Jones et al.
Human-Animal Interactions (2023) 11:1
https://doi.org/10.1079/hai.2023.0041

CABI Human – Animal Interactions

RESEARCH

Guidance on minimum standards for canine-assisted psychotherapy in adolescent mental health: Delphi expert consensus on terminology, qualifications and training

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Abstract

Introduction: Canine-assisted psychotherapy (CAP) is an emerging field that is largely unregulated and at times fragmented. Despite this, CAP shows promise as an innovative intervention for improving adolescent mental health. To ensure safe, ethical interventions incorporating dogs, providers need minimum standards to guide intervention development and subsequent research. Initially, standards should guide the preliminary steps required to prepare for and set up CAP interventions. These should include consensus agreement on the specific training and qualifications of providers, and training/assessment standards for canines to deliver such interventions. Also crucial is establishing clear expectations about treatment goals via use of clinically accurate terminology.

Methods: Using Delphi methodology, experts in animal-assisted therapy (AAT) were recruited globally to complete questionnaires in an iterative process designed to establish consensus. Consensus was met when 80% or more experts agreed that an item was either 'important' or 'essential' and therefore included or 'unimportant' or 'irrelevant' and therefore excluded from the minimum standards required to develop a CAP group intervention for adolescents experiencing common mental health disorders including depression, anxiety, and adjustment disorder.

Results: Over two rounds, consensus was reached to include 34 items and exclude none; 45 items remained unresolved. Standardized terminology was identified that clearly defined the type and scope of the service being provided, delineating psychotherapeutic treatments from informal dog-related interactions. To deliver the CAP intervention, providers must have formal qualifications and licensure/registration in mental health, training and supervision in AAT, and canine-specific training and experience. Important temperament characteristics of working dogs were identified including absence of aggression, and enjoyment working in CAP. Dogs should be formally assessed in obedience and AAT applications, in partnership with a bonded handler. Assessors of dog-handler teams should be independent and have expertise in both canine ethology and AAT.

Discussion: These results reinforce the importance of accurate and standardized terminology, and the need for further community education on the role of 'therapy' and 'therapy dogs'. Consensus on the essential content for provider training was not achieved, highlighting the diversity of practice globally. Nevertheless, there was recognition of the need for breadth and depth of knowledge across the domains of mental health, AAT, canine training, and handling dogs for AAT applications. Dogs working independently of a bonded handler were not supported, nor were mental health providers working with an 'assessed' dog in the absence of AAT and CAP training. Implications for clinical practice are explored.

Keywords: animal-assisted therapy, canine assisted psychotherapy, adolescence, mental health, Delphi, standards, guidelines, terminology, qualifications, training

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Submitted: 19 August 2023. Accepted: 13 November 2023. Published: 20 December 2023

Introduction

Animal-assisted intervention (AAI) is an umbrella term that refers to the formal and informal inclusion of animals in human health, welfare, or education. A sub-set of AAIs, animal-assisted therapy (AAT) is a formal intervention that incorporates animals into various types of professionally delivered therapies, such as physical or psychological therapy (International Association of Human-Animal Interaction Organizations, 2018; Fine *et al*., 2019b). The current study is focused on AATs delivered by mental health professionals, incorporating psychotherapeutic content, and assisted by the meaningful inclusion of dogs. This form of AAT is referred to as canine-assisted psychotherapy (CAP).

Canine-assisted psychotherapy (CAP) is an emerging field that is largely unregulated and at times fragmented. Despite this, CAP shows promise as an innovative intervention for improving adolescent mental health. To ensure safe, ethical interventions incorporating dogs, providers need minimum standards to guide intervention development and subsequent research. Initially, standards should guide the preliminary steps required to prepare for and set up CAP interventions. These should include consensus agreement on the specific training and qualifications of providers, and training/assessment standards for canines to deliver such interventions. Also crucial is establishing clear expectations about treatment goals via use of clinically accurate terminology.

Of particular interest in this study is CAP delivered to adolescents experiencing common mental health disorders. Adolescence is an important developmental period for a number of reasons, including reorganization of regulatory systems in the brain (Steinberg, 2005; Scherf *et al*., 2013; Andrews *et al*., 2021), increasing importance of the peer group and appropriate social experiences, increasing emotional and cognitive demands, sexual and identity development, and individuation (Havinghurst, 1956; Laible *et al*., 2004; La Greca and Harrison, 2005; Narr *et al*., 2019; Laursen and Veenstra, 2021). Importantly, many mental health disorders have their origin in childhood and adolescence (Costello *et al*., 2005). Mental health difficulties during adolescence can severely impact educational and social functioning, causing severe distress (Lawrence *et al*., 2015; Forbes *et al*., 2019; Garcia-Carrion *et al*., 2019). Despite this, young people have historically been a difficult population group to engage, reporting barriers to help seeking including 'talking with strangers,' 'embarrassment,' and 'anxiety' (Lawrence *et al*., 2015; Mission Australia and Black Dog Institute, 2017; Brennan *et al*., 2021). It is therefore important to make interventions for this age group engaging to overcome the possible stigma associated with help seeking.

AAIs have been repeatedly shown to be an effective tool to assist with engagement and rapport building (Wesley *et al*., 2009; VanFleet and Faa-Thompson, 2010; Fine and Beck, 2015; Maharaj, 2015; Heerde *et al*., 2017; Trujillo *et al*., 2019; Sikstrom *et al*., 2020). Our previous research indicates CAP is a promising intervention for adolescents experiencing common mental health disorders, and warrants further research (Jones *et al*., 2019). Due to methodological and terminological concerns (Rodriguez *et al*., 2020; Santaniello *et al*., 2020; Rodriguez *et al*., 2023) and poor delineation between the various types of formal and informal interventions (Jones *et al*., 2018; Kerulo *et al*., 2020; Fine and Andersen, 2021), establishing the efficacy of CAP is difficult.

There are calls for RCTs to improve the evidence base (e.g., Fine and Andersen, 2021); however, there are no published standards or guidelines for the development of such interventions (Jones *et al*., 2019). Replicability of existing studies is limited by a lack of detailed protocols or manualization (Jones *et al*., 2019; Rodriguez *et al*., 2020). Of the CAP intervention studies published in the past 5 years, one is manualized (Kashden *et al*., 2020) and one is provided exclusively to adolescents (Trujillo *et al*., 2019). The majority of recent publications involving dogs in AAI explore the impact of unstructured, informal, or non-professionally directed interactions (e.g., Capparelli *et al*., 2020; Crossman *et al*., 2020; Gillespie and Neu, 2020; Lindstrom Nilsson *et al*., 2020; Norina Haefelin *et al*., 2020; Sandra Brown *et al*., 2020; Mueller *et al*., 2021; Meints *et al*., 2022) or dog training activities delivered by dog trainers with inconsistent mental health therapy integration (e.g., Lahav *et al*., 2019; Smith and Smith, 2019; Duindam *et al*., 2021; Maoz *et al*., 2021), some of which explicitly refer to 'animal-assisted therapy' or 'therapy dogs' despite no goal directed or professionally delivered therapeutic content being evident (Gillespie and Neu, 2020; Lindstrom Nilsson *et al*., 2020; Norina Haefelin *et al*., 2020; Mueller *et al*., 2021).

It is imperative that the recipients of care are clear about the nature of the treatment or service that they are receiving. The use of clinically appropriate terminology is perhaps the most obvious way for providers to describe the type and scope of the services being delivered (Winkle and Linder, 2018; Kerulo *et al*., 2020). Increasingly, professional bodies and research and academic communities are supporting the use of internationally standardized terminology such as those recommended by the International Association of Human Animal Interaction Organizations (International Association of Human-Animal Interaction Organizations, 2018; Fine and Andersen, 2021; Howell *et al*., 2022). However, a poor community understanding of terminology remains, which may result in confusion and misunderstandings. For example, a local Google Internet search of the terms 'therapy dog' (>4M hits) or 'pet therapy' (>3M hits) highlighted the breadth of use of these terms in the general community. These terms continue to perpetuate the misconception that it is the dogs themselves that provide therapy. This may reinforce the belief that a dog can 'treat' conditions, including depression and anxiety, in the absence of a qualified mental health professional or formal mental health treatment. This increases the risk of clients believing they are receiving 'therapy' when, in fact, they are not (Parish-Plass, 2014; Jones *et al*., 2019).

Of equal importance is the provider's competence to deliver the specified service (Parish-Plass, 2014; Kerulo *et al*., 2020). The literature indicates that the qualifications of those delivering CAP to adolescents vary widely, including volunteers with little to no formal training in mental health (e.g., Prothmann *et al*., 2006), students (e.g., Hamama *et al*., 2011), therapist and handler teams (e.g., Stefanini *et al*., 2015; Stefanini *et al*., 2016), mental health clinicians with 'certified' dogs (Trujillo *et al*., 2019), and mental health clinicians who have received specific training in AAT (e.g., Hartwig, 2017). Unfortunately, many studies do not report the level or degree of mental health or AAT training of providers. These data are supported by recent surveys of AAI providers globally, which indicate that providers may be operating outside their scope of practice (qualifications, training, and competence) and may not have formal training in AAI (De Santis *et al*., 2018; Kerulo *et al*., 2020; Mignot *et al*., 2021).

In many jurisdictions, the ability to provide mental health treatment is governed by regulatory controls, including the registration, licensure, and credentialing of mental health professionals (e.g., Australian Health Practitioner Regulation Agency, n.d.). In some instances, voluntary controls are sufficient and managed largely via affiliations and memberships with peak or professional bodies (e.g., Australian Counselling Association, n.d.). With regard to AAI's, a comparatively small number of jurisdictions have regulatory or legislative controls (Simonato *et al*., 2018; Meers *et al*., 2023). Professional bodies and associations for AAI are emerging, and have established AAI standards over the past 10 years, with a substantial increase in detail and quality within the past 5 years (Society for Companion Animal Studies, 2019; Trevathan-Minnis *et al*., 2021; Nieforth *et al*., 2022; Winkle *et al*., 2022; Animal Therapies Ltd, 2023; International Association for Human-Animal Interaction Organizations, 2023). Most guidelines, standards, or codes of conduct stipulate that, if delivering a professional therapeutic service (i.e., AAT), the allied health provider should be qualified to the standard set out by their regulatory authority (Society for Companion Animal Studies, 2019; Winkle *et al*., 2022; Association of Animal Assisted Intervention Professionals, 2023; International Association for Human-Animal

Interaction Organizations, 2023). Some bodies set out separate competencies (Winkle *et al*., 2022) or training requirements (International Association for Human-Animal Interaction Organizations, 2023) for allied health professionals delivering AAT. Competencies specifically for mental health professionals delivering CAP are also emerging (Trevathan-Minnis *et al*., 2021; Stewart *et al*., 2016; The Israeli Association of Animal-Assisted Psychotherapy, 2016). Nevertheless, claims of fragmentation and poor regulation globally continue (Smith and Dale, 2016; De Santis *et al*., 2018; Fine *et al*., 2019a; Brelsford *et al*., 2020; Kerulo *et al*., 2020; Mignot *et al*., 2021).

The role of dogs in CAP is important from both a health and welfare perspective and also from a methodological perspective (Rodriguez *et al*., 2023). Recent systematic reviews indicate a lack of information regarding the dogs working in AAT (Santaniello *et al*., 2021), including those working with adolescents in CAP (Jones *et al*., 2019). It is reassuring to see that AAI guidelines are increasingly focused on animal welfare, including the 'suitability' of the animal (Fine and Andersen, 2021). There is also increasing recognition that the required temperament characteristics, behavior, and skills of dogs working in AAI will vary according to the setting in which they are working (MacNamara *et al*., 2019; Mills *et al*., 2019; Nawareca-Piatek *et al*., 2020; Winkle *et al*., 2020; Bremhorst and Mills, 2021). Common recommendations include a behavioral assessment by a person who is a species specialist, who is familiar with AAI settings, who is independent of the dog-handler team, and in a setting that simulates the intended work environment (e.g., Society for Companion Animal Studies, 2019; Brelsford *et al*., 2020; Howie, 2021; Pet Partners, 2021; Animal Therapies Ltd, 2023). However, there is no published consensus on the training, temperament, or behavioral characteristics that would make a dog suitable for working in a CAP group intervention with adolescents.

To develop sound evidence-based CAP interventions for adolescents that might be tested in effectiveness or efficacy trials, manualized or replicable protocols should be developed (Fine *et al*., 2019b; Griffin *et al*., 2019; Rodriguez *et al*., 2023). They should be easily operationalized and clinically useful in order to bridge the gap between research and practice (Black *et al*., 2011; Kazdin, 2019; Leighton *et al*., 2022). They must include consensus on the preliminary requirements or preparatory steps to establish a CAP intervention. Guidelines should set out the minimum standards expected to maintain the safety and welfare of participants (such as training, qualifications, and assessment standards), while establishing clear expectations about treatment focus and treatment outcomes (e.g., the use of clinically appropriate and accurate terminology).

It is well established that expert consensus is important in the initial development of AAI standards, codes, and guidelines (e.g., Murthy *et al*., 2015; Stewart *et al*., 2016; Trevathan-Minnis *et al*., 2021; Howell *et al*., 2022; Winkle *et al*., 2022; Animal Therapies Ltd, 2023; International Association for Human-Animal Interaction Organizations, 2023) as is knowledge spanning both research and clinical practice (Leighton *et al*., 2022). The Delphi method is one way to formalize expert consensus in areas where there is a lack of clarity in the research evidence (Iqbal and Pipon-Young, 2009; Jorm, 2015). Delphi studies have the capacity to bring together diverse expertise, can be completed online (reducing geographical restrictions), and overcome the biases associated with social pressure (e.g., conforming to the opinion of a dominant individual) by creating anonymity (Tetzlaff *et al*., 2012; Jorm, 2015; Filugelli *et al*., 2021). The method has been used successfully in mental health to establish consensus amongst diverse stakeholders, for example, in the development of priorities, training, and protocol development (Tetzlaff *et al*., 2012; Seidler *et al*., 2019; King *et al*., 2021; Wang *et al*., 2021; Soneson *et al*., 2022).

The aim of the present study was to use the Delphi method to establish consensus agreement on the minimum standards required of practitioners and dogs to prepare for and set up a manualized CAP group intervention for adolescents experiencing common mental health disorders including depression, anxiety, and adjustment disorder.

Methods

This study formed part of a larger research project conducted following the Guidance on Conducting and REporting DElphi Studies (CREDES) (Jorm, 2015; Jünger *et al*., 2017; King *et al*., 2021). Ethics approval for the research project was granted by the University of Melbourne Human Research and Ethics Committee (1853284). See Fig. 1 for an outline of the study process.

Using Delphi methodology, experts in AAT were recruited globally to complete questionnaires in an iterative process designed to establish consensus. Consensus was met when 80% or more experts agreed that an item was either 'important' or 'essential' and therefore included or 'unimportant' or 'irrelevant' and therefore excluded from the minimum standards required to develop a CAP group intervention for adolescents experiencing common mental health disorders including depression, anxiety, and adjustment disorder.

QUESTIONNAIRE DEVELOPMENT

Preliminary items were generated following a systematic review of CAP interventions for adolescents (Jones *et al*., 2019), and further examination of relevant literature including AAT and guidelines existing at the time (2018–2019). Thematic analysis was used to identify areas with poor consensus and contention. To ensure completeness, a preliminary review of the gray literature was also conducted. Pages one and two of 'Google' results for the search term 'Canine Assisted Psychotherapy' were analyzed thematically to ensure that the peer-reviewed literature accurately captured the breadth and depth of themes in the gray literature. Three domains were identified as pertaining to CAP intervention preparation and set up, including (1) terminology; (2) training and qualification of providers; and (3) training and assessment of canines.

A questionnaire was developed using Qualtrics software and piloted. Formatting and style were assessed by a Delphi method expert (second author). Functionality, readability, and data entry were tested by non-expert community members. Finally, face validity was assessed by presenting the questionnaire to two subject matter experts (one academic researcher from a non-English speaking country, and a native English-speaking psychologist who had practiced AAT for 5 years and conducted postgraduate research in the field). Minor changes were made for clarity, such as the inclusion of examples. Two new items were added, and additional free text fields were included.

The final questionnaire presented in round one contained 54 items across 3 domains. First, the terminology used to describe the intervention and its scope contained 10 items (e.g., 'Providers use standardised terminology that is accepted internationally, and updated periodically i.e., Animal Assisted-Interventions, Therapy, Activities, Education/pedagogy, and Coaching (IAHAIO, International Association of Human Animal Interaction Organisations)' and 'Providers use terminology that is acceptable or suitable for their client group'). The second section contained 18 items covering the required training and qualifications of providers to deliver the CAP intervention (e.g., 'Providers hold a licence or registration in a mental health field' and 'Providers receive training and supervision in animal assisted therapy. If yes, please describe (e.g., required content, number of hours) '). The third section assessed, using 26 items, the required training and skills of the dogs working in the CAP intervention (e.g., 'Canines and handlers are assessed as a working team, including the quality of their relationship, communication and interactions skills' and 'Canines are trained in, or responsive to comprehensive/advanced obedience (e.g., come when called, sit, drop/down, stay, heel, even under distraction). ' Free text fields were provided throughout the questionnaire to allow experts to clarify or expand on their

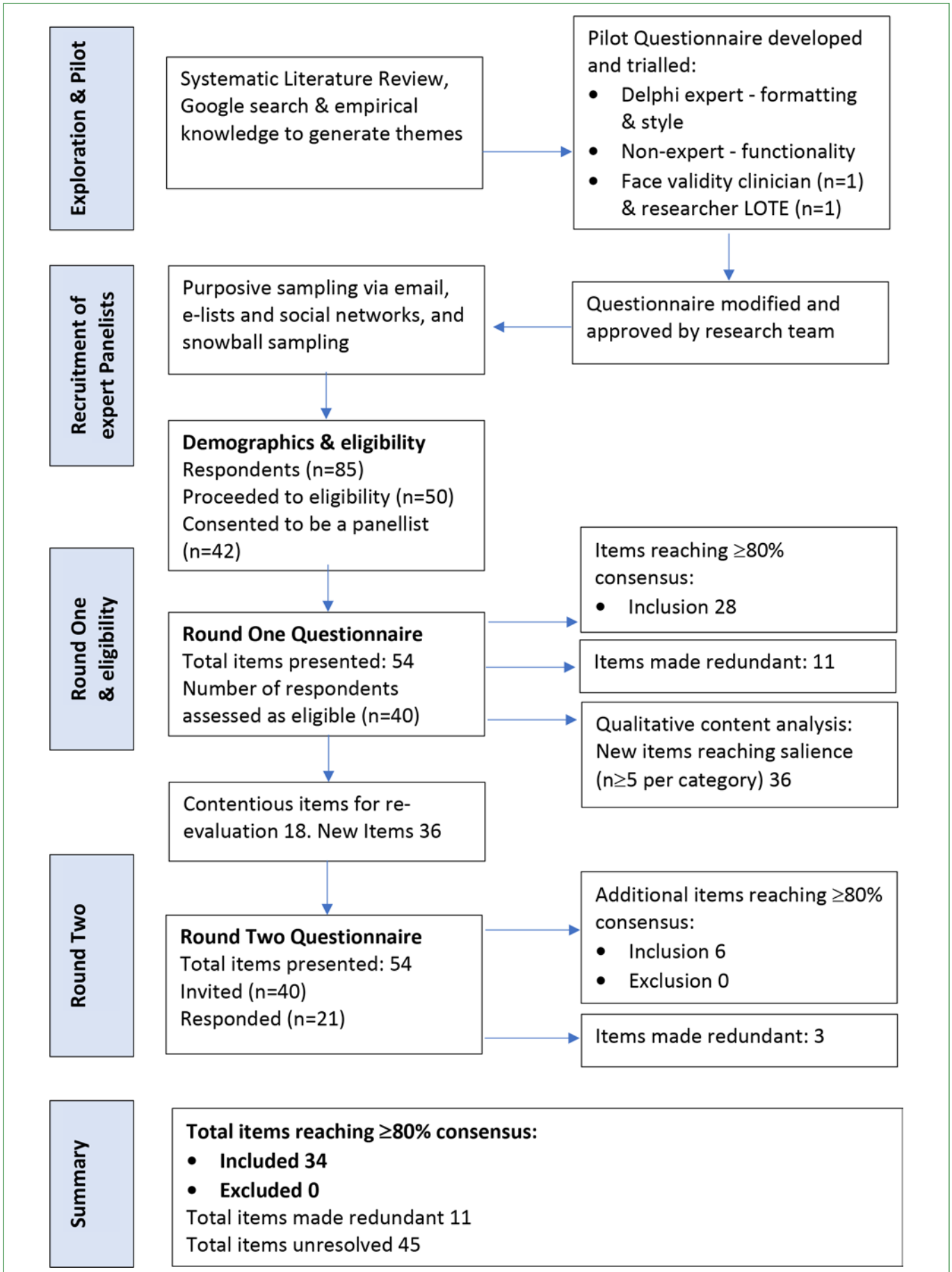

Fig. 1. Outline of Delphi process – Terminology, qualifications, and training.

responses, or to propose additional questions that had not been posed already within the questionnaire (Bolger and Wright, 2011; King *et al*., 2021).

RECRUITMENT

The expert panel was recruited online in 2021, via interest groups (including university departments), AAT organizations, by contacting published authors, screening social media, mailing lists, and snowballing/sharing. Diversity in expertise is one of the goals of the Delphi method (Jorm, 2015). It is possible that animal-assisted therapists who work with species other than canines have expertise that is diverse from CAP expertise and may enrich the scope of information obtained; for example, 'experiential' interventions are commonly cited in the equine-assisted therapy literature but appear largely absent in the CAP literature (Jones *et al*., 2019). It has also been acknowledged that such interventions may improve outcomes in CAP (Hartwig, 2017). As an emerging field that has grown exponentially in the past few years (Rodriguez *et al*., 2023), the research team determined that individuals with 5 or more years of full time (or equivalent) experience were representative of 'experts' in the field. It was also prudent to ensure inclusion criteria were broad enough to gather both a representative sample, and sufficient numbers to establish stability and reliability of responses (Jorm, 2015). For this reason, expert panelists would include those with diverse species experience, and diversity in population groups (e.g., working with clients other than adolescents). The research team also considered it likely that experts with primarily clinical experience would differ in their opinions from those who were academics or researchers.

Experts were therefore considered eligible if they were (1) qualified and licensed or registered mental health professionals with a minimum of 5 years' experience in the direct delivery of AAT and/or (2) employed in an academic or teaching role with at least 5 years' experience in the study of AAT in mental health (or related) and at least one peer-reviewed publication or thesis on AAT in mental health. There were no other restrictions on eligibility to ensure a wide diversity of experts from various demographics, locations, species specializations, and professional backgrounds (Jorm, 2015). Consensus has been achieved with panels of 10–18, with reliability increasing with sample size (Santaguida *et al*., 2018). As such, the team sought to recruit 30 clinicians and 30 academics/researchers for the study.

CONSENSUS

After completing the demographic, eligibility, and informed consent questions, eligible experts were asked: 'If you were developing a guideline for the minimum acceptable standards for a manualized CAP group intervention for adolescents experiencing common mental health disorders (including depression, anxiety and adjustment disorder) how would you rate the importance of the following?'

The panel of experts rated items from (1) unimportant to the minimum standard and therefore not to be included, to (5) essential to the minimum standard. Consensus was reached when 80% or greater expert panel members agreed that the item was important (4) or essential (5) and should therefore be included, or 80% or greater agreed that the item was unimportant (2) or irrelevant (1) and should therefore be excluded from the minimum standards required to develop a CAP intervention. A high cut off score for consensus (80%) (Diamond *et al*., 2014) was considered important by the research team to ensure that only high levels of agreement were included in the minimum standards. Items not reaching consensus for either inclusion or exclusion were re-presented in the subsequent round.

In some instances, an accepted item rendered an alternate item redundant. For example, 'Canines and handlers are assessed as a working team' is contrary to an alternate option 'Canines are assessed alone (as separate entities from their handlers).' Redundant items were not presented in subsequent rounds. Analyses were performed using IBM® SPSS® Statistics version 28.

NEW ITEMS

At round one, expert panelists provided qualitative feedback and suggestions for additional questions to be addressed in subsequent rounds. Using content analysis, suggestions were consolidated to create new items in the relevant category or domain (Elo and Kyngas, 2008) for example, 'professionalization' of terminology, or provider training in 'welfare'. Due to the large volume of feedback and diverse nature of the responses, suggestions were considered salient when five or more expert panelists (n = 5) made suggestions in the same broad category, domain, or topic. Domains were used to generate new items, provided they related directly to CAP and were not already covered elsewhere in the questionnaire. New items were evaluated in round two, alongside any items that had not yet reached consensus in round one.

SUBSEQUENT ROUNDS

Each panelist was provided with a unique identifier that was used to send email reminders, and a personalized link to the subsequent rounds. Also included was feedback to expert panelists in the form of de-identified aggregate data from the previous round and a copy of their own round one results. This allowed expert panelists to compare and review their own answers in relation to the aggregate (Jorm, 2015). A maximum of three rounds were planned, with items remaining unresolved after round three considered contentious.

Results

Over two rounds, consensus was reached to include 34 items and exclude none; 45 items remained unresolved. Standardized terminology was identified that clearly defined the type and scope of the service being provided, delineating psychotherapeutic treatments from informal dog-related interactions. To deliver the CAP intervention, providers must have formal qualifications and licensure/registration in mental health, training and supervision in AAT, and canine-specific training and experience. Important temperament characteristics of working dogs were identified including absence of aggression, and enjoyment working in CAP. Dogs should be formally assessed in obedience and AAT applications, in partnership with a bonded handler. Assessors of dog-handler teams should be independent and have expertise in both canine ethology and AAT.

COHORT CHARACTERISTICS

A total of 40 expert panelists were recruited globally from an initial pool of 85 respondents. Panelists were primarily residing in the USA and Australia (72.5%). Most identified as female (92.5%) and Caucasian (65%). They were aged between 27 and 76 years (mean age 48.58) (see Table 1). These findings are largely consistent with those of other AAI provider surveys (Black *et al*., 2011; Smith and Dale, 2016; Kerulo *et al*., 2020).

Regarding AAT expertise, 52.5% of the panelists reported working primarily in a teaching role, 60% in academia/research, and 77.5% were primarily providers of AAT in clinical practice. These figures indicate a substantial overlap, with many expert panelists working in both academic and clinical roles. The overwhelming majority held postgraduate qualifications in mental health, and all reported at least some formal training in AAT. All but 8 of the panelists had also published in AAT. The majority reported having a total of 5–10 years of experience in the field (45%) while 30% reported having 16 or more years of experience. Most expert panelists (77.5%) reported that they worked with dogs, followed by horses (37.5%).

Due to high attrition rates over the course of the study, only 21 panelists completed round two. There was not sufficient statistical

Table 1. Demographic details for expert panelists.

Item	Response	Frequency (n)	Percentage %
Demographics			
Country of residence	United States of America	17	42.5
	Australia	12	30
	Europe	8	22.5
	UK	1	2.5
	South America	1	2.5
	Undisclosed	1	2.5
Cultural identity/ ethnicity	Caucasian (e.g., 'White', 'Anglo', 'European', 'Australian')	30	65
	Hispanic	1	2.5
	Ashkenazi Jewish	1	2.5
	Undisclosed	8	20
Language(s) spoken	English only	28	70
	English in addition to other language(s)	9	22.5
	Undisclosed	3	7.5
Gender Identity	Female	37	92.5
	Male	1	2.5
	Non-binary	1	2.5
	Undisclosed	1	2.5
Age range	Youngest 27		Mean Age
	Eldest 76		48.58
AAT expertise			
Primary occupation	Teacher/educator	12	52.5
	Researcher	13	60
	Provider of AAT	31	77.5
Primary species	Dog	31	77.5
	Horse	15	37.5
	Farm animal (chicken, goat, donkey, sheep)	7	17.5
	Cat	5	12.5
	Small animal (rat, hamster)	5	12.5
	Bird / aviary	2	5
	Reptile	2	5
	Other (dolphin)	1	2.5
Total years AAT experience	5-10 years	18	45
	11–15 years	10	25
	16 years or more	12	30
Mental health qualifications	Secondary/ diploma	0	0
	Degree	2	5
	Postgraduate	38	95
AAT training	Self-directed CPD/CE (e.g., conferences, books, workshops)	15	37.5
	Short course, certificate	25	62.5
	Certified, accredited, or registered with an organization	24	60
	Tertiary degree (or equivalent)	3	7.5
	Postgraduate (e.g., thesis)	6	15
	Supervised practice / internship	3	7.5
	Dog trainer, dog behavior training	5	12.5
	AAT consultant, supervisor, legislator, conference speaker, postgraduate course developer	8	20
AAT peer reviewed publications	Nil	8	20
	1–4	18	45
	5–10	4	10
	11 or more	10	25

power to perform sub-group analyses (e.g., researchers vs practitioners or equine vs canine practitioners).

CONSENSUS OVERVIEW

The expert panel reached consensus agreement (≥80%) to include a total of 34 items in the minimum standards across three domains: terminology; training and qualification of providers; and training and assessment of dogs (see Tables 2–4). No items reached a consensus agreement for exclusion from the minimum standards. A total of eight questions (45 items) remained contentious and did not reach a consensus agreement for inclusion or exclusion. Of these, five items approached consensus, reaching between 70 and 79% agreement, and eight items received some support, reaching between 60 and 69% agreement (see Supplemental Information Table S1). A complete list of salient suggestions (n = 5) used to develop the round two items is also reported in the Supplemental Information (Table S1).

The study was closed after round two, when the research team determined that there had been substantial attrition between round one (40 panelists) and round two (21 panelists), indicating that further rounds would be unlikely to achieve representative or valid results.

TERMINOLOGY

The expert panel agreed that, as part of the minimum standards, terminology should be used that meets international standards and is considered acceptable and/or suitable for the client group (see Table 2). For example, despite the term 'intervention' not being considered offensive to clients by a majority of the expert panel,

Table 2. Terminology – Items meeting consensus for inclusion into the minimum standards for the delivery of a CAP group intervention for adolescents with common mental health disorders.

Category				
Item[1]	**Consensus**[2] **(%)**	**M and (SD)**[3]	**Median rating**[3]	**Round**
Terminology				
Standardized terminology, accepted internationally, updated periodically	94.8	4.5 (0.6)	5	1
Is acceptable or suitable for their client group	89.8	4.3 (0.7)	4	1
'Therapy' in AAT is restricted to trained/licensed therapists	97.5	4.6 (0.7)	5	1
'Interactions' can be used where 'intervention' is offensive	81.0	4.3 (0.9)	5	2
Animals are called Certified / Registered Therapy Dogs	81.0	4.0 (1.3)	4	2
Labels for animals should align with IAHAIO	85.7	4.3 (1.0)	5	2
AAP is used as a subset of AAT	87.2	4.3 (0.9)	4	1
The following terms should NOT be used–assistance or service dogs	85.8	4.4 (1.4)	5	2

[1]Items here are abbreviated.
[2]Inclusion criterion is ≥ 80% consensus agreement as *Important* or *Essential*.
[3]M = mean; SD = standard deviation. Rating from 1 (unimportant) to 5 (essential) to the minimum standards.

in jurisdictions or with populations for whom the term 'intervention' is considered offensive (e.g., some First Nations peoples of Australia), it was considered acceptable to use the alternative 'interactions' when referring to AAI.

Seven expert panelists suggested that the terminology used should reflect the professionalization of AAT and should differentiate between professional disciplines such as psychotherapy and other allied therapies, and professionals from non-professionals (n = 7 panelists). It was also suggested that terminology is 'therapist/therapy first' such that the assistance of the animals is seen as supplementary to the primary therapy (n = 7 panelists). In rating the resulting items, expert panelists agreed that the term therapy in AAT should be restricted to use by qualified, licensed/registered therapists, working within their scope of practice. The term psychotherapy in AAP should be used to differentiate mental health therapy from other forms of animal-assisted therapies. Although no consensus was reached for inclusion, there was a preference for using the CAP to name the intervention (approach consensus to include item: 76.2%) over CAP (some support to include item: 61.9%). See Supplemental Information (Table S1) for all descriptive statistics for the items, including those that did not reach a consensus.

The expert panel made a further three suggestions for terminology: first, that animals are recognized as voluntary and equal partners in the work (n = 10 panelists) and second, there is no implication that the dogs themselves provide the therapy (n = 6 panelists). Therefore, the expert panel agreed that dogs working in the manualized intervention should be referred to as 'certified/registered therapy dogs (recognized title, working with a therapist in the provision of therapy, and recognition of formal training or assessment).' This was preferred to other potential terms, such as 'canine assistants (recognized as assistants in the work. Note: Term could be confused with 'assistance dogs')' (approached consensus to exclude at 71.4%); 'canine partners (recognized as partners in the work)' (no consensus to include 52.3% or exclude 23.8%); or simply 'dogs (no implications of role or training)' (some support to exclude at 66.6%). Third, there should be clear differentiation between dogs who work with psychotherapists and dogs trained to support an individual with a difficulty or legally recognized disability (n = 8 panelists). Accordingly, terms such as assistance and service dogs (or variations in these terms) should be excluded from the intervention. The exclusion of the term emotional support dog also approached a consensus (76.2%). The expert panel agreed that terminology should 'align with the upcoming IAHAIO Working Group guidelines' (subsequently published as Howell *et al*., 2022).

TRAINING AND QUALIFICATIONS OF PROVIDERS

Mental health

The expert panel agreed that providers should hold a license or registration to practice in a mental health field (see Table 3). Greater support was given to a provider with at least tertiary qualifications in mental health (e.g., degree) over training in mental health at the certificate or diploma level, although both met the agreement criteria for inclusion. Having mental health qualifications at the postgraduate level approached consensus for inclusion into the minimum standards (77.8%) and having no formal qualifications in mental health received some support for exclusion (69.4%) (see Supplemental Information Table S1). Supervision by a qualified and licensed mental health clinician was also considered important or essential for the minimum standard, meeting the consensus agreement for inclusion.

Animal-assisted therapy theory

Regarding AAT specifically, expert panelists universally agreed that providers should receive training and supervision in AAT (100% agreement to include) (see Table 3). Expert panelists also suggested that formal knowledge in AAT theory is delivered in the form of an approved or defined training course (n = 7 panelists). Suggested content varied, with training in canine welfare and behavior (n = 5 panelists) and safety (n = 5 panelists) being mentioned most frequently. The number of hours of formal training required did not reach consensus, with suggestions varying between <50 and >300 h. Some support (66.7%) was given to include AAT training that comprised a formal tertiary qualification, for example, degree (in jurisdictions where available), while the least amount of support was given to training duration of < 50 h (approach consensus to exclude at 76.2%) (see Supplemental Information Table S1). Ongoing supervision in AAT was suggested (n = 11 panelists); however, the frequency and duration did not reach consensus, with suggestions ranging from weekly, fortnightly, or monthly, to ongoing, time-limited, or as part of a training course. The most widely supported suggestion (72.3%) was to receive ongoing monthly supervision while working in AAT.

Species-specific knowledge

Regarding canine specific training and qualifications, the expert panel agreed that providers should have training in 'general canine behavior and communication (e.g., body language, calming signals)' and general 'dog training (e.g., obedience, behavior modification, agility)' (see Table 3). Expert panelists agreed that providers should have 'knowledge of, and a strong and ongoing

Table 3. Training and qualifications of providers – Items meeting consensus for inclusion into the minimum standards for the delivery of a CAP group intervention for adolescents with common mental health disorders.

Category				
Item[1]	**Consensus**[2] **(%)**	**M and (SD)**[3]	**Median rating**[3]	**Round**
Training and qualification of providers				
Hold a license or registration in a mental health field	91.6	4.8 (0.6)	5	1
Hold tertiary qualifications in mental health	86.1	4.2 (0.8)	4	1
Have training in mental health e.g., certificate, diploma	80.6	4.0 (1.2)	4	1
Be supervised by qualified and licensed mental health clinician	86.1	4.4 (0.9)	5	1
Receive training and supervision in animal assisted therapy	100	4.8 (0.4)	5	1
Receive training in general canine behavior and communication	97.2	4.7 (0.8)	5	1
Receive training in general dog training	88.6	4.2 (1.0)	4	1
Receive training in handling / training dogs for specific AAT applications	87.1	4.1 (1.1)	4	1
Have knowledge of the individual dog	97.3	4.8 (0.5)	5	1
Have a strong and ongoing bond with the individual dog	91.5	4.4 (1.0)	5	1

[1]Items here are abbreviated.
[2]Inclusion criterion is ≥ 80% consensus agreement as *Important* or *Essential.*
[3]M = mean; SD = standard deviation. Rating from 1 (unimportant) to 5 (essential) to the minimum standards.

bond/relationship with, the individual canine' with whom they intend to work. Expert panelists agreed that providers should receive AAT specific 'training in handling or training canines for AAT' applications (e.g., facilitating mutually rewarding interactions) and suggested that experience should be obtained 'in addition to,' rather than 'instead of,' formal training (n = 10 panelists). The suggestions for AAT specific dog training/handling included formal skills such as obedience, skills, tricks, classes, and AAT assessments (e.g., scenarios or role plays) (n = 6 panelists), understanding welfare (n = 5 panelists), canine behavior (n = 5 panelists), and safety (n = 4 panelists). The number of suggested hours required to achieve this knowledge varied from < 50 h to > 300 h with the greatest support to include training of 50–99 h duration (55.5%) and no support for training of 300 h or more (0%). Although a consensus was not reached, there was some support (60%) for this training to be 'included in the broader AAT theory training previously recommended,' as above, or to be provided 'only if the provider worked simultaneously as a dog handler' (66.7%) (see Supplemental Information Table S1). Consensus was not reached on whether 'providers should work simultaneously as dog handlers (triangle model)' (include 55.6%, exclude 11.1%), 'in collaboration with a dedicated dog handler (diamond model)' (some support to include 62.5%), or whether 'providers should be prevented from working as handlers at all' (some support to exclude 60%).

TRAINING AND ASSESSMENT OF DOGS

The expert panel agreed that 'dogs and handlers should be assessed as working teams (including the quality of their relationship, communication and interaction skills)' (see Table 4). This was in preference to 'dogs being assessed alone, as separate entities from their handlers, and being able to work with multiple handlers or independently' (include 43.8%, exclude 37.6%) (see Supplemental Information Table S1). The assessments should be conducted by 'an independent AAI organization with standards and guidelines in place (including periodic re-assessment or further training as required)' and by 'providers or handlers who are experienced in AAI settings and in dog behavior, training, and welfare.'

The expert panel agreed that the dogs themselves should be 'trained in, or responsive to, basic obedience cues (e.g., walking on leash, sitting, dropping).' It was also agreed that 'dogs should be trained in, or responsive to, comprehensive/advanced obedience (e.g., coming when called, sitting, dropping, staying, and heeling, even under distraction).' There was some support for dogs to be 'trained to work off leash' (61.9%) and for 'dogs not to be reliant on food rewards when working in AAT (should be responsive even if food treats are not offered)' (66.7%). No other canine skill reached a consensus for inclusion in the minimum standards. Importantly, it was agreed that dogs should be 'trained and handled in a manner that maintains their welfare' and 'not with equipment that is detrimental to their welfare, such as shock collars.'

Expert panelists agreed that dogs should be assessed to ensure that they 'enjoy interactions with people' and 'genuinely enjoy working in AAT.' It was also agreed that 'dogs should be assessed to ensure that they are not fearful or stressed by novelty, sounds, equipment, or animals,' and assessed to ensure that they are 'not aggressive to people or animals.'

The expert panel agreed that dogs working in the intervention should generally display the following temperament characteristics: 'sociability towards humans (e.g., friendly, solicits affection, seeks attention, empathetic)'; 'adaptability (e.g., resilient, flexible, bounces back)'; 'boldness (e.g., confidence, lack of fear)'; 'curiosity (e.g., exploration in novel environments, investigates objects, approaches)'; trainability (e.g., obedience, willingness, compliance)'; 'calmness (e.g., polite, lack of excitability, self-control, self-regulation)'; and 'sociability towards dogs'. 'Sociability towards other animals' approached a consensus for inclusion (71.4%). 'Playfulness (e.g., excitable, high energy)' did not reach a consensus for inclusion (42.8%) or exclusion (28.6%). No other temperament characteristics were recommended by the panelists as important or essential to the minimum standards.

Discussion

The first of its kind, this study represents an important step in the development of minimum standards for the delivery of CAP to adolescents with common mental health disorders. At a time when there is a strong demand for increasing professionalization and standardization in AAI, we bring together diverse AAT experts from around the world to address areas of contention in the research literature, with a view to providing guidance on the development of treatment programs.

Table 4. Training and assessment of dogs – Items meeting consensus for inclusion into the minimum standards for the delivery of a CAP group intervention for adolescents with common mental health disorders.

Category				
Item[1]	**Consensus**[2] **(%)**	**M and (SD)**[3]	**Median rating**[3]	**Round**
Training and assessment of dogs				
Dogs and handlers are assessed as a working team	97.0	4.8 (0.5)	5	1
Teams are independently assessed by an AAI organization	80.9	4.1 (1.3)	5	2
Teams are assessed by providers or handlers who are experienced in AAI settings *and* in canine behavior, training, and welfare	82.4	4.1 (1.2)	4.5	1
Trained in, or responsive to, basic cues	97.1	4.6 (0.7)	5	1
Trained in, or responsive to, comprehensive/advanced cues	82.4	4.2 (1.1)	4.5	1
Trained and handled using equipment that maintains welfare	97.0	4.9 (0.3)	5	1
Assessed to enjoy interactions with people and genuinely enjoy working in AAT	100	4.9 (0.3)	5	1
Assessed not fearful or stressed by novelty, sounds, equipment, or animals	97.1	4.8 (0.5)	5	1
Assessed not aggressive to people or animals	97.1	4.9 (0.4)	5	1
Dogs should generally display the following temperament characteristics:				
Sociability toward humans	94.1	4.7 (0.6)	5	1
Sociability toward dogs	80.9	4.0 (1.0)	4	2
Calmness	82.3	4.2 (0.7)	4	1
Curiosity	85.3	4.2 (0.7)	4	1
Trainability	85.3	4.3 (0.8)	4.5	1
Adaptability	93.9	4.7 (0.6)	5	1
Boldness	88.2	4.0 (0.8)	4	1

[1]Items here are abbreviated.
[2]Inclusion criterion is ≥ 80% consensus agreement as *Important* or *Essential.*
[3]M = mean; SD = standard deviation. Rating from 1 (unimportant) to 5 (essential) to the minimum standards.

These results reinforce the importance of accurate and standardized terminology, and the need for further community education on the role of 'therapy' and 'therapy dogs'. Consensus on the essential content for provider training was not achieved, highlighting the diversity of practice globally. Nevertheless, there was recognition of the need for breadth and depth of knowledge across the domains of mental health, AAT, canine training, and handling dogs for AAT applications. Dogs working independently of a bonded handler were not supported, nor were mental health providers working with an 'assessed' dog in the absence of AAT and CAP training. Implications for clinical practice are explored.

KEY FINDINGS

Our work contributes to the growing support of standardized terminology (International Association of Human-Animal Interaction Organizations, 2018; Fine *et al*., 2019b; Howell *et al*., 2022). Of particular importance, expert panelists supported the use of terminology to differentiate the type and scope of services being provided, such as restricting the use of terms such as 'therapy' and 'psychotherapy' to therapists and those delivering psychotherapeutic treatments. While this distinction appears to have strong support from professional bodies and umbrella organizations, this is not yet reflected in community practice. Similarly, the 'therapy dogs' working in the intervention should be distinguished from visiting dogs, and education or school dogs (Howell *et al*., 2022) This distinction, in particular, is not currently well reflected in published research or community practice and may require more targeted education campaigns. Expert panelists also agreed that therapy dogs must be distinguished from dogs trained to support an individual with a disability (e.g., assistance/service dogs). Interestingly, exclusion of the term 'emotional support dog' approached but did not reach a consensus, despite being clearly defined in recent publications as a dog who provides (usually informal) support to an individual with a disability (Howell *et al*., 2022). This highlights the complexity of identifying accurate, internationally acceptable terminology for interventions.

Importantly, our study highlights the need for providers to have a formal license or registration to practice as a mental health professional to deliver CAP. This is in line with an increasing number of AAI professional bodies that stipulate that an allied health professional delivering AAT must be qualified to the standard set out by their governing or regulatory body (Society for Companion Animal Studies, 2019; Winkle *et al*., 2022). The type of formal training required to achieve registration varies across jurisdictions and countries, as reflected in the expert panel's varying levels of support for qualifications at the secondary, tertiary, and postgraduate levels. It is not acceptable for a person who is not a qualified, licensed, or registered mental health professional to deliver the CAP intervention (De Santis *et al*., 2018; Kerulo *et al*., 2020; Mignot *et al*., 2021).

Another key finding of this study was the universal support for formal training, supervision, and experience specifically in AAT. This training is delivered in addition to any formal qualifications in

mental health or therapy. Such training goes above and beyond developing skills in training a dog for AAT applications (which was also supported) to include knowledge and understanding of the theoretical and relational underpinnings of the CAP intervention. This important distinction highlights the need for providers to develop knowledge and skills in the therapeutic and meaningful inclusion of animals in psychotherapeutic practice (Jones *et al*., 2019) and is supported by the animal-assisted therapy in counseling (AAT-C) competencies adopted by the American Counselling Association (Stewart *et al*., 2016) and more recently adapted by the American Psychological Association (Trevathan-Minnis *et al*., 2021). This level of training is in stark contrast to the practice of simply 'assessing' a dog, for example, for suitability, temperament, or sanitary protocol, or not assessing the dog-handler team at all (Jones *et al*., 2019). Continuing professional development (CPD/CE) and supervision are often required to maintain licensure/registration as a mental health professional. Increasingly, such requirements are also stipulated in the guidelines for allied health professionals working in AAT (e.g., Society for Companion Animal Studies, 2019; Winkle *et al*., 2022). This is similarly reflected by the expert panel's support for ongoing AAT supervision for mental health professionals delivering CAP to adolescents.

Concerningly, the expert panel did not reach consensus agreement on a single suggestion on how many hours of formal AAT training or supervision are required to achieve competence to deliver the CAP intervention, with suggestions ranging from <50 to >300 h. The panel approached consensus to exclude formal AAT training of 50 h or less duration (76.2%) indicating that most expert panelists considered that 50 h was insufficient to achieve the depth of theoretical AAT knowledge required to successfully deliver the CAP intervention. Indeed, there was some support (66.7%) for AAT training to be delivered within a formal tertiary qualification, for example, a degree, in jurisdictions where this is available. The expert panel also approached, but did not reach, the consensus that AAT supervision should occur monthly while working in CAP (72.3%).

In addition to AAT theory training, consensus was reached that providers should obtain both the breadth and depth of species-specific knowledge across three key domains: (1) general canine behavior (ethology), communication, and welfare (e.g., body language, calming signals); (2) dog-training knowledge and skills (e.g., obedience, behavior modification, agility); and (3) specific AAT application skills. Again, consensus on the number of hours required to achieve this competence was not achieved, with the greatest support given to including 50–99 h (55.5%). Although in this study, 'species specific' training was specified separately to 'AAT theory' training, most competencies and guidelines incorporate species specific training into the broader AAT theory training (International Association for Human-Animal Interaction Organizations, 2023). It was not clear in this study if species specific training for the CAP intervention should be incorporated into AAT theory training (60% support to include) or in addition to it, particularly as many topics overlap (e.g., welfare and safety). There was, however, some support (66.7%) for providing species specific training only to those people who were also handling dogs in the intervention.

The broad range of training suggestions and lack of consensus are indicative of the wide variations in service provider training and practice within CAP (Jones *et al*., 2019) and reflective of calls for further work in this area (Kerulo *et al*., 2020; Collica-Cox and Day, 2021). It is therefore important that standardized interventions are developed with current best practice guidelines in mind. Competencies for AAT (Winkle *et al*., 2022) and AAT-C (Trevathan-Minnis *et al*., 2021) have been published; however they may be difficult for providers to operationalize. Recent recommendations suggest that basic training for handlers delivering informal AAI should equate to approximately 56 h (International Society for Animal Assisted Therapy, 2023) whereas training for professional AAT (including species specific knowledge) should equate to not less than 450 h (International Society for Animal Assisted Therapy, 2022; International Association for Human-Animal Interaction Organizations, 2023).

The independence and expertise of the organization assessing dog-handler teams were also highlighted. This is important because handlers have been found to overestimate the suitability of their own dogs for training and participation in AAI (Marit *et al*., 2013; Wohlfarth and Olbrich, 2014; Mongillo *et al*., 2015). It was also agreed that assessments should be conducted by those with experience in AAI settings, not just canine behavior, training, and welfare. Together, these findings may have implications for dog trainers attempting to train and/or assess dog-handler teams without adequate experience, training, or qualifications in AAI.

This study highlights the importance of the bond between handlers and dogs, and the need for them to be assessed as a working and collaborative team. Dogs should be acknowledged as individuals with agency, who are provided with opportunities to develop relationships with both handlers and clients. Despite this, there are numerous anecdotal accounts of school dogs or counseling center dogs who are encouraged to work alongside multiple staff within a facility or organization. Sadly, many of these dogs develop anxiety-related problem behaviors. Although it is well recognized in the literature that the handler-dog relationship can have an impact on therapy dog welfare and working dog performance (Jamieson *et al*., 2018; Bremhorst and Mills, 2021; Glenk and Foltin, 2021; Ng, 2021), no studies on the impact of untrained or novel handlers on therapy dog welfare or work have been published. A number of AAI professional bodies recognize the need for handlers to know the individual animal well, including, for example, knowing the individual animal's preferences, strengths, and weaknesses (International Association of Human-Animal Interaction Organizations, 2018; Society for Companion Animal Studies, 2019; Winkle *et al*., 2022). The bi-directional relationship between animal and handler deserves increased focus in future research and warrants greater public awareness.

It is not surprising that the expert panel agreed that dogs should be assessed for a lack of aggression, fear, and stress, nor that they should be trained and handled in ways that maintain their welfare, such as the use of positive reinforcement training (Guilherme Fernandes *et al*., 2017). This is in line with most welfare standards for therapy dog training and certification (Winkle *et al*., 2020; American Veterinary Medical Association, 2023). However, the level of formal training or responsiveness that should be achieved by teams was more contentious. It was agreed that dogs should be responsive to basic cues, and to a lesser extent advanced cues; however, being trained to the 'off leash' level did not reach consensus for inclusion. This is despite freedom of movement and agency being considered crucial elements of therapy dog welfare (Bremhorst and Mills, 2021; Glenk *et al*., 2013) and widely used in AAT settings (Winkle *et al*., 2020). This presents a risk to safety if dogs have not been assessed as responsive or safe 'off lead' (Winkle *et al*., 2020).

The temperament characteristics identified by the expert panel as important or essential for dogs working in CAP with adolescents include sociability, curiosity, and adaptability. These characteristics are indicative of a dog who is more likely to cope with the novelty and challenges inherent in CAP work. Similarly, boldness (a lack of fear) is likely to reflect a more resilient dog. Trainability may also be observed in dogs who are motivated to engage with people, willing to please, and more likely to be stable and predictable in their work. These traits are consistent with the general skill set required for all dogs working in AAI (Mongillo *et al*., 2015; Nawareca-Piatek *et al*., 2020; Bremhorst and Mills, 2021). Calmness as a trait in preference to playfulness may be representative of risk aversion, whereby excitable dogs may be seen as more likely to cause injury or less likely to follow handlers' directions. This may also represent a stronger preference for tactile interactions in CAP, such that a calmer dog may be more likely to lie down for a pat than a playful dog. This is an interesting finding given that more

active and engaging (experiential) interactions may have greater appeal to adolescents and college students (Folse *et al*., 1994; Hartwig, 2017).

No other unique training or temperament characteristics were identified or suggested by the expert panelists as being important for a dog to work specifically in a CAP group with adolescents. It is possible that panelists readily identified and supported generally accepted canine traits and skills, and in the absence of clear activity or session guidelines were not confidently able to identify specific skills or novel traits that would make a dog more suited to work in a group setting with adolescents.

CLINICAL IMPLICATIONS AND RECOMMENDATIONS FOR CANINE-ASSISTED PSYCHOTHERAPY IN ADOLESCENT MENTAL HEALTH

Given the apparent ongoing confusion of terms being used in the broader community, it is imperative that service providers accurately label their services, describe the scope of treatment, and outline their competence (i.e., formal qualifications and registration) to deliver such services. Similarly, the role of dogs working for and with people should be clearly defined, so that there is a distinction between those who help an individual with a difficulty or disability and those who work alongside a psychotherapist to facilitate CAP. It is also important for professional bodies and interest groups to facilitate community awareness and education. This can be supported by adherence to and dissemination of recently published recommendations (e.g., International Association of Human-Animal Interaction Organizations, 2018; Howell *et al*., 2022); provision of client-friendly information and educational materials; and promotion via social/media.

Based on the findings of this study, CAP providers, at a minimum, must be qualified and licensed/registered in mental health, receive training and ongoing supervision in AAT theory, have general species specific knowledge (e.g., canine ethology), and have practical skills, training, and experience working with dogs in AAT. Providers would ideally complete a formalized training course in AAT, which includes information about canine ethology (welfare, learning, and communication) and health and safety in AAI. Participation in ongoing supervision while working in the field (e.g., monthly) provides opportunities for reflective practice and ongoing skill and knowledge development. Providers should demonstrate competence in the theoretical integration of animals into psychotherapeutic practice such that the dog's presence is seen as relevant and meaningful. This places the dog in the position of an independent being with agency, who makes a unique contribution to the therapeutic process. It is expected to take more than 50 h to develop AAT theory competence, plus additional hours for species specific training and experience, with some organizations recommending a minimum of 450 h combined AAT and species specific training (International Association for Human-Animal Interaction Organizations, 2023).

Handlers of therapy dogs working in the CAP intervention may work either as dedicated handlers (diamond model) or simultaneously as providers (triangle model) (Boggs *et al*., 2011). Handlers should be assessed together with a dog with whom they have a strong and ongoing bond. The team should demonstrate general dog training skills in formal training (obedience), and strong communication. AAT specific handling skills should include the ability to maintain the welfare of all participants – that is the ability to facilitate mutually rewarding interactions. The assessors of teams must have adequate knowledge of both canine ethology and training, and knowledge of AAT settings and requirements. This is crucial as there are training requirements in formal 'obedience' that would be contraindicated in therapeutic work (VanFleet *et al*., 2019; Winkle *et al*., 2020).

Dogs working in CAP with adolescents should share many of the general characteristics of all AAI dogs, including confidence, curiosity, sociability, and resilience. They must not demonstrate any signs of aggression. Importantly, the dogs must demonstrate a genuine desire to engage with people and enjoy CAP work. They should be seen as voluntary participants in the process of CAP and not as tools to 'treat' clients in the absence of mental health treatment. In the absence of specific temperament traits that make dogs suitable to work with adolescents in group settings, handlers must have adequate knowledge of canine communication, and the stress signals of the individual dog, to ensure welfare and safety (Brelsford *et al*., 2020; Winkle *et al*., 2020; Bremhorst and Mills, 2021).

Results from the current study do not support the practice of a mental health professional partnering with an 'assessed' dog in the absence of formal AAT training, or the practice of training dogs to work independently from a trained/assessed handler with whom they are closely bonded. Neither is the assessment of dog-handler teams by canine behavior/training experts who lack adequate and relevant AAT knowledge supported.

STRENGTHS AND LIMITATIONS

This study contributes to the growing literature base dedicated to the professionalization of AAT and AAI more broadly. It supports much of the work being published by professional bodies, and provides guidance specifically related to mental health as a subset of AAT. Our results provide guidance to those delivering CAP to adolescents and will aid the development of standardized and manualized interventions.

Given the specificity of this study (i.e., relating to dogs only, and guiding the development of a group intervention for adolescents experiencing common mental health disorders including depression, anxiety, and adjustment disorder), there is no evidence that these findings will be more broadly applicable to CAP or AAT in other settings or with other population groups.

While recruitment for panelists was broad, fewer respondents from European and other non-English-speaking backgrounds participated in the expert panel. Notably, there were no expert panelists from Asia or the African continent. Although it is unclear if this impacted the study findings, it is possible that more targeted recruitment or the provision of multilingual translations may have improved accessibility.

The substantial attrition of panelists between round one and two (approximately 50%) is indicative of the intensive and time-consuming nature of this research project, in which participants were asked to respond to over 200 items per round (54 relating directly to this study). Some experts also indicated that at times it was difficult to choose 'one answer' to a question and would prefer to answer, 'it depends.' This difficulty reflects the challenges of standardization of any psychotherapeutic intervention. By definition, manualization and standardization reduce the flexibility of providers to respond to the individual needs of their clients/participants in favor of a replicable intervention for use in clinical trials and/or provider training. The cessation of this study after round two resulted in 45 items remaining contentious. While it is not certain that further consensus may have been achieved if a third round had been completed, a number of items approached consensus in round two (70–79% agreement) which suggests it may have been possible. While the resulting dataset for this study (21 respondents) was adequate for general conclusions and consensus (Santaguida *et al*., 2018), it was not large enough to conduct sub-group analyses. It is therefore not possible to identify trends across disciplines (e.g., academic vs practitioner, canine vs equine specialization).

CONCLUSIONS AND FUTURE DIRECTIONS

Here we provide guidance for mental health professionals on the minimum standards required to prepare for and set up a CAP group intervention for adolescents experiencing common mental health disorders. This includes formal qualification, licensure, or

registration as a mental health professional. The use of clinically appropriate and accurate terminology, that is reflective of the provider's scope of practice, and clearly defines the treatment being provided is also required. Minimum educational and training standards for providers of CAP for adolescents should include formal training in AAT theory, general species knowledge, and applied species knowledge and experience; however, we highlight the variation in current practice and perspectives regarding AAT training. Guidance is also provided on the minimum standards for dog-handler teams, including the training content and competencies to be assessed. Through this study, we provide a framework that can guide the preliminary requirements and preparatory steps for CAP interventions for adolescents.

Future research should endeavor to provide further guidance on intervention development (e.g., theoretical foundations, session guidelines, and evaluation) and quality assurance (e.g., health, safety, and welfare). Together, these minimum standards may be used in the development of manualized interventions to establish feasibility, acceptability, tolerability, and effectiveness of CAP groups for adolescents.

ABBREVIATIONS

AAI	animal-assisted interventions
AAT	animal-assisted therapy
AAP	animal-assisted psychotherapy
CAP	canine-assisted psychotherapy

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

ETHICS STATEMENT

All necessary ethical approval has been received for this research. Ethics approval for this study was granted by the University of Melbourne Human Research and Ethics Committee (1853284).

ACKNOWLEDGMENTS

The researchers would like to acknowledge the panelists who dedicated their time and expertise to this study. Special mention should be made to Dr. Jess Heerde who assisted with data management.

AUTHOR CONTRIBUTIONS

The first author performed the statistical analysis and wrote the first draft of the manuscript. All authors contributed to the conception, design of the study, manuscript revision, read, and approved the submitted version.

FUNDING STATEMENT

The study did not receive any funding.

DATA AVAILABILITY

The data in this study form part of a larger, ongoing research project and as such are not available for public use. Please contact the research team directly for further information regarding data.

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