elements of the formal risk of bias assessment (Cochrane risk of bias tool): i.e., sample representativeness, confounding variables, intervention (exposure) measurement, blinding of outcome assessment, incomplete outcome data, and selective outcome reporting.

Strategy for data synthesis

We will provide a narrative synthesis of the findings from the included studies, with a focus on the categories of mediators that have so far been tested, types of psycho-social interventions that have been included in eligible studies, and externalizing problems or disorders that have been treated.

Analysis of subgroups or subsets

If possible treatment-specific mediators will be identified and discussed.

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Type and method of review

Narrative synthesis, Systematic review

Anticipated or actual start date

01 October 2020

Anticipated completion date

26 February 2021

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State the funder, grant or award number and the date of award

CA16102

Conflicts of interest

Language

English

Country

Cyprus, Finland, Germany, Italy, Lithuania, Malta, Norway, Portugal, Serbia, Slovenia, Spain, Switzerland

Stage of review

Review Ongoing

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

MeSH headings have not been applied to this record

Date of registration in PROSPERO

18 February 2021

Date of first submission

18 January 2021

Details of any existing review of the same topic by the same authors

There is no earlier version of this review

Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	No
Formal screening of search results against eligibility criteria	No	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions

18 February 2021

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