The association between working alliance and treatment outcomes in the management of anxiety and depression in young persons aged 14-24 years: a synthesis of a scoping review and stakeholders' consultations

Jermaine M. Dambi (jermaine.dambi@friendshipbench.io)
University of Zimbabwe
Rhulani Chauke
Friendship Bench
Malinda Kaiyo-Utete
University of Zimbabwe
Rhiana Mills
King's College London
Ruvimbo Shumba
Friendship Bench
Sidney Muchemwa
University of Zimbabwe
Rosemary Musesengwa
University of Oxford
Ruth Verhey
Friendship Bench
Melanie Abas
King's College London
Colette R Hirsch
King's College London
Dixon Chibanda
University of Zimbabwe

Article

Keywords: Active ingredients, anxiety, depression, scoping review, stakeholder consultations, working alliance, young people

Posted Date: May 2nd, 2022

DOI: https://doi.org/10.21203/rs.3.rs-1574622/v1

Version of Record: A version of this preprint was published at npj Mental Health Research on January 30th, 2023. See the published version at https://doi.org/10.1038/s44184-023-00021-2.

Abstract

Background: A working alliance (WA) is a multidimensional construct signifying a collaborative relationship between a client and therapist. Systematic reviews of therapies to treat depression and anxiety, almost exclusively in adults, demonstrate that WA is essential across psychotherapies. A functional WA predicts greater uptake of interventions, client engagement, adherence to treatment, and symptoms reduction. Conversely, ruptured and/or low WA reduces the effectiveness of known-efficacious treatments. However, there are critical gaps in our understanding of the importance of WA in low-intensity therapies for young people with depression and anxiety. We sought to understand the following research questions in young persons aged 14-24 years:

1) the role of working alliance in the ongoing management of anxiety and depression?

2) how do the different working alliance elements influence treatment outcomes?

3) the client/therapist characteristics deemed essential in forming and maintaining a working alliance?

Methods: We conducted a scoping review to summarise and synthesise the findings collaboratively with young people with lived experiences of anxiety/depression. Then, we conducted key stakeholders' consultations with clinicians [lay health counsellors (n=6), clinical psychologists (n=2), occupational therapists (n=2), and psychiatrists (n=2)], and young people with lived experiences (n=20). Finally, we convened workshops to triangulate/synthesise findings from the scoping review and stakeholder consultations to develop the mechanistic framework, hypothesising pathways by which WA may influence treatment outcomes.

Results: We analysed 27 studies; most were done in high-income countries. Cognitive behavioural therapy was the most common treatment modality (16/27). Most therapy sessions were conducted one-to-one (18/27), with only two (2/27) studies utilising digital therapy platforms. A functional working alliance was recognised as an active ingredient in psychotherapies targeting anxiety and depression in young persons aged 14-24 years. Previous research has theorised that improvements in the working alliance are associated with improvements in relationships, self-esteem, positive coping strategies, optimism, adherence to treatments, and emotional regulation. During the stakeholders' consultations, young people with lived experience expressed that; a favourable therapy environment, regular meetings, collaborative goal setting and confidentiality were vital in forming and maintaining a functional WA. For a clinician, ssetting boundaries, maintaining confidentiality, excellent communication skills, and being non-judgmental and empathic were considered important for facilitating a functional WA.

Conclusions: Although more research is needed to understand WA's influence in managing anxiety and depression in young people, we recommend routine evaluation of WA. Furthermore, there is an urgent need to identify strategies that promote WA in psychotherapies to optimise the treatment of anxiety and depression in young people.

Background

A working/therapeutic alliance is a multidimensional construct signifying a collaborative relationship between a client and therapist [1–3]. A functional Working Alliance (WA) hinges on shared confidence that therapy will be helpful. Also, there is concurrence between the client and therapist over the assignment of therapy tasks; the relationship includes mutual trust and reciprocal liking [1, 4]. Collectively, a functional WA has three salient elements, i.e., the creation of a bond between the patient and therapist, agreement in the setting of therapy goals to guide scheduled tasks necessary for the attainment of therapy objectives [1–3]. Systematic reviews of therapies to treat depression and anxiety, almost exclusively done in adults, demonstrate that WA is essential across psychotherapies [1–7]. A functional WA, as perceived by both client and therapist, predicts greater uptake of interventions, client engagement, adherence to treatment, and symptoms reduction [1, 5, 7]. Conversely, ruptured and/or low WA reduces the effectiveness of known-efficacious treatments [2, 4]. Of the available reviews on young people (YP), Sun et al. (2019), looking at cognitive behavioural therapy (CBT) for internalising disorders in YP, found that goal setting, parental involvement, relapse prevention, and booster sessions explained only 14% of the variance predicting treatment outcomes [6]. This implies that other factors, potentially including WA, explain treatment effects. Another meta-analysis in youth demonstrated that a strong WA is predictive of positive treatment outcomes in family-involved treatment for youth problems [4]. However, there are critical gaps in our understanding of the importance of WA in individual psychotherapies and low-intensity therapies [e.g., behavioural activation (BA), psychoeducation, and problem-solving therapy] for YP with depression and anxiety. Also, there is inconclusive evidence regarding the putative mechanism through which WA optimises treatment outcomes [1–7]. Consequently, Welcome Trust has launched Active Ingredients commissions to understand elements essential for the prevention, ongoing treatment and management, and prevention of relapse of anxiety and depression in youth aged 14–24 years [8].

The Active Ingredients commission seeks to understand the putative mechanisms by which treatments bring about clinical changes, including understanding the context and possible harms [8]. For instance, some teams have demonstrated the usefulness of interventions such as self-compassion, physical activity, emotional regulation and problem-solving therapy (PST) in managing anxiety and depression in youth [9, 10]. Regardless of intervention effectiveness, potential active ingredients such as WA are essential for optimal outcomes [1–7]. For instance, despite PST being effective in managing depression in youth [11], a poor WA would invariably lead to poor clinical outcomes [1–7]. Consequently, we set out to understand the effect of WA on anxiety and depression outcomes in youth aged 14–24 years. Since most mental health problems (75%) initially occur in youth [12], it is important that WA is understood in order to maximise the effectiveness of prevention interventions, treatment and ongoing management of anxiety and depression in youth [11]. Understanding the role of WA could also refine the implementation of known effective treatments. More importantly, there have not been previous attempts to critically appraise evidence on WA in youth with the key input from youth with lived experience of anxiety and/or depression. Working collaboratively with young people experiencing anxiety and depression, this review set out to answer the following research questions:

1. Does better WA improve clinical outcomes of interventions for YP (14–24 years) with anxiety and depression?

2a. What different WA elements (bond, goal, and task) influence treatment outcomes?

2b. what elements are considered most important by YP with depression and anxiety and therapists?

3a. What therapist and YP patient characteristics (e.g., age, gender) influence the therapeutic alliance-outcome relationship?

4. Does culture influence WA and WA-outcome relationships?

Methodology

First, we conducted a scoping review to summarise and synthesise the findings collaboratively with YP. After that, we conducted key stakeholders' consultations with clinicians [lay health counsellors (n = 6), psychologists (n = 2), occupational therapists (n = 2), and psychiatrists (n = 2)], and YP with lived experiences (n = 20). After that, we convened a workshop to triangulate/synthesise findings from the scoping review and stakeholder consultations. The output of the first workshop was the first iteration of the mechanistic framework hypothesising pathways by which WA influences treatment outcomes. After that, YAP representatives independently consulted with the community advisory group (CAG), constituting YP with lived experiences, the appropriateness of the hypothesised model. Finally, we convened a second workshop to finalise the insight analysis collaboratively with YP.

Scoping review

Introduction

A scoping review was undertaken to critically appraise the evidence of the impact of WA on depression and anxiety in young people aged 14–24 years. The scoping review was done per the PRISMA-ScR checklist- See Additional File 1 [13].

Eligibility criteria

The following criterion was applied in selecting articles:

Study designs/interventions

We included all quantitative designs. Systematic reviews, editorials, case studies and study protocols were similarly excluded.

Participants/settings

We analysed all studies reporting on working alliance in young persons with anxiety and/or depression aged 14–24 years across all settings.

Language

We only analysed articles published in the English language; our preliminary searches did not yield/reveal articles published in languages other than English.

Information sources

Peer-reviewed articles were searched/retrieved from these electronic databases; PubMed, CINAHL, Scopus, PsychINFO and Africa-Wide information. Databases were searched from inception through August 2021. Where only an abstract was available online, an attempt to contact the lead author was made, requesting the full article to ensure literature saturation. The article was excluded from the review if there was no response in two weeks following three email reminders. We also reviewed grey literature by using the Google Scholar search engine to search potential databases such as university databases and conference proceedings, among others, for articles. For completeness, we also performed both backwards and forward searches of the reference lists of identified articles and databases, respectively.

Search strategy

As an illustration, articles in CINAHL were searched using the following Boolean logic operators; ("working alliance" OR "therapeutic alliance" OR "collaborative alliance" AND "anxiety OR depression OR anxiety/depression OR (anxiety AND depression)" AND "young people OR young adults OR teenagers OR Adolescent*".

Selection of sources of evidence

First, three early career researchers and three early career researchers and three young people with lived experience of anxiety and/or depression piloted the data collection tool by extracting data from five (5) articles. Two researchers then independently searched articles using a pre-defined search strategy (see above). The principal author (PI) then imported the searches into Mendeley Software and removed duplicates. Afterwards, another set of independent researchers screened the articles by title and abstract. The PI then performed backwards and forward citation searches to identify other potential articles. More

senior researchers reviewed the list of identified articles to check for completeness of the searches. Once searches were finalised, two researchers retrieved the full articles and extracted the data.

Data charting process

Once searches were finalised, two researchers retrieved the full articles and extracted the data. Disagreements during data extraction were resolved through consensus, and more senior researchers made the final decision.

Data items

The data extraction sheet included information/variables such as author, year, age group, primary and secondary outcome measures, and critical findings. WA, anxiety, and depression were the primary outcomes for this scoping review. Secondary outcomes included variables, such as changes in relationships, and coping mechanisms, amongst other relevant outcomes.

Synthesis of results

Results were qualitatively synthesised per study objectives. Study outcomes were summarised per study design.

Involvement of Young Persons (YP):

We worked collaboratively with young people with lived experience of anxiety and/or depression, and their specific roles included:

I. Project design - e.g., developing a unified definition of WA, identification/mapping of key stakeholders.
II. Literature searches – YP representatives previously trained and involved in systematic reviews assisted with the pre-application screening of available reviews and assisted with article screening for the actual scoping review.
III. Data collection – e.g., co-facilitating stakeholders' interviews.
IV. Analysis and synthesis – e.g., reviewing themes emerging from stakeholders' interviews.
V. Dissemination – e.g., co-developing output animation

Results

Scoping review

Initially, 274 articles were identified by searching academic databases and grey literature. After filtering duplicates and screening by title and abstract, 70 full articles were retrieved. Further screening was applied, and 27 articles were included in the qualitative synthesis – See Fig. 1.

Study selection

Study characteristics

Most studies were done in HICs (26/27), mainly in the USA (12/27). The DSM was the most used diagnostic tool (10/27). Cognitive behavioural therapy (CBT) was the most commonly applied treatment modality (16/27), and most sessions were done individually (18/27) as opposed to in a group format (5/27). Only two (2) studies utilised digital therapy platforms, with the remainder being in-person therapies (25/27).

Working alliance measurement and outcomes

The working alliance inventory was the most applied outcome measure (12/27). Working alliance was mainly measured at the beginning (14/27) or the beginning and end of therapy (17/27). Most assessments were completed by clients (15/27), with therapists' ratings only recorded in two studies. Table 2 below outlines the assessment timing, assessor, key findings, and overall synthesis per study.

Table 2
Working alliance outcomes

Author (Year)	Outcome Measure(s)	TA assessment timing			TA assessor			Main findings	Main findings 2	Main findings 3
		Early	Mid	Late	Client	Therapist	Observer			
Feeley et al (1999) [14]	Penn Helping Alliance rating scalePHAS	Yes		Yes			Yes	Measures of in-session therapist behaviour and therapist-patient interactions were correlated with prior and subsequent symptom change	"concrete" subset of theory-specified therapist actions, measured early in treatment, predicted subsequent change in depression	The therapeutic alliance was predicted by prior symptom change in 1 of the 2 later assessments, but only at a trend level
Barber et al (2000) [15]	CALPAS	Yes	Yes	Yes	Yes			Greater WA associated with greater changes in depression scores	greater decrease in depressive symptoms from intake to the time alliance is assessed is associated with higher alliance level, albeit not very early in treatment	
Schwartz et al (2003) [16]	WAI-SR	Yes		Yes	Yes			early alliance significantly predicted subsequent improvement in depressive symptoms after controlling for prior improvement and 8 prognostically relevant patient characteristics.	neither early level nor change in symptoms predicted the subsequent level or course of the alliance.	Patients receiving combination treatment reported stronge alliances with their psychotherapist than patients receiving CBASF alone
McLeod & Weisz (2005) [17]	TASC	Yes		Yes	Yes		Yes	Child–therapist alliance during treatment predicted reduced anxiety symptoms at the end of treatment.	Parent–therapist alliance during treatment predicted reduced internalising, anxiety, and depression symptoms at the end of treatment.	
Constantino et al (2010) [18]	WAI				Yes	Yes		Increased alliance associate with decreased depression		
Johansson et al. (2011) [19]	i) WAI ii) HUS	yes	yes	yes	yes	yes		patient ratings, but not the therapist rating of alliance mediated the association between global expectancy and clinician-rated outcome	global optimism was associated with patient-rated alliance after first session; the effects waned off with subsequent sessions	

Note: TA – Therapeutic Alliance, PHAS - Penn Helping Alliance rating scale, CALPAS - California Psychotherapy Alliance Scale, WAI - Working Alliance Invento Help and Understanding Scale, CBASP - Cognitive–Behavioral Analysis System of Psychotherapy, TASC - Therapeutic Alliance Scale for Children, VTAS - Van Working Alliance Inventory–Short Observer-Rated version, HAQ-II - Helping Alliance Questionnaire 2, WAI-S - Working Alliance Inventory short version, WAI-12 - Report, SAI - Session Alliance Inventory, ETAS - Edmonton Therapeutic Alliance Scale, Helping Alliance Questionnaire (HAQ), CBT - Cognitive Behavioral Thera Penn State Worry Questionnaire, LSAS-SR - Liebowitz Social Anxiety Scale-Self Report, ETAS - Edmonton Therapeutic Alliance Scale.

Author (Year)	Outcome Measure(s)	TA assessment timing			TA assessor			Main findings	Main findings 2	Main findings 3
Andersson et al (2012) [24]	WAI				Yes			Subsample I - Both groups improved on the BDI with within group effect sizes being d = 2.18 and d = 1.39 for the email therapy and guided self-help groups respectively.	Subsample II - the treatment group improved, and for the group who completed the short WAI the within group effect size on the PSWQ was d = 1.17	Subsample III - the treatment group improved with a within-group effect size of d = 0.97 on the LSAS-SR.
Strunk et al (2012) [20]	WAI	Yes	Yes	Yes			Yes	Both adherence to Behavioral Methods/Homework and the therapeutic alliance significantly predicted session-to-session symptom change.		

Author (Year)	Outcome Measure(s)	TA assessment timing			TA assessor			Main findings	Main findings 2	Main findings 3
		Early	Mid	Late	Client	Therapist	Observer			
Levin et al (2012) [21]	i) VTAS ii) WAI	Yes	Yes		Yes	Yes	Yes	adolescents who indicated greater anxiety and depressive symptoms were rated as having stronger early alliances by independent observers.	Strong corelation between WA assessments	
Stubbings et al (2013) [22]	WAI-S			Yes	Yes			No differences in WA ratings across groups (in-person vs. videoconferencing)		
Dinger et al (2013) [23]	CALPAS	Yes	Yes	Yes			Yes	Interpersonal problems related to communion predicted better alliances, but slower symptomatic improvement.	Lower interpersonal distress was associated with an increased likelihood to terminate treatment prematurely.	
Hersoug et al (2013) [25]	WAI	Yes	Yes	Yes	Yes			The alliance alone had a significant impact on long-term on quality of relationships, insight, problem solving and interpersonal problems.	Patient characteristic had stronger effect on long-term outcome, over and above the effect of alliance.	

Note: TA – Therapeutic Alliance, PHAS - Penn Helping Alliance rating scale, CALPAS - California Psychotherapy Alliance Scale, WAI - Working Alliance Invento Help and Understanding Scale, CBASP - Cognitive–Behavioral Analysis System of Psychotherapy, TASC - Therapeutic Alliance Scale for Children, VTAS - Van Working Alliance Inventory–Short Observer-Rated version, HAQ-II - Helping Alliance Questionnaire 2, WAI-S - Working Alliance Inventory short version, WAI-12 - Report, SAI - Session Alliance Inventory, ETAS - Edmonton Therapeutic Alliance Scale, Helping Alliance Questionnaire (HAQ), CBT - Cognitive Behavioral Thera Penn State Worry Questionnaire, LSAS-SR - Liebowitz Social Anxiety Scale-Self Report, ETAS - Edmonton Therapeutic Alliance Scale.

Author (Year)	Outcome Measure(s)	TA assessment timing			TA assessor			Main findings	Main findings 2	Main findings 3
Arnow et al (2013) [26]	WAI-S	Yes	Yes	Yes		Yes		A more positive early working alliance was associated with lower subsequent symptom ratings.	The interaction between alliance and psychotherapy type was significant, such that alliance quality was more strongly associated with symptom ratings among those in the CBASP.	
Lorenzo-Luace (2014) [27]	WAI–O	Yes					Yes	Greater WA associated with greater changes in depression scores	Participants with < 3 prior depression episodes had greater alliance-outcome corelation	
Chu et al. (2014) [28]	Therapeutic alliance scale for children/adolescents	yes	yes	Yes	Yes	yes		pre-treatment anxiety predicted initial alliance scores; depression symptoms and engagement coping style predicted postexposure slope; and no variables predicted preexposure growth.	Depressive symptoms predicted less linear growth and engagement coping predicted greater growth during exposure session	Therapist-reported alliance ratings may grow over the course of manual-based CBT, even during exposure-focused sessions
McEvoy et al (2014) [29]	HAQ-II	Yes		Yes	Yes			For those receiving individual therapy, those with a stronger early therapeutic alliance were more likely to complete treatment, whereas symptom severity and pre-treatment interpersonal problems were not significantly related to attrition	For those receiving group therapy, the strength of early therapeutic alliance was unrelated to attrition, whereas those with more severe depression and anxiety symptoms and more severe pre-treatment interpersonal problems were more likely to discontinue treatment.	For those receiving group therapy pre-existing interpersonal problems were associated with higher attrition and poorer outcome for treatment completers.
Author (Year)	**Outcome Measure(s)**	**TA assessment timing**			**TA assessor**			**Main findings**	**Main findings 2**	**Main findings 3**
		Early	Mid	Late	Self-report	Therapist	Observer			
Webb et al. (2014) [30]	WAI-S		Yes	Yes	Yes			Alliance and treatment outcome expectancies significantly predicted subsequent depressive symptom change	The alliance was significantly associated with prior symptom improvement.	

Note: TA – Therapeutic Alliance, PHAS - Penn Helping Alliance rating scale, CALPAS - California Psychotherapy Alliance Scale, WAI - Working Alliance Invento Help and Understanding Scale, CBASP - Cognitive–Behavioral Analysis System of Psychotherapy, TASC - Therapeutic Alliance Scale for Children, VTAS - Van Working Alliance Inventory–Short Observer-Rated version, HAQ-II - Helping Alliance Questionnaire 2, WAI-S - Working Alliance Inventory short version, WAI-12 - Report, SAI - Session Alliance Inventory, ETAS - Edmonton Therapeutic Alliance Scale, Helping Alliance Questionnaire (HAQ), CBT - Cognitive Behavioral Thera Penn State Worry Questionnaire, LSAS-SR - Liebowitz Social Anxiety Scale-Self Report, ETAS - Edmonton Therapeutic Alliance Scale.

Author (Year)	Outcome Measure(s)	TA assessment timing			TA assessor			Main findings	Main findings 2	Main findings 3
Tschschke et al (2015) [31]	HAQ	Yes		Yes			Yes	Different types of psychotherapy differ significantly in their degree of treatment adherence Therapeutic alliance was not directly corelated with treatment outcome	There was no statistically significant association between the type of psychotherapy and its outcome, or between the degree of therapists' treatment fidelity and the treatment outcome	There were significant associations between therapists' degree of professional experience, clients' initial psychological burden, and treatment response.
Heynen et al. (2017) [32]	WAI-12		Yes		Yes			High alliance was overall associated with decreased depression and anxiety	Increase in WA over time	
Lorenzo-Luaces et al (2017)	Helping Alliance Questionnaire HAQ			Yes	Yes			the alliance was a predictor of symptom change (d = 0.33).		
Rubel et al (2017) [34]	SR	Yes	Yes	Yes	Yes			better session-specific coping skills, better therapeutic alliance, and deeper emotional involvement were followed by next session symptom improvements.	Coping skills were especially helpful when combined with a better therapeutic relationship quality.	
Falkenström et al (2018) [33]	Session Alliance Inventory SAI	Yes		Yes	Yes			changes in the working alliance from session to session predicted reduction in psychological distress symptoms at the following session		
Khalifian et al (2019) [35]	WAI-S	Yes		Yes	Yes			improvement in the alliance was associated with improved post-treatment relationship functioning	patients who experienced an improvement in therapeutic bond and tasks reported less relationship difficulties at post-treatment	improvement in goals was significantly related to lower relationship difficulties at post-treatment for patients with higher relationship difficulties at pre treatment
Doorn et al (2019) [36]	Edmonton Therapeutic Alliance Scale			Yes	Yes			High alliance was overall associated with a change increased self-esteem and decreased depression		
Steinhert et al (2019) [37]	HAQ	Yes		Yes	Yes	Yes		For patients responding to treatment a significantly better helping alliance was found, corresponding to a large effect		

Note: TA – Therapeutic Alliance, PHAS - Penn Helping Alliance rating scale, CALPAS - California Psychotherapy Alliance Scale, WAI - Working Alliance Invento Help and Understanding Scale, CBASP - Cognitive–Behavioral Analysis System of Psychotherapy, TASC - Therapeutic Alliance Scale for Children, VTAS - Van Working Alliance Inventory–Short Observer-Rated version, HAQ-II - Helping Alliance Questionnaire 2, WAI-S - Working Alliance Inventory short version, WAI-12 - Report, SAI - Session Alliance Inventory, ETAS - Edmonton Therapeutic Alliance Scale, Helping Alliance Questionnaire (HAQ), CBT - Cognitive Behavioral Thera Penn State Worry Questionnaire, LSAS-SR - Liebowitz Social Anxiety Scale-Self Report, ETAS - Edmonton Therapeutic Alliance Scale.

Author (Year)	Outcome Measure(s)	TA assessment timing			TA assessor			Main findings	Main findings 2	Main findings 3
Author (Year)	Outcome Measure(s)	TA assessment timing			TA assessor			Main findings	Main findings 2	Main findings 3
		Early	Mid	Late	Self-report	Therapist	Observer			
Goldstein et al (2020) [38]	WAI-S	Yes		Yes	Yes			TA was superior for clients treated by students than qualified therapists	Both alliance and skill acquisition were moderately correlated with therapeutic gains in changes in depression scores	
Zelencich et al (2020) [39]	WAI-SR-O	Yes					Yes	Higher levels of therapist competence in reviewing homework were associated with greater improvement in anxiety and/or depression symptoms.		

Note: TA – Therapeutic Alliance, PHAS - Penn Helping Alliance rating scale, CALPAS - California Psychotherapy Alliance Scale, WAI - Working Alliance Invento Help and Understanding Scale, CBASP - Cognitive–Behavioral Analysis System of Psychotherapy, TASC - Therapeutic Alliance Scale for Children, VTAS - Van Working Alliance Inventory–Short Observer-Rated version, HAQ-II - Helping Alliance Questionnaire 2, WAI-S - Working Alliance Inventory short version, WAI-12 - Report, SAI - Session Alliance Inventory, ETAS - Edmonton Therapeutic Alliance Scale, Helping Alliance Questionnaire (HAQ), CBT - Cognitive Behavioral Thera Penn State Worry Questionnaire, LSAS-SR - Liebowitz Social Anxiety Scale-Self Report, ETAS - Edmonton Therapeutic Alliance Scale.

Logic model

The logic model (Fig. 2 above) identifies potential mechanisms whereby WA can optimise treatment outcomes for anxiety and depression in young people. The model focuses on the bond between a client and therapist, as well as them having a consensus on the goals of therapy and tasks is fundamental in developing a working alliance. For a WA to develop, certain conditions, including therapists' characteristics (e.g., communication skills, empathy), less severe baseline symptoms, initial symptoms change, and regular engagement between the therapist and client, are essential for developing an optimal WA. Once created, a WA can lead to increased adherence to treatment, improved self-esteem, increased treatment satisfaction, and improved relationships and coping skills. Ultimately, WA is associated with increased treatment effectiveness, thus mitigating the burden of anxiety and depression in young persons [5].

Stakeholders' consultations

Young persons experiencing anxiety and depression views

Consultations with young people indicated what was necessary for developing a WA. For developing the client-therapist bond, a conducive environment, regular engagements, and confidentiality were vital. Involvement in setting treatment goals was essential in forming a WA. One respondent said, *"…if two people can agree on the goals and outcomes of the entire session and what they will be working on, I think it will help develop a better connection and bond."* There was an agreement between the young people with lived experience that involvement in coming up with tasks influenced WA formation, which subsequently affected treatment outcomes. Young people value being involved in the planning of therapy tasks. Client characteristics such as willingness to engage in therapy, politeness, and being expressive were essential for developing a WA. A trustworthy therapist with good communication skills was considered ideal for developing a working alliance. Also, cultural background, inappropriate dressing, therapists' age, gender, and religion were potential barriers to developing working alliances. Patients much-preferred therapists of the same gender; one client said, "*…my counsellor was a female, and it helped me a lot."* Also, respondents preferred more experienced counsellors and therapists and those who were inclusive in their religious views (See Table 3).

Table 3
Young person's views

Domain	Subtheme	Verbatim quote (s)
Bond:	Conducive environment	*"Privacy is very important. What happened when we were having our counselling sessions there was not much space so I could hear what the other counsellor and client were discussing which is not good, I would not want that." (Respondent D3)*
	Regular engagements	*"I think keeping in touch and meeting face to face, even monthly." (Respondent V1)* *"Regular communication…" (Respondent V3)*
	Confidentiality	*"At first, when we started sessions when I saw counsellor talking to someone else, I felt insecure thinking that confidentiality is at stake, but after reading the consent forms, I had a better understanding and was assured of confidentiality." (Respondent R2)*
Goals	Decision on treatment goals	*"When we had those sessions, I was the one who made all the decisions. I was involved one hundred percent. Because after asking the questionnaire, the counsellor would then ask me, 'How do you think we can help each other.' That's when I will start setting the goals I need and what I expect to accomplish for my problem to be solved." (Respondent D3)*
	Involvement in treatment goals' influence on outcome	*"I think to a greater extent. What happens is before I start receiving counselling I will be having these crazy decisions about the problem I will be facing at that time, but when you have received counselling services you are actually able to make better decisions for yourself." (Respondent D3)* *"Okay firstly I can say, to a greater extent, if two people can agree on the goals and outcomes of the entire session and what they will be working on, I think it will help develop a better connection and bond." (Respondent D1)*
Tasks	Client involvement in tasks	*"Counsellor would give me support on the task that I suggested, not making the decisions for me. I was greatly involved." (Respondent R1)*
	Task's influence on treatment outcome	*"It is to a larger extent; I would do homework or research pertaining my problem then comeback with the feedback. We received the feedback from the homework together and came up with the solutions." (Respondent T1)*
	Task's influence in development of WA	*"…it's just to a greater extent because it gives the client the room to express, how they feel because they will have had time to think about it after the sessions so they can have better ways to express their feelings and develop that bond with the counsellor." (Respondent D1)*
Client characteristics necessary for the formation of a WA	Willingness	*"…client should be committed, time conscious because coming late for sessions would mean you won't access counselling services fully…" (Respondent R1)*
	Good manners	*"I think being polite, like we know you have issues but be polite, sometimes someone goes through something that they get angry, but if you speak in a way that the right people would be able to help you out." (Respondent C2)* *"First one should be responsible, have good manners, they should greet." (Respondent C3)*
	Expressive /able to open up	*"I think client should be a person who is able to share their problems with the counsellor..." (Respondent V2)* *"As a client you must be willing to participate in the counselling sessions you must not hold anything back for anything." (Respondent D3)*
Domain	**Subtheme**	**Verbatim quote (s)**
Therapist characteristics necessary for the formation of a WA	Trustworthiness	*"Therapist should be a trustworthy person..." (Respondent V2)* *"The therapist also has to be friendly, and what else, they have to be trustworthy..." (Respondent R2)*
	Communication skills	*"Therapist should have good communication skills..." (Respondent T1)* *"Speaking in a polite manner should greet, should do his duties." (Respondent C3)*
	Counselling skills	*"Therapist should be a trustworthy person, a good listener and reliable as well." (Participant V2)* *"The therapist has to be patient..." (Participant D2)*
Influence of culture	Cultural background	*"There could come a discussion about God; hmm, let's say the other one is Islamic and the Christian, so there may be disputes on that". (Respondent B1)* *"The therapist has to be diverse; he or she has to know what happens in other cultures to be able to create a working alliance with any client that he or she is talking to other than his own culture." (Respondent D2)*
	Dress code	*"Dressing and character affect working alliance negatively. Take for instance if the therapist is not wearing professional dressing it could be disruptive". (Respondent T1)*
	Communication patterns	*"Yah, I think if people are coming from different cultures, it can affect how they work together. Here I am talking about communication patterns, language… These can become major barriers to having that bond with my counsellor, and the counsellor with me as well." (Respondent D1)*
Influence of therapist's socio-demographics' on WA	Age	*"I think it affects because if someone is young like me, they can help me as they sometimes face what I am going through, however at the same time I feel there are other problems they can't help me with because of lack of experience as they are still young." (Respondent V3)*

Domain	Subtheme	Verbatim quote (s)
	Gender	*"…if the counsellor is a man, gender becomes a barrier." (Respondent V3)* *"…my counsellor was a female, and it helped me a lot." (Respondent C3)* *"Yes, it can be changed; maybe the client may choose the gender that they feel they are comfortable with during counselling sessions." (Respondent R2)*
	Religion	*"Religion can be a barrier as we come from different religions, for example, if I am Muslim, yet they are Christian…" (Respondent V3)* *"Uhm, the religion, I do not think it affects anything." (Respondent D3)*

Clinicians' views on working alliance

The conceptualisation of working/therapeutic alliance aligned with the working definition; however, some lay counsellors were unsure of the term's meaning. After further probing using descriptives and examples, the lay counsellors could relate to the concept. Most clinicians view personal connection with a client as an essential aspect of improving treatment outcomes that facilitates understanding between the client and clinician, builds trust, facilitates empathy and enables the application of good listening skills. Setting boundaries, maintaining confidentiality, and being non-judgmental and empathetic were considered pre-requisite clinician attributes for forming a WA. Also, goal setting was deemed integral to successful therapy. Furthermore, the importance of participants' motivation levels, mutual agreement on goals, and the number of times the goals were set and reviewed are crucial for forming and maintaining a WA (See Table 4).

Table 4
Clinician's views on WA

Domain	Subtheme	Verbatim quotes
Definition of WA	Cooperative working relationship between client and clinician	*"Relationship that they (client and clinician) have, that is directed to achieve certain goals"* (Lay counsellor C1) *"An agreement between the client and a clinician/counsellor with regards to confidence and setting of goals in the session"* (Lay counsellor B1)
	An unfamiliar term	*"I have not yet heard about the term Working Alliance"* (Lay counsellor T1) *"It refers to mental health."* (Lay counsellor T2) *"Maybe you can just give me a definition of the context you are meaning by the term working alliance so that I can answer accordingly."* (Lay counsellor R2)
Importance of WA	Facilitates understanding between the client and clinician	*"So, if a client and a therapist have a relationship, if there is trust and if there is understanding during the sessions or helps with the outcomes of the session. But if the client does not trust the therapist, it means they are not so free to say whatever er they want to say; it also means they are not free to say whatever they want to say, it also means they cannot express themselves"* (Lay counsellor C1) *"Helps the client to clearly understand the session and to be open when they are having sessions which are very important for the treatment outcome."* (Lay counsellor T2)
	Builds trust/confidentiality between client and clinician	*"But if the client does not trust the therapist, it means they are not so free to say whatever er they want to say; it also means they are not free to say whatever they want to say, it also means they cannot express themselves,"* (Lay counsellor R1)
	Brings out essential therapist's skills such as empathy and good listening skills considering cultural values as well.	*"Ummh…you can have a personal relationship where ethics are accommodated, for example, using active and good listening skills to add for a personal connection and empathy, using empathy where there is need for empathy, you know, trust in the end of the counsellor being able to address their ethics realising that the ethics you have been doing are relationship becoming more than it should be then it can actually be addressed."* Lay counsellor R2)
Key elements required for the development of WA	Goal, bond, and task	*"Goal setting, bond and task, I think these are the key elements which are important"* (Lay counsellor B1)
	Boundary setting	*"…and then I think about it, one of the most important things when going back to the issue of personal connection is boundary. Are we able to set boundaries, within that phase,"* (Lay counsellor V1)
	Confidentiality	*"Okay, so this is informing the client of confidentiality, informing the client of being able to speak openly without being judged and informing the client that information shall not be shared unless they are at the risk of harming themselves or myself in the counselling process."* (Lay counsellor R2)
	Non-judgmental	*"If there could be that custom that clients are free to express themselves freely, clients should know that everything done by the therapist is to add confidence and to make the client feel safe then the counsellor is also non-judgmental and lets the client express themselves freely in a comfortable way so that we won't have clients ending up lying or pretending to appear nice."* (Lay counsellor R3)
	Empathy	*"I think other key components can be empathy, yes empathy can also contribute to the therapeutic alliance because a client will be feeling that you are with him or her."* (Lay counsellor R1)

Discussion

Overall synthesis

In this review, we set to explore the effect of working alliance on depression and anxiety in young people aged 14 to 24 years. Overall, a greater working alliance is associated with improvements in depression and anxiety, as previously shown in reviews focusing exclusively on adults [1, 2, 5, 34].

Mechanism

Although there is universal agreement on the importance of a functional WA, the exact mechanism by which a working alliance optimises reductions in anxiety and depression is currently unknown [3]. It is theorised by both patients and therapists that improvements in the working alliance are associated with improvements in interpersonal relationships, self-esteem, positive coping strategies, optimism, adherence to treatment protocols, and emotional regulation [1, 2, 5, 15, 27, 37]. Improvements in negative psychosocial indices and treatment processes/factors attenuate anxiety and depression symptoms. Consequently, improved mental health can positively influence WA creating a positive feedback loop [1, 2, 5]. However, some studies did not find an association between working alliance and depression and anxiety [2]. In recent research into psychotherapy with adults, there have been attempts to use advanced statistical modelling techniques to understand the WA clinical outcome relationship [1]. However, heterogeneity in methodologies makes it difficult to conceptualise and model the association between WA and anxiety and depression [1, 2, 5]. For instance, in a systematic review by Baier et al. (2020), most studies retrieved (26/37) demonstrated that WA is a mediator to change. However, reverse causality and mediation by a third confounding variable could not be ruled out [1, 5].

Salient WA element

Improvements in bond and tasks were associated with improvements in interpersonal functioning [25, 35]. CMDs are sometimes associated with relationship problems; therefore, establishing a bond with the therapists can affect the client's social life [20]. It is generally suggested that early WA is essential in the early stages of the therapeutic process; early bonding between the client-therapist is likely to improve the client's agreement on the task and subsequent adherence to treatment procedures by the client, which ultimately improves treatment outcomes [1]. A functional WA improves the client's confidence and self-efficacy in building interpersonal relationships [20]. Therapy sessions are the bedrock of social exposures and a source of social support that optimise clients' relational functioning [35]. More critical, pre-treatment characteristics, including motivation, hope for change, and expectancy in therapy effectiveness, are precursors to forming a functional WA, which leads to improvements in clinical outcomes [25]. Sentiments of our stakeholders' consultations support this proposition. One respondent said, "*…I really had faith in my counsellor, they were very welcoming, and this increased my confidence in the treatment process….".* In CBT, enhancing a client's ability to agree on tasks and assignments, including eliciting emotional engagement during therapy, is essential for forging a functional WA. However, despite forming a WA during sessions, if clients are not provided with coping skills, the mediation of WA in symptomatic relief is attenuated [2, 34].

In a naturalistic study, Webb et al. (2014) demonstrated that the task component was statistically associated with treatment outcomes after controlling for temporal confounders (patient expectations and prior symptom change) [30]. That study demonstrates the importance of agreement on concrete tasks as being fundamental to changes in depression in CBT [30]. The importance of tasks completion is further supported by Zelenchich et al. (2020) [39], who explored the effect of WA on anxiety and depression in youth with acquired brain injury. Facilitation by the therapists in completing tasks was linked to improved functioning and lower anxiety and depression [39]. This is further supported by a systematic review of adult patients undergoing CBT for anxiety disorders; task agreement was more predictive of the WA therapeutic-outcome association, with bond/goals-outcome association equivocal [2].

Timing

Evidence is inconclusive regarding the requisite timing of working alliance on changes in mental health functioning [34]. For example, some studies suggest that a more favourable early working alliance is associated with more significant symptom improvement [3, 5, 34, 14, 16, 21, 25–27, 30, 33], with others reporting a null association [2, 15]. The discrepancies have been attributed to differences in outcomes measures, the timing of WA assessment and differences in methodologies, i.e. sample sizes, heterogeneity in study participants, and study designs, amongst other methodological issues [2, 4, 5, 30, 33]. A meta-analysis exploring the WA therapeutic-outcome relationship in CBT for adults with depression revealed that early WA-outcome correlations are marginally lower than mid-and late assessments [5], thus the need for an early establishment of a WA to optimise treatment outcomes [5]. Another meta-analysis also identified a reciprocal relationship between WA and symptom reduction early in therapy [3]. Early WA was predictive of post-treatment outcomes optimised lower drop rates; this association was evident irrespective of baseline symptom severity and was optimised by greater levels of patients' engagement with treatment and treatment acceptance in the early stages of therapy [3]. However, very few long-term studies have been conducted to assess the temporal WA therapeutic-outcome association. WA has been mainly studied using cross-sectional or clinical trials with short follow-ups [5, 15]. Hersoug et al. (2013) [25] explored the long-term effects of WA on 100 patients three years after receiving dynamic psychotherapy for anxiety, depression and personality disorders. This study showed that a functional WA was predictive of long-term changes in mental health outcomes. Furthermore, higher treatment expectations, less severe symptoms, and the ability to create mutually fulfilling relationships with others were predictive of a better functional WA [25]. The temporal relationship between WA and treatment outcomes is not without controversy [4, 30, 33].

Delivery agent

We also set out to explore if the therapist influenced WA. Greater professional experience is associated with better treatment outcomes and greater WA [17, 30, 31]. Our stakeholder consultations mirror outcomes from a study by Goldstein et al. [38] exploring comparability of anxiety/depression symptoms change, skills acquisition and WA between experienced and student therapists. In their study, TA was superior for clients treated by students than qualified therapists. Also, a study showed that videoconferencing is equally effective in treating anxiety and depression; a doctoral trainee psychologist was the therapist [22]. Both alliance and skill acquisition were moderately correlated with therapeutic gains in changes in depression scores [38]. However, our stakeholders' consultations were indeterminant; clients revealed that age was a potential determinant for establishing WA, with young people preferring to be treated by a similarly aged lay counsellor. A similar age counsellor was deemed likely to have the same experiences and relate more to a young person experiencing anxiety and depression. Other clients preferred to be seen by a more mature counsellor who could have more experience addressing the issues at hand. In problem-solving therapy and CBT, more experience appears helpful when the patient is still opening up; an experienced counsellor can use their clinical expertise to facilitate problem-solving in the client [17, 30, 31, 34].

Delivery mode

The association between WA and anxiety/depression was the same across delivery modes, i.e., physical vs online therapy and individual vs group therapy [15, 40]. Evidence of the WA across physical formats is unequivocal in suggesting that a functional WA optimises in-person therapy outcomes, with evidence across digital platforms still evolving [1, 2, 4–6]. A pilot RCT (N=26) showed that videoconferencing clinically equalled in-person CBT, with client satisfaction and client- and therapist-rated WA comparable across the two groups [22]. Andersson et al. (2012) [40] explored the association between WA and treatment outcomes in guided CBT in patients with anxiety, depression, generalised anxiety disorder and social anxiety disorder (N=174). The study showed high WA scores comparable to face-to-face therapies. They argue that a WA can still be formed in guided digital self-help despite a lack of physical contact over online interactions; the process of agreeing on goals and homework/tasks is essential for successful therapy outcomes [40]. Unlike physical sessions, WA in guided

digital therapy is a function of the clients' interaction with the therapist online and access to self-help materials/systems [40]. However, there was no association between WA and clinical outcomes, despite the clients improving clinically; the null association require further research [40]. Methodological limitations of this study, including a one-off measurement of WA and using an instrument developed for face-to-face therapies, could account for the null association, or maybe WA may not be an active ingredient for guided self-help modalities.

Format

Most of the WA therapeutic-outcome association knowledge is derived from one-to-one therapy delivery. We also set to understand the effect of WA on group therapy in young people experiencing anxiety and depression. Evidence synthesized produced mixed findings. Group therapy was associated with increases in self-esteem, which had a moderating effect on both WA and depression [36]. Group interactions, coupled with a secure working alliance, were associated with improved self-esteem and reduced depression [36]. Furthermore, clients with more impaired relational experiences seem to benefit much more from group therapy, signifying a warm WA's potential impact on treatment outcomes [36]. Group therapy among adults with mental health problems was also associated with an increase in WA in psychomotor therapies (body awareness and physical activity), with increases in collaboration the most salient predictor of changes in WA [32]. However, a study by McEvoy et al. (2014) [29] exploring the relationship between interpersonal problems, WA, and outcomes following group (n=115) and individual (n=84), produced slightly different outcomes. In this study, individual therapy recipients reported greater WA pre-and post-treatment; the differences were statistically significant [29]. Furthermore, in group therapy, severe pre-treatment anxiety/depression and interpersonal problems were associated with poorer WA and dropout than individual therapy [29]. Some argue that when compared to individual therapy, the group therapy format may not be the most "conducive" platform for clients with severe pre-treatment interpersonal problems to form a functional WA, given their assumed difficulties to relate to other group members and the therapist(s) [2, 29].

Psychotherapeutic orientation

A functional WA is considered active across psychotherapies [5, 33, 40]. Tschschke et al. [31] demonstrated that WA was essential in predicting clinical outcomes for behavioural, cognitive-behavioural, person-centred, and psychodynamic therapies. This proposition is further supported by systematic reviews and meta-analyses exploring the effects of WA on depression and anxiety for CBT [1–7].

Client and therapist characteristics

Patient optimism regarding the potential for improved symptoms is linked to better WA and more favourable treatment outcomes, underscoring therapists' need to build realistic expectations and optimism that therapy will be effective [2, 19, 30]. Also, patients with good attachment histories, adaptive attachment styles and developed social skills are more likely to forge good relationships with the therapists, thus improving WA [7]. More critically, positive relations, characterised by an ability to develop a stronger bond between a patient and a therapist, are essential. It creates trust and safety, which spills over to the agreement of goals and subsequent completion of agreed tasks [2]. Our stakeholders' consultations identified empathy from the therapist as an essential element across patients. However, evidence from a systematic review exploring the active ingredients of CBT in adult anxiety disorders produced mixed results [2]. Furthermore, studies are needed to better understand critical windows for good WA to impact therapy outcome and any moderating effects on the empathy-outcome association [2]. The exploration is essential given that a meta-analysis by De Re et al. (2012) demonstrated that therapists' characteristics hugely contribute to the WA formation regardless of patient diagnosis, research design, and WA measurement [7].

Context -setting

McLeod & Weisz (2005) [17] carried out a study to explore the relationship between WA and treatment outcomes in youth (mean age; 10.3 (SD 6.2 years) with anxiety and depression in an outpatient setting. Their study showed that better child–therapist alliance and parent–therapist alliance during treatment predicted greater reductions in internalising (anxiety and depression) symptoms at the end of treatment. Given that children rarely volunteer to engage in therapy, with parents usually deciding to get involved, a functional WA between therapist(s) and both parents and children is necessary for optimising treatment outcomes [17]. Using a naturalistic study design, Webb et al. al. (2014) also explored the association between WA and changes in symptomatology in an inpatient setting. For patients with anxiety and depression (N=103) receiving combined CBT and antidepressants in a psychiatric?? facility [30]. A functional WA was associated with a decrease in depression. Also, patients with optimism (greater treatment expectations) were likely to form greater WA, subsequently improving treatment outcomes [30]. It seems reasonable to conclude that the WA-outcome association is independent of the setting in which treatment is provided.

Therapy combinations

Most studies have primarily focused on the relationship between WA and treatment outcomes for standalone psychotherapies. Stunk et al. (2012) explored the relationship between WA, adherence and symptom change in 176 randomised clients receiving combined cognitive therapy and antidepressants for depression in the US [20]. A positive WA is associated with symptom change early in therapy; furthermore, only the task sub-scale was associated with symptom change. However, multivariate analyses showed that only the task subscale remained the statistically significant predictor after controlling for therapist skill and adherence to cognitive therapy. Taken together, the study showed the importance of agreeing on goals and provision of homework to influence both WA and subsequent symptomatic changes in combined therapy [20].

Harms

In relational dynamic psychotherapy and group CBT, the association between WA and treatment outcomes seems unclear. Some studies suggest that a functional WA does not seem to optimise treatment in patients with personality disorders and relationship problems [20, 21]. Patients with relationship problems may have challenges connecting with the therapist, which may cause a poor WA, and subsequent poor treatment outcomes [29]. Also, clients with greater relationship difficulties are likely to be more dependent on their therapist; this may lead to challenges in developing their problem-solving capabilities, in turn influencing the ability to forge a functional WA and treatment outcomes [25, 29]. Conversely, the greater reliance on the therapist may cause an improved alliance, specifically the client and therapist bond [2].

Furthermore, patients with fewer relationship difficulties may be more realistic in treatment outcomes. They may have better appreciated how difficult it may be to attain any meaningful change [25]. Among patients, a functional WA does not seem to play a huge role in treatment success; instead, other non-specific factors (e.g. adherence, symptoms severity) seem to influence treatment effectiveness [25]. More research is needed to explore contexts where WA can be harmful or circumstances under which a functional WA can deter patients' functional recovery. Conversely, ruptures in WA can lead to decreased treatment expectancy, which may negatively affect adherence, thus ultimately reducing treatment effectiveness. However, the evidence concerning this is limited, and more research is needed for definitive conclusions [2].

Limitations

Although our review suggests the positive impact of strong WA in treating depression and anxiety, the generalisation of our findings may be limited. First, we did not formally assess the risk of bias in each study. The scoping review aimed to summarise the relationship between WA and mental health outcomes in young people aged 14-24 years. Future systematic reviews and meta-analyses are warranted. Second, most of the studies were from high-income countries, and their applicability across different settings could be limited; we only retrieved a solitary study from Kenya [33]. There is a need for context-specific studies to explore the effect of WA on anxiety and depression, given the potential influence of culture on WA, as evidenced by our stakeholder consultations [3].

Third, very few retrieved studies were exclusively done in young adults in the 14-24 age, which may potentially limit external validity. Fourthly, albeit the heterogeneous measurement in the WA [2], there is a need for psychometric evaluation studies to standardise WA measures from diverse perspectives, i.e., patient-, observer- and therapist perspectives [6].

Conclusion

The review indicates that WA is a salient active ingredient across psychotherapies in managing ongoing anxiety and depression in young persons aged 14–24 years. The study's strength includes using a systematic process in searching and retrieving data across sources. More importantly, this study was primarily driven by the patients. The involvement of young persons in planning, collecting, analysing, and synthesising the outcomes increases the review's relevance to the target population of young persons experiencing anxiety and depression.

Recommendations

Although more research is needed to understand WA's influence in managing anxiety and depression in young people, based on this review, we recommend routine evaluation of WA from both patients' and clients' viewpoints [2, 7, 32] at multiple timepoints over therapy. Also, there is a need to explore ways to promote better WA across psychotherapies [2, 7]. Last, more targeted research using; longitudinal designs, adequately powered experimental designs, multiple WA measurements and advanced statistical modelling techniques to differentiate within- and between-patient differences [1, 2, 6] is needed to understand the impact of WA on anxiety and depression in young persons aged 14–24 years.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

All the authors declare no competing interests.

Funding

This work was funded by a Wellcome Trust Mental Health 'Active Ingredients' commission awarded to Jermaine Dambi at Friendship Bench/the University of Zimbabwe. The funder had no role in study design, data collection, data analysis, data interpretation, or writing of the report.

Authors' contributions

- Study conceptualization - JMD, MA, RM, CRH, DC, RS
- Search strategy development and refinement, database searches, including forwards and backwards searches – JMD, RV, MA, CRH, DC
- Article screening, data extraction and manuscript editing – RC, MKU, SM, RS, RM
- Quality assurance and qualitative synthesis – JMD, RV, RM, MA, CRH, DC
- Qualitative interviews (transcription, analysis & write-up) – JMD, RS, SM, RM, RV, DC
- Drafting of manuscript first full version – JMD
- Manuscript editing (second to fourth versions) – JMD, RV, MA, CRH, DC
- All authors read and approved the final version of the manuscript.

Acknowledgements

We would like to especially acknowledge young persons experiencing anxiety and depression for their contributions and invaluable participation throughout the review. CH receives salary support from the National Institute for Health Research (NIHR), Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London. The views expressed are those of the authors and not necessarily those of Wellcome Trust, NHS, the National Institute for Health Research (NIHR), or the Department of Health.

References

1. Baier AL, Kline AC, Feeny NC. Therapeutic alliance as a mediator of change: A systematic review and evaluation of research. Clin Psychol Rev. 2020;82:101921.
2. Luong HK, Drummond SPA, Norton PJ. Elements of the therapeutic relationship in CBT for anxiety disorders: A systematic review. J Anxiety Disord. 2020;76:102322.
3. Flückiger C, Rubel J, Del Re AC, Horvath AO, Wampold BE, Crits-Christoph P, et al. The reciprocal relationship between alliance and early treatment symptoms: A two-stage individual participant data meta-analysis. J Consult Clin Psychol. 2020;88:829–43.
4. Welmers-van de Poll MJ, Roest JJ, van der Stouwe T, van den Akker AL, Stams GJJM, Escudero V, et al. Alliance and Treatment Outcome in Family-Involved Treatment for Youth Problems: A Three-Level Meta-analysis. Clin Child Fam Psychol Rev. 2018;21:146–70.
5. Cameron SK, Rodgers J, Dagnan D. The relationship between the therapeutic alliance and clinical outcomes in cognitive behaviour therapy for adults with depression: A meta-analytic review. Clin Psychol Psychother. 2018;25:446–56.
6. Sun M, Rith-Najarian LR, Williamson TJ, Chorpita BF. Treatment Features Associated with Youth Cognitive Behavioral Therapy Follow-Up Effects for Internalizing Disorders: A Meta-Analysis. J Clin Child Adolesc Psychol. 2019;48:S269–83.
7. Del Re AC, Flückiger C, Horvath AO, Symonds D, Wampold BE. Therapist effects in the therapeutic alliance-outcome relationship: A restricted-maximum likelihood meta-analysis. Clin Psychol Rev. 2012;32:642–9.
8. Sebastian CL, Pote I, Wolpert M. Searching for active ingredients to combat youth anxiety and depression. Nat Hum Behav. 2021;5:1266–8.
9. Egan SJ, Rees CS, Delalande J, Greene D, Fitzallen G, Brown S, et al. A Review of Self-Compassion as an Active Ingredient in the Prevention and Treatment of Anxiety and Depression in Young People. Adm Policy Ment Heal Ment Heal Serv Res. 2022;49:385–403.
10. Krause KR, Courtney DB, Chan BWC, Bonato S, Aitken M, Relihan J, et al. Problem-solving training as an active ingredient of treatment for youth depression: a scoping review and exploratory meta-analysis. BMC Psychiatry. 2021;21:1–14.
11. Pearce E, Myles-Hooton P, Johnson S, Hards E, Olsen S, Clisu D, et al. Loneliness as an active ingredient in preventing or alleviating youth anxiety and depression: a critical interpretative synthesis incorporating principles from rapid realist reviews. Transl Psychiatry. 2021;11:1–36.
12. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry. 2005;62:593–602.
13. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. Ann Intern Med. 2018;169:467–73.
14. Feeley M, Derubeis R, Gelfand L. The temporal relation between adherence and alliance to symptom change in cognitive therapy for depression. Journal of Consulting and. Clin Psychol. 1999;67:578–82.
15. Barber JP, Connolly MB, Crits-Christoph P, Gladis L, Siqueland L. Alliance predicts patients' outcome beyond in-treatment change in symptoms. J Consult Clin Psychol. 2000;68:1027–32.
16. Klein DN, Schwartz JE, Santiago NJ, Vivian D, Vocisano C, Arnow B, et al. Therapeutic Alliance in Depression Treatment: Controlling for Prior Change and Patient Characteristics. J Consult Clin Psychol. 2003;71:997–1006.

17. McLeod BD, Weisz JR. The therapy process observational coding system-alliance scale: measure characteristics and prediction of outcome in usual clinical practice. J Consult Clin Psychol. 2005;73:323–33.
18. Constantino MJ, Schwaiger EM, Smith JZ, Degeorge J, Mcbride C, Ravitz P, et al. Patient interpersonal impacts and the early therapeutic alliance in interpersonal therapy for depression. Psychotherapy. 2010;47:418–24.
19. Johansson P, Høglend P, Hersoug AG. Therapeutic alliance mediates the effect of patient expectancy in dynamic psychotherapy. Br J Clin Psychol. 2011;50:283–97.
20. Strunk DR, Cooper AA, Ryan ET, DeRubeis RJ, Hollon SD. The process of change in cognitive therapy for depression when combined with antidepressant medication: Predictors of early intersession symptom gains. J Consult Clin Psychol. 2012;80:730–8.
21. Levin L, Henderson HA, Ehrenreich-May J. Interpersonal predictors of early therapeutic alliance in a transdiagnostic cognitive-behavioral treatment for adolescents with anxiety and depression. Psychotherapy (Chic). 2012;49:218–30.
22. Stubbings DR, Rees CS, Roberts LD, Kane RT. Comparing in-person to videoconference-based cognitive behavioral therapy for mood and anxiety disorders: randomized controlled trial. J Med Internet Res. 2013;15:e258.
23. Dinger U, Zilcha-Mano S, McCarthy KS, Barrett MS, Barber JP. Interpersonal problems as predictors of alliance, symptomatic improvement and premature termination in treatment of depression. J Affect Disord. 2013;151:800–3.
24. Andersson G, Paxling B, Wiwe M, Vernmark K, Felix CB, Lundborg L, et al. Therapeutic alliance in guided internet-delivered cognitive behavioural treatment of depression, generalized anxiety disorder and social anxiety disorder. Behav Res Ther. 2012;50:544–50.
25. Hersoug AG, Høglend P, Gabbard GO, Lorentzen S. The combined predictive effect of patient characteristics and alliance on long-term dynamic and interpersonal functioning after dynamic psychotherapy. Clin Psychol Psychother. 2013;20:297–307.
26. Arnow BA, Steidtmann D, Blasey C, Manber R, Constantino MJ, Klein DN, et al. The relationship between the therapeutic alliance and treatment outcome in two distinct psychotherapies for chronic depression. J Consult Clin Psychol. 2013;81:627–38.
27. Lorenzo-Luaces L, Derubeis RJ, Webb CA. Client characteristics as moderators of the relation between the therapeutic alliance and outcome in cognitive therapy for depression. J Consult Clin Psychol. 2014;82:368–73.
28. Chu BC, Skriner LC, Zandberg LJ. Trajectory and predictors of alliance in cognitive behavioral therapy for youth anxiety. J Clin Child Adolesc Psychol. 2014;43:721–34.
29. McEvoy PM, Burgess MM, Nathan P. The relationship between interpersonal problems, therapeutic alliance, and outcomes following group and individual cognitive behaviour therapy. J Affect Disord. 2014;157:25–32.
30. Webb CA, Beard C, Auerbach RP, Menninger E, Björgvinsson T. The therapeutic alliance in a naturalistic psychiatric setting: temporal relations with depressive symptom change. Behav Res Ther. 2014;61:70–7.
31. Tschuschke V, Crameri A, Koehler M, Berglar J, Muth K, Staczan P, et al. The role of therapists' treatment adherence, professional experience, therapeutic alliance, and clients' severity of psychological problems: Prediction of treatment outcome in eight different psychotherapy approaches. Preliminary results of a naturalistic. Psychother Res. 2015;25:420–34.
32. Heynen E, Roest J, Willemars G, van Hooren S. Therapeutic alliance is a factor of change in arts therapies and psychomotor therapy with adults who have mental health problems. Arts Psychother. 2017;55:111–5.
33. Falkenström F, Kuria M, Othieno C, Kumar M. Working Alliance Predicts Symptomatic Improvement in Public Hospital'Delivered Psychotherapy in Nairobi, Kenya. J Consult Clin Psychol. 2019;87:46–55.
34. Rubel JA, Rosenbaum D, Lutz W. Patients' in-session experiences and symptom change: Session-to-session effects on a within- and between-patient level. Behav Res Ther. 2017;90:58–66.
35. Khalifian CE, Beard C, Björgvinsson T, Webb CA. The Relation between Improvement in the Therapeutic Alliance and Interpersonal Functioning for Individuals with Emotional Disorders. Int J Cogn Ther. 2019;12:109–25.
36. Doorn KA, Kealy D, S. OJ, Joyce, S. A, Weber, et al. Improving self-esteemthroughintegrative group therapy for personality dysfunction: Investigating the role of the therapeutic alliance and quality of object relations. J Clin Psychol. 2019;75:2079–94.
37. Steinert C, Kruse J, Leweke F, Leichsenring F. Psychosomatic inpatient treatment: Real-world effectiveness, response rates and the helping alliance. J Psychosom Res. 2019;124:109743.
38. Goldstein LA, Adler Mandel AD, DeRubeis RJ, Strunk DR. Outcomes, skill acquisition, and the alliance: Similarities and differences between clinical trial and student therapists. Behav Res Ther. 2020;129 April 2019:103608.
39. Zelencich LM, Wong D, Kazantzis N, McKenzie DP, Downing M, Ponsford JL. Predictors of Anxiety and Depression Symptom Improvement in CBT Adapted for Traumatic Brain Injury: Pre/Post-Injury and Therapy Process Factors. J Int Neuropsychol Soc. 2020;26:97–107.
40. Apolinário-Hagen J, Kemper J, Stürmer C. Public Acceptability of E-Mental Health Treatment Services for Psychological Problems: A Scoping Review. JMIR Ment Heal. 2017;4:e10.

Table

Table 1 is available in the Supplementary Files section.

Figures

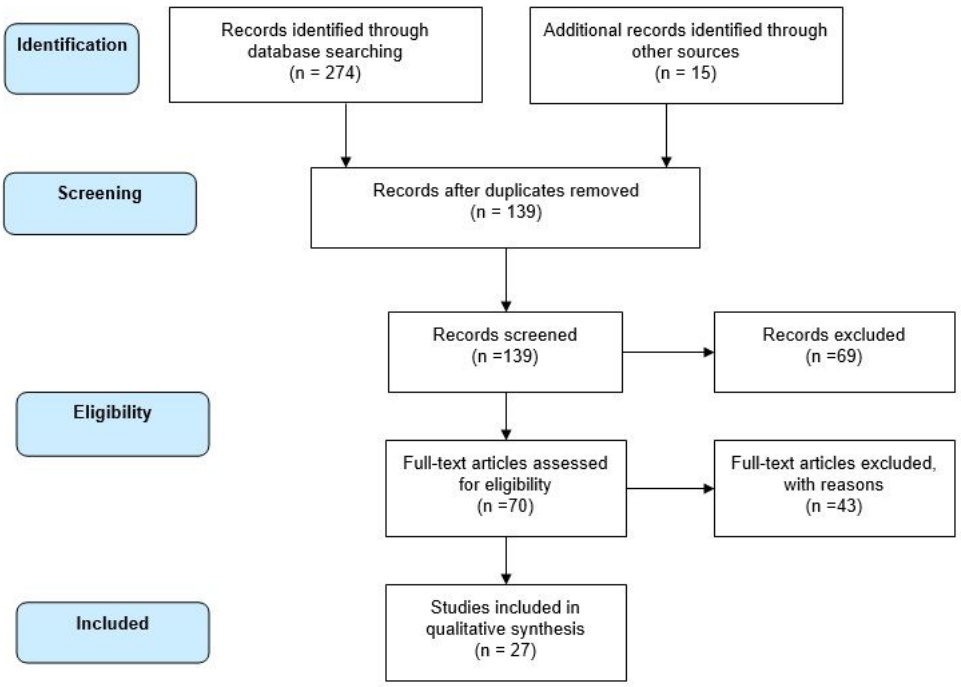

Figure 1

Flow chart for the study selection process

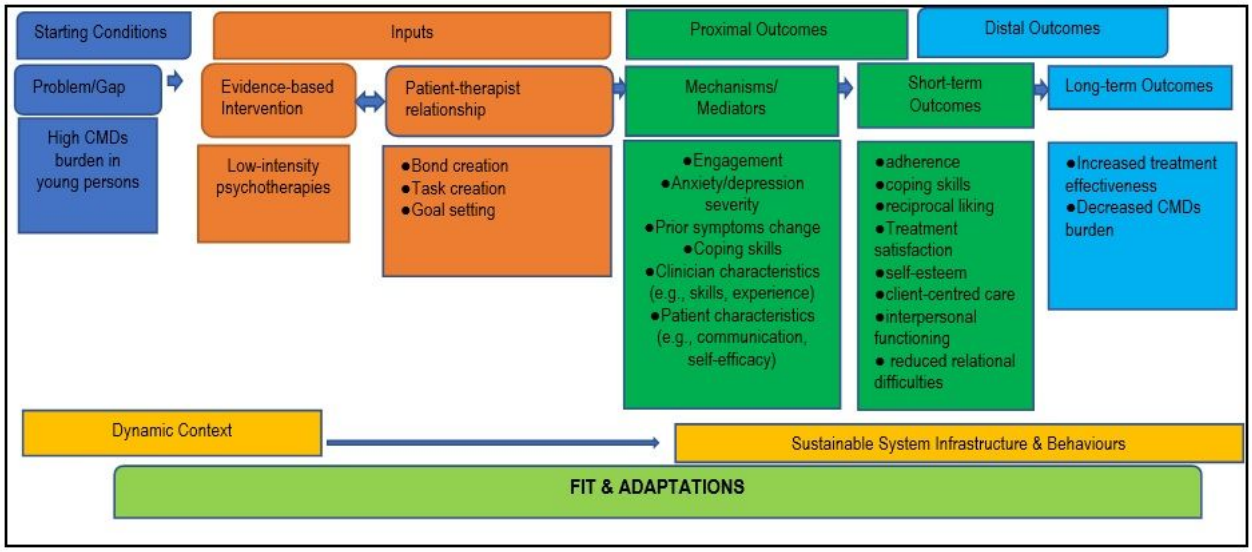

Figure 2

Logic model

Note CMDs – common mental disorders.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- Table1.docx
- AdditionalFile1PRISMAScRFillableChecklist.docx