

The
Health Policy
Partnership

**Literature review on the use of level 1 psychotherapy
in psychiatric training**

July 2018

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1. Background

The European Union of Medical Specialists (UEMS) Section of Psychiatry aims to promote the highest standard of care within psychiatry across Europe. Their psychotherapy working group has proposed a three-level model of psychotherapy training for psychiatrists in training.

This literature review aims to establish if there are evidence-based methods to enhancing level 1 psychotherapy skills, what the impact of these methods is on desired outcomes, and how these outcomes are measured.

As per the RFP developed for this literature review, level 1 psychotherapy training is focused on enabling the psychiatrist in training to practise in a psychologically informed way. Level 1 psychotherapy skills will enable psychiatrists in training to be resilient practitioners, expert communicators and novice therapists who can not only elicit the signs and symptoms of mental disorder but also build effective therapeutic relationships.

Little is known about how best to train psychiatrists in level 1 psychotherapy skills, which include empathy, resilience, self-awareness and the ability to manage a range of interactions within a consultation.

The RFP requests that the literature review focus on the following questions:

1. Are there descriptions in the literature of educational interventions that seek to develop the above outcomes in psychiatrists?
2. If there are no descriptions of such interventions that have been applied to psychiatrists, are there accounts of interventions applied to 'nearby' professional groups such as clinical psychologists, psychotherapists or psychiatric nurses?
3. If there are accounts of educational interventions that have measured outcomes, what does the evidence indicate concerning the effectiveness and efficiency of educational interventions to develop the above capabilities in psychiatrists in training?
4. What methods of assessment are there that demonstrate how effectively psychiatrists in training demonstrate the above capabilities?

2. Methods

A search strategy was developed through reading of relevant papers, recent Cochrane reviews and consultation with psychiatric colleagues. The level 1 psychotherapy skills identified by the UEMS working group were summarised (see *Table 1*) and used to develop the search strategy.

Table 1. Competencies to be developed during level 1 psychotherapy training

As a resilient practitioner	As an expert communicator	As a novice therapist
Psychologically resilient	Effective and empathetic – both verbal and non-verbal	Builds, maintains and ends treatment
Self-aware	Establishes empathetic understanding	Establishes shared goals and shared decision making, and gains trust
Self-monitors	Identifies concerns and expectations of others	Is able to administer common, supportive interventions including: acknowledging, expressing empathy, stimulating, structuring, advising, and confronting
Self-cares	Is able to recognize and manage defence, coping, resistance, transference and counter-transference mechanisms	Can communicate diagnostic and prognostic information, and give accurate information regarding the effectiveness of and indications for different psychotherapies
Seeks advice	Discusses and reflects on the inner experiences of the patient	Is able to apply motivational techniques appropriately

PubMed, Embase, PsycNET and Google Scholar were searched using the following search terms:

- (Psychiatrist* OR Psychiatr* resident OR Psychiatric*) OR (Psycholog* OR clinical adj2 psycholog* OR psychotherapist\$ OR clinical adj2 psychotherapist\$ OR psychiatr* nurse\$ OR mental health professional\$ OR mental health worker\$) OR social worker\$
- AND
- empath* OR communication* OR communication\$ skill\$ OR listening OR compassion* OR understanding OR resilien* OR (self adj3 care) OR (self adj3 aware*) OR helping skill\$
- AND
- Training OR education* OR course\$ OR training adj2 course OR intervention\$ OR Teach* OR skill\$

We also conducted specific searches for Balint groups, mindfulness and the use of personal psychotherapy in psychotherapy training. A snowballing strategy reviewing all references contained in relevant identified literature helped to identify several other important papers.

A grey literature search included the websites of the Royal College of Psychiatry (UK), The American Psychiatric Association, the American Psychological Association and the Australian and New Zealand College of Psychiatrists.

Searches were expanded to include non-psychiatric participants (i.e. doctors of other medical specialties or other counselling professions such as psychology and social work) only when evidence could not be identified for psychiatric trainees. Therefore, where evidence is extrapolated from associated health professions, no research could be identified which included psychiatric trainees or psychiatrists.

3. Results

A range of interventions was reviewed for their effectiveness in training novice therapists in level 1 psychotherapy skills. The identified evidence will be presented below in two sections. Firstly, existing evidence for how to teach each level 1 psychotherapy skill will be reviewed. This section is divided as per the level 1 psychotherapy skills defined by the UEMS psychotherapy working group. Secondly, the existing evidence for each identified intervention will be summarised with regard to which skills that intervention may develop. For example, existing studies of Balint groups, personal psychotherapy and mindfulness all suggest impact on one or more of the level 1 psychotherapy skills.

This structure aims to facilitate use of the report depending on which aspect is most relevant at the time. Challenges in synthesising results arose from the wide range of outcome measures implemented in the reviewed studies. Areas with little or no identified evidence will be highlighted as priorities for further research.

Sixty-one papers are referred to in this final report. These have been classified according to the Centre for Evidence-Based Medicine Study Designs algorithm [1] and study types are summarised in *Table 2*.

Table 2. Study types of referenced studies

Study type	Count
Descriptive	1
Descriptive survey	7
Descriptive qualitative	11
Analytic observational cross-sectional survey	18
Analytic observational cross-sectional study	10
Randomised controlled trial	2
Literature review	12

Table 3 provides an overview of the interventions for teaching level 1 psychotherapy skills which have been identified, and how these contribute to the teaching of individual skills. These will be presented in more detail throughout the results section.

Table 3. Summary of evidence for interventions to teach level 1 psychotherapy skills

Intervention		Role play	Peer counselling	Communication skills workshop	Videotaping and feedback	Simulation	Virtual patients	Personal psychotherapy	Balint groups	Mindfulness	Reflection	Self-care training
Psychotherapy level 1 skills – developing resilient practitioners	Psychological resilience							✓				✓
	Self-aware							✓		✓	x	
	Self-monitors											
	Self-cares							✓				✓
	Seeks advice											
Psychotherapy level 1 skills – developing expert communicators	Empathetic verbal and non-verbal communication*	✓	✓					✓	✓ x	✓		
	Establishes empathetic understanding							✓		✓		
	Identifies concerns and expectations											
	Able to recognise and manage: Defence Coping Resistance Transference Counter-transference						x x			✓		
Psychotherapy level 1 skills – developing novice therapists	Builds, maintains and ends treatment											
	Establishes shared goals, shared decision making and gains trust											
	Is able to administer interventions including: Acknowledging Expressing empathy Stimulating Structuring Advising Confronting	✓	✓	✓	✓			✓	✓			
	Communicates diagnostic and prognostic information											
	Able to apply motivational techniques appropriately			✓								

*Evidence also drawn from studies with medical students and medical trainees of other specialties

✓ Evidence **in favour** of this teaching technique for developing this skill

x Evidence reviewed which **does not support** this teaching technique for developing this skill

Boxes shaded grey highlight areas where no evidence has been identified

3.1 Evidence presented by skill

Level 1 psychotherapy skills are divided into three sections; developing resilient practitioners, developing expert communicators and developing novice therapists. The reviewed evidence for each section will be presented individually below.

3.1.1 Developing resilient practitioners

How to develop resilient practitioners has been explored in multiple research papers. The most relevant interventions appear to be participation in Balint groups, undergoing personal psychotherapy, self-care training and mindfulness.

3.1.1.1 Developing resilient practitioners: psychological resilience

Psychological resilience usually refers to a person's ability to withstand adversity, a concept considered essential for a successful psychotherapist. A range of interventions has been studied to determine whether they contribute to the development of psychological resilience among trainee psychotherapists.

Undergoing personal psychotherapy is an element of psychiatric training which has been widely studied and debated over the years, and offers potential to the development of psychological resilience among participants. Although many researchers posit the possibility of undergoing personal psychotherapy developing psychological resilience, no studies were identified which attempt to measure the effect – a challenging concept in itself.

A self-care training course has been trialled by Mache *et al.*[2] who researched the effects on psychiatric doctors. The intervention consisted of 12 weekly sessions of 1.5 hours; training sessions included theoretical education, experiential exercises and home assignments. Psychological resilience was measured using questionnaires at baseline, three and six months. There were 37 psychiatrists included in the intervention group, with 35 in the control group. Participants reported significant improvements in resilience at both follow-up surveys. Despite the small sample size, this study provides evidence for the potential that psychological resilience can be taught and fostered among psychiatrists, although long-term evaluations are required.

In summary, a self-care intervention and personal psychotherapy training have the potential to develop psychological resilience.

3.1.1.2 Developing resilient practitioners: self-awareness

The development of self-awareness among trainee psychotherapists has been more widely studied than the development of psychological resilience. Self-awareness is defined in this context as 'an unbiased observation of one's inner experience and behavior'[3]. Existing research evidence supports personal psychotherapy and mindfulness for the development of self-awareness.

Personal psychotherapy has been a long debated and disputed aspect of psychiatric training, and is voluntary in the majority of training programmes. Survey data, collected from psychologists in 1994 by Pope and Tabachnick, [4] reported the development of self-awareness to be one of the primary outcomes of undergoing personal psychotherapy. MacDevitt [5] reported on a survey study where psychologists responded to case vignettes, and the selection of self-analytical responses were compared with whether or not participants had undergone personal psychotherapy. As the number of personal therapy hours increased, there was an increase in counter-transference awareness, a therapeutic skill considered to be an aspect of self-awareness. No other studies were identified specifically focusing on the role of personal psychotherapy for developing therapist self-awareness. However, MacDevitt makes reasonable recommendations for further study in this area, including a call for more controlled studies and the suggestion that a measurement of self-awareness may be obtained by asking therapists to analyse a recording or transcript of a consultation they have just conducted. Further survey data collected by Messina *et al.* [6] support the suggestion that personal therapy

enhances therapists' self-awareness. However, robust studies with objective measurements of self-awareness are lacking.

Mindfulness is a form of self-care intervention which has been increasingly studied in recent years. Shapiro *et al.* [3] conducted a cohort-controlled trial of mindfulness with graduate counselling students. They identified an associated increase in awareness, but acknowledged limitations to the study including the lack of randomisation and small sample sizes. Three qualitative studies exploring the impact of mindfulness on students enrolled in therapy or social work courses [7-9] also identified improvements in self-awareness of participants. Although this evidence suggests that mindfulness training and participation may contribute to development of self-awareness, further studies are required to robustly establish whether this is the case.

Finally, Graham *et al.* [10] studied the effect of participation in Balint groups on psychiatric trainees and counsellors. Psychiatric trainees participated for 12 weeks in a Balint group and reported using a 'modified Psychological inventory' on the impact on self-awareness. Participants reported increased self-awareness as an outcome of their participation.

There is therefore potential that Balint groups, personal psychotherapy and mindfulness contribute to the development of self-awareness.

3.1.1.3 Developing resilient practitioners: self-monitors

No evidence was identified which had studied how to develop capacity for self-monitoring among psychotherapists in training, although arguably evidence for developing self-awareness may contribute to this domain.

3.1.1.4 Developing resilient practitioners: self-cares

The evidence for psychotherapists in training to develop skills in self-care links closely to the evidence discussed above. There is potential for personal psychotherapy to contribute to self-care. Daw *et al.* [11] surveyed 48 qualified therapists in order to explore the impact of personal psychotherapy. Personal therapy was identified as a valuable and positive tool for self-care. Grimmer and Tribe also add that personal psychotherapy, seemingly evidently, is reported to offer support to participants during times of personal need [12]. However, no identified research studies have specifically measured the impact of personal psychotherapy on therapists' ability to self-care beyond self-reported data referring to the period when the personal psychotherapy is ongoing.

However, Mache *et al.* [2], as mentioned previously, researched the effects of a self-care intervention for doctors working in psychiatric clinics. This training, over 12 weeks, included theoretical teaching on self-care techniques (i.e. healthy eating and sleeping) and experiential practice, including references to real-life scenarios. The intervention demonstrated statistically significant improvements in resilience, self-efficacy and perceived stress, as well as improved relationships with patients and renewed enthusiasm for work. Subsequent self-care seeking behaviour was not assessed. Data were collected by survey and participants rated the intervention favourably, demonstrating potential for this form of self-care training to promote protective coping techniques. Longer-term evaluation would be required to demonstrate sustained impact.

Self-care techniques may be developed through personal psychotherapy or a self-care intervention.

3.1.1.5 Developing resilient practitioners: seeks advice

Psychiatrists in training are often encouraged, or even mandated, to undergo personal psychotherapy, although no studies investigated specifically how to cultivate advice seeking in psychotherapists in training at times of need. Self-help interventions, such as that by Mache *et al.* [2] may offer potential impact on long-term advice seeking; however, this study did not measure impact on advice seeking behaviour.

3.1.2 Developing expert communicators

The literature available for review in this domain spans the entire medical education literature. Here selected studies and reviews have been included, with evidence obtained from studies with medical students and allied health professionals included where no evidence obtained with psychiatric trainees was available.

3.1.2.1 Developing expert communicators: empathetic verbal and non-verbal communication

Evidence exists for how to develop empathy among psychiatric and other medical trainees. There is significantly more evidence to support the development of empathy among medical students and the broader medical workforce, than studies focusing specifically on psychiatric trainees. However, evidence exists for interventions which have demonstrated improvements in empathy. These include undergoing personal psychotherapy, participation in Balint groups and mindfulness, and other teaching interventions such as role play and peer counselling. It is challenging to compare the impact of these interventions with each other due to variations in outcome measures for empathy; a range of self-report questionnaires or independent rating scales are used.

Therefore, this section presents an overview of existing evidence for teaching empathy to medical students and medical trainees, including psychiatric trainees. Personal psychotherapy, Balint groups and mindfulness with regard to their impact on empathy are discussed thereafter.

In a review by Stepien *et al.* primarily investigating training for undergraduate medical students, interpersonal skills workshops, audiotape workshops, and communications skills workshops lasting between 3 and 16 hours showed statistically significant improvements in pre- and post-training assessments [13]. A more recent review of interventions to teach empathy to medical students by Kelm *et al.* identified 15 studies which increased empathy but limited evidence to concretely support specific teaching methods [14]. There are, however, significant methodological complexities and inconsistencies in research on empathy with a range of different scales used to assess changes as a result of interventions, and often a lack of control group. *Table 4* provides an overview of research into the teaching of empathy to either psychiatric trainees, medical students or allied professional students such as psychology.

Table 4. Summary of studies investigating interventions to improve empathy

Paper	Participants and intervention	Evidence (for or against)
Ascencio. 2017. Training Clinical Empathy: A Behaviour Analytic Approach. Thesis presented to California State University [15]	Four students of psychology or social work watched a model video of an empathetic consultation. Also reviewed video footage of a pre-intervention consultation and gained feedback on how to improve	Client rating and third-party observer rating of verbal and non-verbal empathy skills. These ratings were conducted over 12 sessions, with the intervention implemented at different time points for each participant
Aggarwal and Guanci. 2014. Teaching empathy during clerkship and residency. Academic Psychiatry [16]	86 participants including medical students and psychiatric residents attended a one-hour session consisting of case discussions bought by trainees coupled with theoretical teaching on the definition and implementation of empathy in patient interactions and role play to implement the learned techniques	Survey data from participants: 95% reported increased understanding of the importance of empathy and thought it would help them be more empathetic in future encounters

Bombeke <i>et al.</i> 2011. Medical students trained in communication skills show a decline in patient-centred attitudes: An observational study comparing two cohorts during clinical clerkships. [17]	Communication skills training consisting of four hour-long small group interactive teaching and role play with medical students.	Non-statistically significant improvements in the Jefferson Scale of Physician Empathy (JSPE) score
Fernández-Olano <i>et al.</i> 2008. Impact of clinical interview training on the empathy level of medical students and medical residents. [18]	127 medical students and 66 medical residents participated in communication skills workshops, which included role playing, coaching on formulating empathic phrases, and conveying empathy verbally and nonverbally	Significant post-intervention increase in empathy measured on the JSPE
Karaoglu and Seker. 2011. Looking for winds of change with a PBL scenario about communication and empathy. [19]	Three problem-based learning scenarios were discussed with 137 pre-clinical students and 66 medical residents, which could be explored from the points of view of each character involved	No changes in empathy on the Empathetic Tendency Scale and Empathetic Skill Scale
Tiuraniemi <i>et al.</i> 2011. Medical and psychology students' self-assessed communication skills: A pilot study. [20]	126 medical students and 183 psychology students were delivered a lecture on communication which was followed by role play; the role play sessions were videotaped	Participants' survey responses regarding 'empathy and reflection' significantly increased post-intervention
Bayne. 2011. Training medical students in empathic communication. [21]	Didactic and experiential content delivered to 22 medical students on a psychiatry clerkship. This included communication skills training and role play	Significant increase in empathy post-intervention. Measured using the Consultation and Relational Empathy (CARE) scale

These studies suggest that empathy can be taught and cultivated among medical students and medical trainees of other specialties. However, only Ascencio [15] used independent observer and patient ratings in a small (four-participant) thesis research project.

There is, however, a dearth of evidence investigating which techniques may result in long-term change, as existing research has not studied the impact of interventions beyond 12 months. In addition, existing research evidence relies heavily on self-reported survey data, and there are few standardised assessments or randomised controlled trials. Evidence generated from the wider medical profession provides a starting point for further investigations within psychiatric and, specifically, psychotherapeutic training. However, it is insufficient to draw conclusions from evidence with students and clinical medical trainees for the development of the nuanced level of empathy required for conducting effective psychotherapy.

In conclusion, further research is required investigating the nuances of teaching empathy and associated communication skills to psychiatric trainees. Specifically, the combination of theoretical teaching and videotaped feedback seem promising for cultivating empathy, but robust trials with psychiatric trainees have not been identified.

Other interventions which have been studied with psychiatric and other counselling professions include the effects of undergoing personal psychotherapy, Balint groups and mindfulness. Two reviews conducted by Malikiosi-Loizos [22] and Macran and Shapiro [23] conclude that personal psychotherapy participation improves empathy in participants. Bike *et al.* [24] surveyed psychotherapists 20 years after participation in personal psychotherapy, and found that psychotherapists consider personal psychotherapy to contribute to their development of empathy. This finding is supported by Mackey and Mackey [25] who interviewed social workers and reported an association with undergoing personal psychotherapy and the development of empathy.

Balint groups are regular meetings of trainees with facilitators designed to study and explore the doctor–patient relationship, described in more detail below. Fitzgerald *et al.* [26] included psychiatric trainees in a study where participants responded to a written case vignette before and after participation in Balint group sessions. Their responses were graded for a range of interventions, and an improvement in empathetic understanding was reported after the intervention. McKenney *et al.* [27] gathered qualitative data from nine psychiatric trainees who participated in voluntary Balint groups. Participants provided feedback after the final session and reported an increase in empathetic awareness. Studies of Balint groups, however, by Ghetti *et al.* [28] and Cataldo *et al.* [29] with non-psychiatric medical trainees did not demonstrate any improvement in empathy. Therefore, further study is required to establish whether Balint groups in psychiatry provide a foundation for the development of empathy required for psychotherapy.

Existing research is mixed on the impact of participating in mindfulness on empathy. Comparison between studies is challenging due to differing measures of empathy. Shapiro, Brown, and Biegel [3] found that counselling trainees exposed to mindfulness-based stress reduction (MBSR) demonstrated increased empathy and another study with medical students by Shapiro *et al.* demonstrated improved empathy [30]. Studies of mindfulness-based interventions using the Interpersonal Reactivity Index (IRI) did not find any changes in empathy as a result of the intervention [31-33]. Hojat *et al.* [34] used the Jefferson Scale of Empathy and found a moderate change in empathy. Shapiro *et al.* [30] found that, with medical students, empathy was higher among the mindfulness intervention group (Empathy Construct Rating Scale). A review by Lamothe *et al.* (2015) including all healthcare professionals (not limited to psychiatrists) demonstrated that MBSR interventions can lead to improvements in healthcare professionals' empathy (a range of scales were used to assess empathy).

However, the evidence is not strong enough to draw conclusions regarding the effect of any one of these interventions in isolation on the development and improvement of empathy in psychotherapy trainees. In addition, trainees are usually undergoing personal psychotherapy and therapy training simultaneously, resulting in multiple confounders for any survey data. Research studies using validated measures of empathy would provide more robust evidence, but confounding factors would remain a challenge for any research in this field.

3.1.2.2 Developing expert communicators: empathetic understanding

Empathetic understanding is not specifically referred to in any of the reviewed literature. The development of empathy is discussed in the above section, and likely to have crossover to this domain.

3.1.2.3 Developing expert communicators: identifies concerns and expectations

No studies were identified developing these skills in isolation from the training in a specific form of psychotherapy. Studies exist on the training of medical students in identifying patients' concerns and expectations; however, this evidence is unlikely to be sufficient to translate into the training of psychotherapists.

3.1.2.4 Developing expert communicators: able to recognise and manage defence, coping, resistance, transference and counter-transference

Limited evidence was identified where any one of these skills was specifically studied in the training of psychotherapists. Counter-transference is the only aspect of communication in this section which is mentioned in the research literature in a study on personal psychotherapy.

Personal psychotherapy has been considered to improve awareness of transference and counter-transference [22, 24, 35]; predominantly a finding identified from self-reported survey data with psychotherapists reporting on the perceived benefits of their personal psychotherapy. MacDevitt [5] conducted a survey study with psychologists who were members of the psychotherapy division of the American Psychological Association. Respondents ($n=185$) were asked to provide responses to case-vignettes, and the selection of a counter-transference option was compared with whether the participant had undergone personal psychotherapy. Increased exposure to personal psychotherapy was associated with increased awareness of counter-transference. However, objective assessment of these skills would be required to draw conclusions.

There is also, however, evidence that well-organised communication skills training improves the ability of psychiatric trainees to communicate effectively with their patients. Rimondini *et al.* (2010) conducted a trial of a communication skills teaching course for psychiatric trainees [36]. This consisted of four weeks of one-hour sessions which were run by experienced facilitators teaching on communication skills in psychiatry. The content included teaching on a reasoned use of open inquiry, patient orientating and patient supporting statements and active listening skills. Teaching methods included videotaped consultations, role play with video feedback and critical incident reports. This trial was conducted with a small sample of 10 psychiatric residents, who each interviewed 12 simulated patients (eight interviews before the intervention training and four afterwards). After the training a significantly improved performance was observed in interviews. The research team controlled for experience; however, it is acknowledged that the sample size is too small to draw conclusive conclusions. This intervention could however be assessed for impact on the management of defence, coping, transference and counter-transference in future research.

3.1.3 Developing novice therapists

Many of the skills in the section 'developing novice therapists', including the ability to build, maintain and end treatment, discuss diagnostic and prognostic information and identifying ideas, concerns and expectations, were not addressed in broad research studies for developing skills among trainee psychotherapists. These skills were, however, addressed in studies of training in specific psychotherapies, thereby indicating that these skills may be further studied under psychotherapy level 2 skills. In addition, motivational interviewing and many of the specific psychotherapy skills including the management of defence, transference and counter-transference were not addressed in the literature, suggesting a dearth of evidence in the specifics of training in these skills.

3.1.3.1 Developing novice therapists: builds, maintains and ends treatment

Papers not specifically aligned to the training in one form of psychotherapy did not focus on whether trainees were able to build, maintain and end treatment. This form of analysis was only identified in papers studying training in a specific psychotherapeutic intervention.

3.1.3.2 Developing novice therapists: establishes shared goals, shared decision making and gains trust

Papers not specifically aligned to the training in one form of psychotherapy did not focus on whether trainees were able to establish shared goals, decision making and trust. As above, this aspect of psychotherapy training was only addressed in studies focusing on training in a specific form of psychotherapy.

3.1.3.3 Developing novice therapists: administers interventions including acknowledging, expressing empathy, stimulating, structuring, advising and confronting

Of these aspects of therapeutic skills, only the development and expression of empathy was addressed in the literature. The evidence for developing empathy in training psychotherapists is presented above in section 3.1. One other paper by Strupp (1955) [37] found that analysed practitioners (i.e. those who had undergone personal psychotherapy) were generally more 'active' in consultations and used more interpretations, silences, and structuring responses than the unanalysed group. This was a study conducted with a mixture of psychiatrists, social workers and psychologists who provided responses to a written case vignette. Further research would be required to establish whether there is an association between undergoing personal psychotherapy and active participation in consultations.

3.1.3.4 Developing novice therapists: communicates diagnostic and prognostic information

No studies were identified which assessed how to teach or how to assess whether psychotherapists in training are able to communicate diagnostic and prognostic information. It is likely that this is an area which is often addressed by supervisors, and there is no research evidence to support any specific teaching techniques for communication of diagnosis and prognosis.

3.1.3.5 Developing novice therapists: able to apply motivational techniques appropriately

There is research suggesting that workshops that include didactic training and experience, including role play, are helpful in training mental health workers to use motivational interviewing techniques when they tackle substance abuse. However, specific studies establishing whether trainee psychotherapists apply appropriate motivational techniques appropriately were not identified during the course of this review.

In conclusion, evidence for how training may develop level 1 psychotherapy skills exists for the majority of skills above, although robust evidence is lacking overall. However, no research was identified concerning some of the skills above, particularly those relating to the particular aspects of consultations (i.e. identification of ideas, concerns and expectations). Further discussion is required as to whether these may be better classified into level 2 psychotherapy skills i.e. best studied in relation to a specific psychotherapy.

3.2 Evidence presented by intervention

Through database and literature searches, a range of interventions and teaching techniques were identified which aim to develop at least one of the level 1 psychotherapy skills outcomes. The interventions identified ranged from role play and simulation to participation in personal psychotherapy or Balint groups. The quantity and quality of evidence for each of the interventions varied hugely, with areas such as personal psychotherapy and mindfulness significantly more researched than other interventions.

Studies utilised a range of methods to assess the impact of interventions, ranging from self-reported changes by participants to independent scores using validated empathy measures. Most supporting evidence suggesting that a combination of methods beginning with theoretical training and education on the importance of a variety of skills, followed by role play and continuous feedback on performance shows most promise for developing these skills. However, further research into the majority of these interventions is warranted, where objective measurements of an intervention's impact would add to the quality of evidence available.

3.2.1 Role play

Existing evidence suggests that well organised, structured role play is an effective teaching technique for level 1 psychotherapy skills. Role play has been used in psychiatric education for over 30 years. The

term has, however, been used interchangeably in the research literature and there were no studies identified specifically using only role play in psychiatric education to develop level 1 psychotherapy skills. Rimondini *et al.* [36] also implemented role play as an aspect of their communications skills training, as discussed above.

A study by Ruiz *et al.* with 202 psychology trainees investigated participants' opinions of whether a role play or peer counselling technique was more effective in developing empathy, self-awareness and active listening[38]. Peer counselling involved participants sharing a personal experience and engaging with another student acting as a therapist to discuss the issue. For the role play exercise, students were provided with descriptions of the roles to enact. Overall participants reported a greater utility associated with peer counselling. Specifically, participants reported a stronger effect attributed to peer counselling for improving self-awareness and professional competence, but for empathy development a slight preference for role play was reported.

Barney *et al.* [39] use role play to train psychiatrists in the US, and describe the advantages of using role play as a teaching technique in this scenario. Although there are no published trials of Barney's role play teaching, this is the most comprehensive overview of how one may incorporate effective role play into psychiatric education. Barney and Shea's research team have defined 'microtraining' and 'macrotraining', the first being the use of role play to focus on the development of specific skills i.e. empathy, and the latter being the use of role play to incorporate skills into scenarios akin to patient interactions. Barney *et al.* describe in detail the advantages of using role play as a teaching technique for psychiatrists. These include the chance to assess a trainee's skills accurately with a broad range of case material, and the opportunity to use repetition to consolidate skills learned including how to transform angry and awkward moments while experimenting with different types of responses. Finally, a teacher can model an interview technique, and the student can immediately implement the new interview technique. Barney also recommends that a useful adjunct to role play is reviewing videotaped interactions with patients, and using role play to model and practise alternative ways of running the consultation. There are, however, no studies yet investigating the effects of role play training, and the different aspects of successful training on the ability of a trainee to demonstrate level 1 psychotherapy skills.

3.2.2 Peer counselling

This is a technique only referred to in a study by Ruiz *et al.* [38] who compared peer counselling with role play in a study with psychology trainees. Ruiz *et al.* conclude that peer counselling is more effective than role play for the development of self-awareness and personal growth, with role play more effective for empathy development. The authors conclude that the discomfort of sharing a personal experience outweighs the utility of peer counselling as a teaching technique, and that the emotional nature of teaching in this way ultimately enhances the learning. This study is limited by relying on self-reports by participants and a small sample size; a study with independent assessment of the skills by a professional prior to and following intervention would provide more objective evidence.

3.2.3 Videotaping with feedback

Ascencio [15], in her thesis research, worked with four students of psychology or social work. They were recorded conducting 12 consultations with clients, and at varying points during the 12 sessions watched a model video of an empathetic consultation. At this point, participants also reviewed video footage of a pre-intervention consultation and were provided with feedback on how to improve. This resulted in increased empathy post-intervention for three participants as measured by client rating and third-party observer rating of verbal and non-verbal empathy skills. Although a small study with no control, this suggests an intervention for improving empathy with objective measurements of empathy used. Rimondini *et al.* [36] conducted a trial of a communication skills teaching course for psychiatric trainees [36]. This consisted of four one-hour sessions over a four-week period, run by experienced facilitators teaching on communication skills in psychiatry (see section 3.1.2.4).

3.2.4 Simulation

The term 'simulation' is used in medical education literature to refer to both simulated and standardised patients. Simulated patients may refer to people who have been coached to present certain symptoms or signs, while standardised patients are people with a disease who have been trained to present their condition in a certain way. A separate commentary on virtual simulation can be found below.

McNaughton *et al.* [40] reviewed the use of simulation using actors and trained patients in psychiatric education, and concluded that this is a useful method for early training of psychiatrists, but that for more senior trainees simulated patients do not provide the depth required for learning to manage transference and counter-transference – essential level 1 psychotherapy skills.

3.2.5 Virtual patients

The evidence for the use of virtual reality and virtual patients in psychiatry or psychotherapy training is limited, with no studies investigating the teaching of level 1 psychotherapy skills specifically using virtual patients. Kenny and Parsons *et al.* [41] in the United States have published papers describing the use of simulated patients in psychiatry and psychotherapy training. The created virtual patient is capable of verbal and non-verbal responses to questions, and an external clinical observer instructs the simulated patient to respond depending on the trainees' interventions. The authors present the case for the use of virtual patients to provide improved teaching opportunities when compared with 'standardised patients' (i.e. actors trained to play a certain role). Virtual patients provide an opportunity to learn skills in a realistic but protected environment, with immediate feedback. This compares to traditional methods with trainees 'practising' on patients with subsequent supervision, where feedback is provided by a supervisor too late to make an impact on the patient. The authors do, however, acknowledge that the limitations of virtual reality and virtual patients are most pronounced when trying to address psychotherapy training; namely the lack of ability to continue spontaneous conversation on the abstract topics that often comprise psychotherapy.

An analysis of the current research in this field suggests that with current software, the use of virtual patients for training in level 1 psychotherapy skills is not sufficient, as simulated patients have a limited number of responses to predetermined questions.

3.2.6 Personal psychotherapy

Personal psychotherapy has the potential to contribute to the development of a novice therapist in a variety of ways:

- By providing awareness and insight into personal conflicts that may affect therapy
- By developing empathy, warmth and acceptance
- By improving self-care
- By developing empathy for the client role and a direct understanding of how therapy works
- By providing the opportunity to learn from a role model.

There are a number of theories and different views about whether and how personal psychotherapy contributes to the development of a psychotherapist. Here we review the literature and the impact of personal psychotherapy on the therapist in training, and their therapeutic relationships and outcomes.

The tables below summarise the papers read regarding personal psychotherapy thus far. In *Table 5*, the identified literature reviews on the topic are summarised. *Table 6* summarises the key findings of individual studies.

Table 5. Summary of literature reviews focusing on the use of personal psychotherapy during psychotherapy training

Literature reviews	Relevant findings
<p>Orlinsky <i>et al.</i> 2005. Outcomes and impacts of the psychotherapists' own psychotherapy: A research review [35]</p>	<p>Personal therapy is likely to contribute to understanding of the positives and negatives of a therapeutic relationship, development of the therapist's interpersonal skills and ability to self-care. Evidence could justify widespread personal therapy for psychotherapists.</p> <p>However, the most important determinants of therapeutic success are the positive qualities or resources that patients bring to therapy and are able to mobilise and apply effectively in the therapeutic process. Therefore, the effects of personal therapy contribute only a limited part to the therapeutic process</p>
<p>Greenberg and Staller. 1981. Personal therapy for therapists [42]</p>	<p>Evidence overall is inconclusive. Therapy seems to affect the therapist's verbal behaviour. There is no evidence that either receipt of personal therapy or length of personal therapy is positively related to various measures of client outcome. Some suggestion that undergoing therapy at the same time as delivering therapy may result in worse therapeutic outcomes for the patient</p>
<p>Macran and Shapiro. 1998. The role of personal therapy for therapists: A review [23]</p>	<p>Self-reported survey data suggest increased awareness of the importance of the therapeutic relationship, increased empathy and patience after personal therapy. Client outcomes were assessed as therapist and client ratings of improvement, and drop-out rates. Macran concludes: 'Whilst the majority of therapists feel that they have benefited professionally from personal therapy, there is very little empirical evidence that it has any measurable effect on client outcome'</p> <p>However, positive effects have been observed in therapists' behaviour in therapy. Observers and self-reports by therapists showed increased ability to display warmth, empathy, genuineness and awareness of counter-transference</p>
<p>Malikiosi-Loizos. 2013. Personal Therapy for Future Therapists: Reflections on a still debated issue [22]</p>	<p>Evidence suggests improvements in empathy and warmth</p>

Table 6. Summary of the use of personal psychotherapy during psychotherapy training

Paper	Participants	Outcome measure(s) and methods	Relevant findings
Probst. 2015. The Other Chair: Portability and Translation From Personal Therapy to Clinical Practice [43]	30 social workers (United States)	Individual interviews Qualitative, thematic content, analysis	'Enhances personal qualities that contribute to professional competence and offers exposure to concrete practices that are portable across roles'
Bike <i>et al.</i> 2009. Processes and outcomes of psychotherapists' personal therapy: Replication and extension 20 years later [24]	American psychologists (<i>n</i> =219), counselors (<i>n</i> =191) and social workers (<i>n</i> =192)	Survey (repeat of a survey done by Norcross <i>et al.</i> in 1988) Survey responses summarised	Reported increase in therapist empathy
Pope and Tabachnick. 1994. Therapists as patients: A national survey of psychologists' experiences, problems and beliefs [4]	American psychologists	Self-reported survey	Enhanced self-awareness and self-understanding followed by better self-esteem and improved skills as a therapist
Katz <i>et al.</i> 1958. Remainder patient attributes and their relation to subsequent improvement in psychotherapy [44]	232 therapy cases	Patient ratings	Ratings of patient improvement were not related to whether the therapist had undergone therapy
Mackey and Mackey. 1994. Personal psychotherapy and the development of a professional self [25]	30 social workers	Interviews; thematic content analysis	Personal therapy improves self-awareness, active listening, empathy and awareness of personal and professional identity
Macran <i>et al.</i> 1999. How does personal therapy affect therapists' practice? [45]	Seven therapists	Interviews; thematic content analysis	These clinicians felt they translated their experiences as clients into skills and attitudes that they used in their practice
Wiseman and Shefler. 2001. Experienced psychoanalytically oriented therapists' narrative accounts of their personal therapy: Impacts on professional and personal development [46]	Five psychotherapists	Interviews; thematic content analysis	Personal therapy increases use of self-awareness in therapeutic relationships

<p>Strupp. 1955. The effect of the psychotherapist's personal analysis upon his techniques [37]</p> <p>Strupp. 1958. The psychotherapist's contribution to the treatment process [47]</p> <p>Strupp. 1973. The therapist's performance: A comparison of two professional groups [48]</p>	<p>Three studies with 41, 8 and 56 participants, respectively. Mixture of psychiatrists, clinical psychologists and social workers</p>	<p>Vignette presented and written responses analysed. Statistically separated depending on years of experience</p>	<p>Those who had undergone therapy were less passive. Strupp concluded that the responses of therapists who had received personal therapy were more consistent with recommendations in the literature (marginally significant)</p> <p>Limited by small sample sizes, and cannot know how written responses translate to clinical practice</p>
<p>Strupp. 1973. The therapist's performance. A comparison of two professional groups [48]</p>	<p>Therapy conducted by psychiatric residents (who had not undergone psychotherapy) compared with private therapists.</p>	<p>Compared questionnaire responses from patients of two groups</p>	<p>Patients were equally satisfied with both therapies</p>
<p>Holt and Luborsky. 1969. Personality patterns of psychiatrists. [49]</p>	<p>Psychiatric residents</p>	<p>Rating of supervisors</p>	<p>No difference between supervisor ratings for the resident's therapeutic competence and whether the resident had undergone therapy</p>
<p>MacDevitt. 1987. Therapist's personal therapy and professional self-awareness [5]</p>	<p>Clinical psychologists (n=185)</p>	<p>Survey</p>	<p>Personal therapy increases the readiness for using self-awareness as a tool</p>

In summary, personal psychotherapy shows potential to improve self-awareness, psychological resilience and empathy, although overall quality of evidence is low and therefore firm conclusions cannot be drawn.

3.2.7 Balint groups

Balint groups are intended to facilitate study and exploration of the doctor–patient relationship. According to the Balint Society, the goal of the Balint group experience is to ‘help all health and social care professionals to gain a better understanding of the emotional content of their relationship with patients’ [50]. Initially focused on general practitioners, Balint groups are now used in a range of professional training courses. This includes the Royal College of Psychiatry, which mandates that trainee psychiatrists in the UK partake in a minimum of 30 Balint groups throughout their training [51].

Balint groups range in size, consisting of 4–10 participants, and meet regularly, usually once a week for at least six months. One participant presents a case, without notes, for around ten minutes, and then sits back from the discussion allowing others to discuss and analyse the case, focusing primarily on the therapeutic relationship. The presenter only feeds in towards the end. These groups are facilitated by two experienced leaders.

The tables below summarise the key findings regarding the effect of Balint groups on the aforementioned psychotherapy skills. These are divided into studies focusing on psychiatric trainees, and trainees of other disciplines.

Table 7. Summary of studies using Balint groups with psychiatric trainees

Paper	Balint group intervention and participants	Participants	Outcome measure(s)	Methods	Outcomes
Graham <i>et al.</i> 2009. Balint-Style Case Discussion Groups in Psychiatric Training: An Evaluation [10]	Weekly sessions for 12 weeks, lasting 75 minutes	21 participants (16 psychiatric residents and 5 counsellors) – mandatory participation	Modified Psychological Medical Inventory	Self-report at the start, midpoint and end. Three participants scoring the lowest and highest change scores were interviewed	Self-awareness and self-efficacy improved
McKensy and Sullivan. 2016. Balint groups – helping trainee psychiatrists make even better use of themselves [27]	Three pilot Balint sessions	Nine psychiatric trainees.	13 items, open-ended questions	Participants provided feedback after final session. Analysed with standard thematic analysis	Positive experience. Trainees reported increased empathetic awareness
Fitzgerald and Hunter. 2003. Organising and evaluating a Balint group for trainees in psychiatry [26]	75-minute sessions weekly for one year	Eight psychiatry SHOs	Answers to a vignette which is a question for the Medical Research Council psychiatry exam	Quantitative evaluation of the responses	Empathetic awareness and listening improved

Table 8. Summary of studies using Balint groups with non-psychiatric trainees

Paper	Balint group intervention	Participants	Outcome measure(s)	Methods	Outcomes
Turner and Malm. 2004. A preliminary investigation of Balint and non-Balint behavioral medicine training [52]	Nine months of Balint training. Control group did not participate	14 residents	Psychological Medicine Inventory (PMI)	PMI completed at baseline and at 12 months	Self-efficacy improved
Rabinowitz <i>et al.</i> 1994. Developing psychosocial mindedness and sensitivity to mental-health issues among primary-care nurses using the	Fortnightly Balint group for 12 months	13 primary care nurses participated	PMI and participant listing of important mental health topics	Initial interview, midway and at the end	Self-efficacy improved

Balint group method [53]					
Rabinowitz <i>et al.</i> 1996. Preventing burnout: increasing professional self-efficacy in primary care nurses in a Balint Group [54]	Fortnightly Balint group for 12 months	13 primary care nurses participated	PMI and burnout questionnaire (Shirom–Melamed)	Initial interview, midway and at the end	Increased awareness and ability cognitions
Abeni <i>et al.</i> 2014. Psychological care of caregivers, nurses and physicians: a study of a new approach [55]	30 one-hour Balint sessions	10 caregivers, 11 physicians (haematologists) and 13 nurses	Defensive mechanisms Response Evaluation Measure (REM-71), Satisfaction Profile and the Group Climate Questionnaire	Surveys completed at baseline and after intervention	Defensive mechanism matured
Cataldo <i>et al.</i> 2005. Association between Balint training and physician empathy and work satisfaction [29]	Balint group once a week for two years. Optional	Family medicine residents	Jefferson Scale of Physician Empathy (JSPE)	Compared responses to the JSPE between residents who attended the Balint group and those who declined	No improvement in empathy
Ghetti <i>et al.</i> 2009. Burnout, psychological skills, and empathy: Balint training in obstetrics and gynecology residents [28]	Two one-hour sessions per month for 12 months	17 obstetrics and gynaecology residents	JSPE and PMI	Baseline and 12-month questionnaires	No improvement in empathy

Two literature reviews were also identified regarding the use of Balint groups in psychotherapy training. These have suggested potential increases in self-efficacy (see *Table 9*).

Table 9. Summary of literature reviews reviewing Balint groups

Paper	Results
Van Roy <i>et al.</i> 2015. Research on Balint groups: A literature review [56]	This review focused primarily on psychological self-efficacy. Six articles measured this; three found an increase and three found no change. One article identified an increase in self-efficacy only after long-term participation in a Balint group.
Mahoney <i>et al.</i> 2013. Balint groups: the nuts and bolts of making better doctors [57]	The most frequently reported outcome is an improvement in confidence, self-esteem, competence with patient encounter. No improvement in empathy scores.

In summary, Balint groups show potential to improve aspects of expert communication and developing resilience. Most studies reported that participants considered participation in Balint groups a positive experience, and the increasing use of Balint groups in psychiatry training provides an ideal environment for further study on the specific impact of participating in a group.

3.2.8 Mindfulness

Mindfulness is one of the most researched interventions covered in this review. There is some evidence that mindfulness may improve psychological resilience in psychiatric trainees and allied health professionals. Shapiro *et al.* [3] found that counselling trainees exposed to mindfulness-based stress reduction (MBSR) demonstrated increased positive affect and self-compassion. This review identified studies which showed mindfulness to increase empathy, improve self-awareness and improve therapeutic relationships, and one study identified improved patient outcomes.

Shapiro *et al.* demonstrated improved empathy with medical students [30]. Chambers and Maris [58] reviewed five qualitative studies, primarily self-reported effects by therapists, and identified that mindfulness had a positive impact on therapists' and psychotherapists' self-awareness and the therapeutic relationship. Grepmaier *et al.* [59] found that meditation improved patient outcomes (see *Table 10*).

Existing research is mixed on the impact of participating in mindfulness on empathy. Studies of mindfulness-based interventions using the Interpersonal Reactivity Index (IRI) did not find any changes in empathy as a result of the intervention [31-33]. Hojat *et al.* [34] used the Jefferson Scale of Empathy and found a moderate change in empathy. Shapiro *et al.* [30] found that, with medical students, empathy was higher in the mindfulness intervention group (Empathy Construct Rating Scale).

A review by Lamothe *et al.* [60] including all healthcare professionals (not limited to psychiatrists) demonstrated that MBSR interventions can lead to improvements in healthcare professionals' empathy (a range of scales were used to assess empathy). *Table 10* summarises the identified impact of mindfulness.

Table 10. Studies investigating the impact of mindfulness on psychotherapy level 1 skills

Authors	Participants	Research design	Intervention	Relevant outcome measure(s)	Results relevant to this review
Grepmaier <i>et al.</i> 2007. Promoting Mindfulness in Psychotherapists in Training Influences the Treatment Results of Their Patients: A Randomized, Double-Blind, Controlled Study [59]	18 psychotherapists in training (control group <i>n</i> =9)	Patient outcomes of 124 inpatients were assessed and compared between the two groups	The intervention group practised Zen meditation for one hour prior to commencing work	Session Questionnaire for General and Differential Individual Psychotherapy (STEP), the Questionnaire of Changes in Experience and Behavior (VEV) and the Symptom Checklist (SCL-90-R)	The patients of those in the meditation group had significantly higher evaluations for individual therapy and showed greater symptom reduction

<p>Lamothe <i>et al.</i> 2018. Developing professional caregivers' empathy and emotional competencies through mindfulness-based stress reduction (MBSR): results of two proof-of-concept studies [61]</p>	<p>12 psychology students and 25 professional psychologists completed eight-week programme</p>	<p>Outcome measures assessed pre, post and at three months (professionals only)</p>	<p>Standard mindfulness-based stress reduction – eight consecutive weekly two-hour sessions and a full-day silent retreat</p>	<p>Empathy measured by Interpersonal Reactivity Index (IRI), Profile of Emotional Competence (PEC), Acceptance and Action Questionnaire-II (AAQ-II) and the Emotion Regulation Scale (ERQ) and Geneva Emotion Recognition Test (GERT)</p>	<p>Participants who completed the programme improved on all measures except the PEC's Identify Others' Emotions and the IRI's Empathic Concern</p> <p>Programme effects were maintained at three months</p>
<p>Rimes and Wingrove. 2011. Pilot Study of Mindfulness-Based Cognitive Therapy for Trainee Clinical Psychologists [31]</p>	<p>20 clinical psychology trainees</p>	<p>Outcome measures assessed pre- and post-intervention</p>	<p>Eight-week mindfulness-based cognitive therapy</p>	<p>Perceived Stress Scale (PSS), IRI, Self-Compassion Scale (SCS), Reflection-Rumination Questionnaire (RRQ)</p>	<p>Increase in self-compassion and empathetic concern</p> <p>No changes in empathy</p>
<p>Shapiro <i>et al.</i> 2007. Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training [3]</p>	<p>22 treatment group, 32 control. Master's level counselling psychology students</p>	<p>Prospective cohort controlled study</p>	<p>Ten-week stress intervention including eight weeks mindfulness</p>	<p>Mindful Attention Awareness Scale (MAAS), Positive and Negative Affectivity Schedule (PANAS), PSS, RRQ, State Trait Anxiety Inventory (STAI), SCS</p>	<p>Relative increase in positive affect, mindfulness and self-compassion</p>
<p>Shapiro <i>et al.</i> 2005. Mindfulness-based stress reduction for health care professionals: Results from a randomized trial [62]</p>	<p>28 intervention, 20 control. Physicians, social workers, physiotherapists and psychologists</p>	<p>Randomised controlled study</p>	<p>Eight weeks of two-hour MBSR</p>	<p>Brief Symptom Inventory (BSI), Maslach Burnout Inventory (MBI), PSS, Satisfaction with Life Scale (SLS), SCS</p>	<p>Increase in self-compassion</p>

McCullum and Gehart. 2010. Using mindfulness meditation to teach beginning therapists therapeutic presence: a qualitative study [8]	13 trainee family therapists	Qualitative study – participants were asked to keep journal of impact of sessions	Integrated teaching of mindfulness – 2.5-hour sessions weekly for a semester	Thematic analysis of journals	Increase in self-awareness, increase in awareness in therapeutic relationship, increase in compassion
Chrisman <i>et al.</i> 2009. Qigong as a Mindfulness Practice for Counseling Students [9]	31 Master’s level counselling students	Qualitative study – journal assignments	Two-hour sessions for 15 weeks (75 minutes mindfulness, 15 minutes academic content)	Inductive content analysis	Increase in self-awareness, self-compassion and self-care
Schure <i>et al.</i> 2008. Mind-body medicine and the art of self care: Teaching mindfulness to counseling students through yoga, meditation and qigong [63]	33 Master’s level counselling students	Qualitative study – journal assignment	Two-hour sessions for 15 weeks (75 minutes mindfulness, 15 minutes academic content)	Inductive content analysis	Increase in awareness of relationship patterns including counter-transference
Shapiro <i>et al.</i> 1998. Effects of mindfulness-based stress reduction on medical and premedical students [30]	Premedical and medical students	Self-reported outcomes	Eight-week MBSR training	Self-reported empathy	Significantly higher self-reported empathy than control group
Aiken. 2006. The potential effect of mindfulness meditation on the cultivation of empathy in psychotherapy: A qualitative inquiry [64]	Six psychotherapists who each had more than 10 years of experience practising both therapy and mindfulness meditation	Interviews	Minimum requirement for participation included 10 meditation retreats of 10 days or more	N/A	Improved ability to reflect on inner client experiences
Birnbaum. 2008. The Use of Mindfulness Training to Create an ‘Accompanying Place’ for Social Work Students [7]	12 third-year social work students (7 included in analysis due to poor attendance)	Transcripts of sessions and students’ writing	Eight weekly sessions of two hours	Thematic content analysis	Reported significant increases in self-awareness

In summary, mindfulness may contribute towards the development of self-awareness, self-care and empathy, although a large amount of existing data are qualitative or rely on self-reported data. Objective measurements, such as those introduced by Grepmaier *et al.* [59] for measurement of impact on the therapist and the patient, would provide improved quality of evidence to support mindfulness as an intervention to develop psychotherapy level 1 skills.

3.2.9 Reflection

No studies were identified investigating the impact of reflective writing on the development of psychotherapy level 1 skills. Mann *et al.* reviewed the literature on reflective writing for health professionals in 2009 and found no evidence of impact on self-understanding [65].

3.2.10 Self-care training

Mache *et al.* [2] described implementation of self-care training delivered by psychotherapists. Participants were psychiatric trainees who received 90-minute sessions for 12 weeks. The intervention effect was assessed by survey data (Perceived Stress Questionnaire; Copenhagen Psychosocial Questionnaire; Brief Resilient Coping Scale; questionnaire of self-efficacy, optimism and pessimism) at baseline, three and six months after the intervention. Comparing the control group ($n=35$) and intervention group ($n=37$), the authors reported an improvement in resilience and self-efficacy, and an improved relationship with patients. There was, however, no long-term evaluation of impact.

4. Discussion

Drawing conclusions from the papers reviewed, there is existing evidence to support certain interventions for the development and training of level 1 psychotherapy skills. There is more evidence available for the development of skills classified as 'developing resilient practitioners' and 'developing expert communicators'. A dearth of evidence was identified to 'develop novice therapists', with these outcomes often only referred to in literature which addresses training in a specific psychotherapy.

Role play, videotaping and peer counselling interventions are to support the development of self-awareness and empathy of participants. The use of videotaping with feedback, combined with theoretical teaching on communication skills including empathy is promising, yet obviously a time-consuming teaching intervention that would require adequate numbers of trained supervisors. In an environment where such an intervention would be feasible, the evidence is favourable for this teaching intervention. Role play has been widely used in psychiatric education, but research evidence on this topic is lacking. Barney's [39] role play standards would merit further research to establish how well-delivered role play training develops level 1 psychotherapy skills. Peer counselling as a teaching technique was referred to in only one research study, where participants reported this as an effective method to cultivate empathy. Further research would be required to establish whether this is an intervention for consideration in training programmes.

Personal psychotherapy, a long-debated issue, and Balint groups, more recently researched, show promise for nurturing several of the level 1 psychotherapy skills including self-awareness and empathy. Mindfulness is also a more recent and fairly researched area, although limited amounts of research have been conducted directly with psychiatric trainees. There is insufficient evidence to draw firm conclusions on whether any of these interventions should be mandatory during training. However, it may be appropriate to offer all as optional during training programmes and allow trainees to use those they feel appropriate to themselves to develop the required level 1 psychotherapy skills. This would be a different approach from the majority of training programmes read about in the course of conducting this project. However, offering optional participation may facilitate trainees seeking out the techniques which work best for them as an individual.

In conclusion, the vast majority of studies are with small sample sizes and further studies would be required to establish which interventions may be most effective. Particularly, where possible, control groups should be implemented into research designs, and objective outcome measures, such as independently observed consultations, should be used to improve the evidence quality in psychiatric medical education.

5. Assessment methods

Research identified in the field of psychotherapy level 1 training utilises a variety of assessment scales. There is little written about how to assess the level 1 psychotherapy skills in practice, and which scales and tools are most useful or validated with the psychiatric population. There are also various aspects of the therapist–patient interaction which can be assessed. These include the following:

1. Direct measures of knowledge
2. Measurement of skill at implementing a treatment
 - a. Evaluation of patient outcome
 - b. Evaluation of treatment sessions
 - c. Evaluation of standardised role play
3. Feedback from colleagues and/or patients
4. Portfolios and reflective writing.

There are advantages and disadvantages to each of these assessment types, and many challenges with regard to this particular field. There was little research evidence identified suggesting specific methods which may be implemented for assessment of level 1 psychotherapy skill competence.

6. Potential assessment tools

Many different rating scales and questionnaires were implemented throughout the research reviewed for this project. These are summarised below, although an appraisal of the utility, benefits and disadvantages of each was beyond the scope of this review. The rating scales have been categorised by the aspect of the therapeutic relationship that they assess.

6.1 Therapist in action

- Enhancing Assessment of Common Therapeutic Factors

6.2 Therapeutic Alliance

- Luborksy Penn Helping Alliance
- Penn Helping Alliance Questionnaire (HAq)
- Horvath and Greenberg's Working Alliance Inventory
- California Psychotherapy Alliance Scales (CALPAS)

6.3 Empathy

- Measures for measuring empathy include:
 - Self-report measures
 - Interpersonal Reactivity Index
 - Jefferson Scale of Physician Empathy
 - Questionnaire Measure of Emotional Empathy
 - Hogan Empathy Scale
 - Groningen Reflection Ability Scale
 - LaMonica's Empathy Construct Rating Scale
 - General Empathy Scale
 - Medical Empathy Scale
 - Empathy and attributes towards caring for the elderly
 - Observer rating
 - A tentative scale for the measurement of empathy (accurate empathy scale)

- Carkhuff's Empathetic Understanding Scale
- Pencil-and-paper empathy rating test
- The rote-interaction analysis system
- Rating scales for the assessment of Empathetic Communication in Medical interviews (REM)
- Liverpool Clinical interaction Analysis scheme
- Instrument Resident Communication Evaluation Form
- Four Habits Coding Scheme
- Empathetic Communication Coding System
- Coding of empathetic opportunities and continuers
- Patient rating measures
 - Consultation and Relational Empathy (CARE) Measure
 - Therapeutic bond scales – revised
 - SERVQUAL questionnaire
 - Scales for patient perceived empathy and related constructs
 - Reynolds Empathy Scale
 - Patient perception of the doctor's empathy
 - Jefferson Scale of Patient Perceptions of Physician Empathy

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