

RESEARCH

Recommendations for uniform terminology in animal-assisted services (AAS)

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Abstract

Through the years, the range of services involving animals benefiting people, often described as "animal-assisted interventions" (AAIs), has been plagued with confusing and inconsistent taxonomy, terminology, and definitions. This has caused difficulties for the delineation of roles of service providers, for the recipients of services, as well as for the preparation, training, and expectations of the animals that work in different roles. It can be argued that these difficulties have compromised the development of the field in terms of establishing agreed standards of practice, qualifications, and competencies and adopting good animal welfare practices. It has also likely limited the base of evidence, as search terms used to access studies are not consistent, and study protocols are difficult to compare, lacking uniformity in terminology. Additionally, the current terminology cannot accommodate the expansion and diversification of programs in recent years, which is likely to continue as the field evolves. Establishing internationally agreed upon uniform taxonomy, terminology, and definitions is crucial to more accurately reflect the key features of different approaches, to define the scope and competencies for different service providers and their animals, to provide transparency about services for recipients, and to ensure the appropriate preparation, training, and support of the animals that work with them.

The recommendations in this article are the result of an international work group that convened over the course of two years. The umbrella term animal-assisted services (AAS) is proposed, defined as services that are facilitated, guided or mediated by a health or human service provider or educator, who works with and maintains the welfare of a specially alongside a specially qualifying animal to provide therapeutic, educational, supportive and/or ameliorative processes aimed at enhancing the well-being of humans. AAS are further categorized into three main areas: treatment, education, and support programs. A recommendation for provider-specific terminology is also suggested. The aim of these proposals is to set clear expectations and boundaries for each specialty of practice, without compromising the richness and diversity of each approach. The adoption of this new umbrella term and its categories is intended to improve clarity for all involved in the receipt and delivery of services, as well as for those who study their effects.

Keywords: animal-assisted interventions, animal-assisted services, animal-assisted therapy, animal-assisted activities, animal-assisted treatment, animal-assisted education, animal-assisted support program, pet therapy, therapy animals, therapy dog

Introduction

In recent decades, the breadth of initiatives where animals benefit people has expanded and diversified to include crisis response, coaching, vocational programs, education, initiatives in healthcare settings and more. Common to all is the promotion, facilitation, and support of human well-being. However, the diversity and specialization of human-animal teams have implications for the

providers, handlers, animals, and recipients of the services. While equally important, there are significant differences in the services that teams provide which are largely based on the handler's formal education and training, qualifications and credentials, and scope of practice. It follows that the description and skills of the animals involved, also vary.

Many volunteer visiting teams belong to organizations that have a rich history of educating, evaluating, and registering human-animal

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teams for very specific criteria for informal visits with humans. They may visit a site two times a week and stay for duration of up to 2 hours. During that block of time, they may have several brief interactions with recipients, each lasting a few minutes. The handler is solely responsible for tending to the animal and maintaining good welfare practices, including ending an interaction if the animal shows signs of distress or discomfort. In contrast, a licensed/credentialed/registered healthcare provider-animal team may provide very different services. Clients may be seen with more frequency, for a longer duration per session, and for a specific treatment plan that was based on a physical, cognitive or mental health evaluation. The animal handler may also be the healthcare provider who juggles the responsibilities of client, the treatment plan, equipment, and the animal.

Currently and historically, the most widely used terminology is oriented around animal-assisted interventions (AAI) as the umbrella term, covering several categories of services that have been subsumed under the names: animal-assisted therapy (AAT), animal-assisted education (AAE), and animal-assisted activities (AAA). Descriptions and definitions of these terms have been published by the International Association of Human Animal Interaction Organizations (IAHAIO, 2018) and Animal-Assisted Intervention International (2022).

However, inconsistencies remain in how these services are described, practiced, and reported upon in professional literature and in the media. Without uniform terminology and definitions, standards of practice have been difficult to define and monitor, the quality and appropriateness of the interactions may be negatively impacted, and quality research may be difficult to conduct (Parish-Plass, 2014; Trevathan-Minnis et al., 2021). Leaders in the field, researchers and providers, have increasingly expressed concerns about prolific, inconsistent terminology used over recent years. They have repeatedly called for the adoption of uniform and optimal terms and definitions to provide more conceptual clarity in the field (Beck and Katcher, 2003; Kruger and Serpell, 2010; Parish-Plass, 2014; Fine et al., 2019; Fine and Andersen, 2021). For example, in 2021, a consensus document was published to recommend optimal uniform terminology for services that incorporate equines to benefit people (Wood et al., 2021). The stated benefits of such an approach included advancing future scientific development and reliable measurement of effectiveness, mitigating future terminology-related problems, protecting consumers, removing reimbursement obstacles, and helping physicians and insurance carriers embrace, recommend, and fund some of these services. More recently, an international study of terminology in human-equine interactions (Mattila-Rautiainen et al., 2023) highlighted the need for clarification of terms to address cultural and methodical differences. The authors of the study suggested creating a matrix of terms that would include descriptions of the services provided, leading to a clearer understanding by practitioners and clients of these services, as well as allowing for improved cross-cultural, work-related exchange and research. The authors of this article have reviewed these documents and support the terms recommended, but there remains a need to provide clear, operational definitions for terms used in initiatives beyond the equine context.

In this article, we:

- explain, using examples, why the continuing use of inconsistent, unclear terminology is particularly detrimental to the acceptance and recognition of the field as an evidencebased, scientifically grounded set of practices;
- propose terminology and definitions that should provide more clarity and guide the understanding of the scope and requirements of the different practices that include animals to benefit humans. The recommended terms that are proposed are: animal-assisted services (AAS) as the umbrella term and animal-assisted treatment (AATx), animal-assisted education (AAE), and animal-assisted support programs (AASP) as subcategories. Recommendations for provider-specific terminology are also proposed;

 suggest ways in which practitioners in the field, researchers and individuals, organizations and educational providers who have a special interest in human-animal interactions (HAI) and AAS in any capacity, may contribute to implementing these changes.

WHY IS UNIFORM TERMINOLOGY IMPORTANT?

Specialized knowledge requires consistent terminology for the representation, communication, and teaching of concepts to professionals (Cabré, 2002). Every profession has its industry-specific lexicon (Cabré, 2002) to help readers grasp the technical contexts and interactions between concepts. Professionals in a field or industry must speak the same language, develop evidence-based literature, and layout competency guidelines to ensure consistency and understanding among them, as well as to enhance interprofessional collaboration. Within the field of what has heretofore been referred to as AAI, fully accepted vernacular does not exist.

For the field to be seen as a credible, research-driven area of practice with potential for growth, a consistent language must be adopted. The processes involved in various areas of the field cannot be understood in the absence of consistent language specifying how services are set up or delivered. Scholars must start from similar conceptualizations and definitions of core constructs in order to draw scientifically valid conclusions about the internal validity and efficacy of this work.

PROBLEMS WITH CURRENT TERMINOLOGY FOR PROFESSIONALS, RECIPIENTS AND GENERAL PUBLIC

The field of practices of AAIs has developed and evolved dramatically over the last 50 years. Terms such as AAT, or historically, "pet therapy," are widely used as umbrella terms to describe a wide spectrum of interactions, including those whose context or process does not involve therapy. The term "intervention" has been particularly problematic and the cause of much debate in the field and among those within this workgroup. For some, the term "intervention" itself may be commonly used as a synonym for treatment or for human service. For others, and for much of the public, the term is defined as attempting to remove undesirable behaviors (Loss, 2008) in a forcefully interfering manner such as the act of "intervention" within the substance abuse field.

Likewise, the terms "therapy horse" or "therapy dog" are commonly used to describe an animal that participates in recreational, educational, and support activities or services. These are not always within the context of therapy, mental health treatment, or other types of professional treatment¹ and they imply that the animal is somehow the therapist, with an inherent ability to be therapeutic or "deliver" therapy. The problems arising from this lack of clarity and proposed alternatives are addressed in Howell *et al.* (2022) and are not addressed in this article.¹

This lack of consistent and clear terminology has complicated the setting of relevant, widely-accepted standards in the field, defining crucial provider competencies, credentialing of both the humans and the animals who accompany them, and thus confused governing bodies. For example, a program may have therapeutic effects and provide many benefits, yet not belong to a recognized field of therapy. A practice can only be considered to be therapy when a licensed, credentialed, and/or accredited therapist is involved in the therapy process and the intervention involves therapeutic goals, appropriate therapy techniques, and measurable outcomes. The authors emphasize that in order to work with animals in practice ethically, providers must work within their boundaries of knowledge, skills, and competence. Incorrectly categorizing one's work as therapy, when the provider is not professionally credentialed, licensed, and registered, harms the reputation and perceived efficacy of the services. Clients in

need of therapy may be inadvertently harmed by providers who profess to do therapy, yet do not have the education and licensure, credentials, or registration to conduct therapy. Programs should state their specific preparation, goals, scope, methods, techniques, processes, and projected outcomes.

PROBLEMS WITH CURRENT TERMINOLOGY FOR RESEARCH AND PUBLICATION

The lack of specificity or clear operationalization of the methods and standards of practice used under current terminology also confuses researchers and theoreticians, making it challenging to evaluate and compare the results of research investigating the effects of any given practice (Fine, 2010; Griffin et al., 2011; Fine and Beck, 2015). Non-standardized terminology use makes the publication of a scientific study of animal-assisted interactions and services difficult because it impedes the possibility of comparing studies, severely limiting the ability of researchers to conduct meta-analyses that would allow them to start drawing conclusions about important questions such as dosage, duration, and overall efficacy across populations. Reviewers may not have knowledge about uncommon or inconsistent language that is used, or even understand that there are various ways to include animals and the differences between them. For instance, many studies included in various meta-analyses erroneously refer to AAT despite investigating the effect of the presence of an animal in non-therapy situations. It is impossible to have a consensus of whether an approach can be shown to be effective if we do not accurately define the environment, provider qualifications, methodology and content of the intervention investigated by the research study with consistent terms.

In summary, the adoption of uniform terminology is expected to provide a clear pathway for enhancing the quality of the service for the recipient and for determining appropriate training and qualifications for providers. Additionally, more explicit practice standards and competencies would lead to greater scientific and public confidence and credibility in the field.

Methods

AAII AND IAHAIO COLLABORATION

The consensus-building process began in 2020 with working group collaboration between the Animal-Assisted Intervention International (AAII) and the International Association of Human-Animal Interaction Organizations (IAHAIO). AAII was founded in 2012 and is a member-driven (including both organizations and individual providers) non-profit organization that has expanded standards of practice, competencies, accreditation, and continuing education for AAS providers, including animal trainers who work with people and their dogs who conduct animal-assisted services (Animal-Assisted Intervention International, 2020). One of AAII's core goals has been to facilitate international collaborations with other organizations for professionalizing AAS practices. AAII is supported by 112 individual and organization members across six continents.

In 1992, the IAHAIO was founded as a global association of organizations that engage in practice, research and/or education in animal-assisted human services, human-animal interactions and service animal training (IAHAIO, 2018). There are over 110 member organizations within IAHAIO, across 30 different countries. One of IAHAIO's strategic directions is to establish international task forces to address pressing issues in the field, for example, the international task force for standards in AAI best practice and animal welfare (Strategy 7). It provides international guidelines on many aspects of AAS, position statements, and declarations.

The AAII and IAHAIO leadership decided to form the International Consortium of Animal-Assisted Interactions (IC-AAI), an international task force made up of experienced individuals,

organizations and educational institutions that engage in animalassisted interactions. As a first step toward this goal, four core members, Melissa Winkle and Amy Johnson Binder (representing AAII) and Marie-Jose Enders-Slegers and Jo-Ann Fowler (representing IAHAIO) collaborated for over a year and a half to frame projects and review literature.

TIMELINE OF EVENTS

For the next step, they prepared and presented a half-day workshop for the International Society for Anthrozoology, reviewing previous and current terms and definitions from the literature and the official documents of AAI and Human-Animal Interaction organizations. Brief presentations were made, followed by semi-structured discussion groups among attendees and facilitators. Workshop discussions were focused on the clarity of the terms and implications of terminology, identification of more transparent terms and recommendation of terms as outlined in this article.

Following this process, through a live and recorded invitation presented at the ISAZ 2020 conference session, the IAHAIO 2021 conference session, and the AAII 2021 Members Forum, together with an international open invitation via email and social media, potential members were sought to join the IC-AAI task-force to identify terminology problems and make recommendations to address these.

Three personal invitations were extended to well-respected specialists in mental/physical health and veterinary medicine who are known for their contributions in AAIs. Their purpose was to periodically monitor and review the group's outcomes. A total of 91 people joined the IC-AAI general workgroup, which consisted of the four original IC-AAI chairs, two dozen university faculty, researchers, volunteer dog handlers, dog trainers, and providers from a variety of disciplines, working with different populations, in more than 13 countries. Members of the general workgroup were invited to join any of four topic-specific work groups: (1) AAI terminology, (2) therapy animal terminology, (3) government regulations for AAI, and (4) qualifications and continuing education for AAI. Individuals were placed in at least one of their top two working group choices. The intensive input of the members of these groups spanned 2 years.

Twenty-seven individual members with AAS experience from various disciplines and practices from around the globe signed up for the AAI terminology group, which culminated in this article. This work group was charged with reviewing and recommending unified and optimal terminology for those incorporating animals into their services. The work group was facilitated by Amy Johnson and Nancy Parish-Plass. The workgroup met virtually on Zoom for eight meetings, from January 2022 until August 2022, as well as continuously worked via emails and shared documents until September 2023. The four original chairs met regularly during the same period to discuss progress and make recommendations. The list of members is noted in the authorship list of the article. This article reports the results from the AAI terminology group. There was no financial support for this work group (Table 1).

Results

ANIMAL-ASSISTED SERVICES

We propose that the term animal-assisted service (AAS) replace AAI as the umbrella term for the full spectrum of practices in which animals are included in various roles for the benefit of humans. AAS are defined as the mediated, guided or facilitator-led practices, programs and human services that incorporate specially qualified animals into therapeutic, educational, supportive and/ or ameliorative processes aimed at enhancing the well-being of humans while ensuring the welfare of the animals involved in these practices. There are three categories of AAS: animal-assisted

Table 1. Timeline of events.

April 2020	IAHAIO/AAII joined forces to professionalize AAS practices beginning with uniform terminology
June 2020	IAHAIO/AAII conducted a half-day workshop at the ISAZ conference; formed the International Consortium of Animal-Assisted Interventions
September 2021	IAHAIO/AAII presented the results of the work progress at the IAHAIO conference, and AAII monthly forum.
January 2022	Working groups were formed that included AAS terminology, therapy animal terminology, government regulations in AAS, and continuing education in AASI; AAS terminology workgroup chairs were confirmed
September 2022	Outcomes and recommendations were presented at the IAHAIO and AAII conferences
September 2022–June 2023	The International Terminology task force met monthly to begin assembling the article of recommendations
June 2023	Rough draft of the article sent to members of AAII and IAHAIO and to Nancy Gee, Aubrey Fine, and Zenithson Ng for peer review
July 2023	Edits that were suggested from the review process above were discussed amongst the task force and AAII/ IAHAIO core members and implemented as applicable; that version was sent to the larger international consortium (IC-AAI) for review.
August 2023	Edits from that review process were discussed among the task force and implemented as applicable.
October 2023	Paper submitted to the Human Animal Interaction journal (CABI) for peer review and publication

treatment (AATx), animal-assisted education (AAE), and animal-assisted support programs (AASP) (see Figs. 1 and 2).

AAS are a distinct category of human-animal interactions, where human-animal interactions are described as "any manner of relationship or behavior between people and animal(s). These interactions can vary widely and be positive, negative, or neutral for either party. They can occur in individual, community, or societal contexts" (AVMA, 1998) Appendix A (examples of HAIs that are not AASs) provides further clarity on the distinction between HAI and AAS.

In AAS, the human-animal bond (defined as a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors considered essential to the health and wellbeing of both, AVMA, 1998) may or may not develop, depending on the specialized process being facilitated and the subjective experience of the professional, recipient and animal(s). Some AASs intentionally develop the (potential for) human-animal bond to facilitate change in the client. Other AASs include interactions with animals where the human-animal bond may not develop, however, other mechanisms involving animals and supporting change are involved (such as observing a group of horses to project and reflect on a client's family dynamics). Firmly embedded in the definition of AAS is an emphasis on the need for proper animal welfare practices across all categories. This is covered in further detail in Section "Animal welfare and well-being". Figures 1 and 2 provide a graphic illustration of the three main categories under the umbrella term, AAS.

ANIMAL-ASSISTED TREATMENT (AATx)

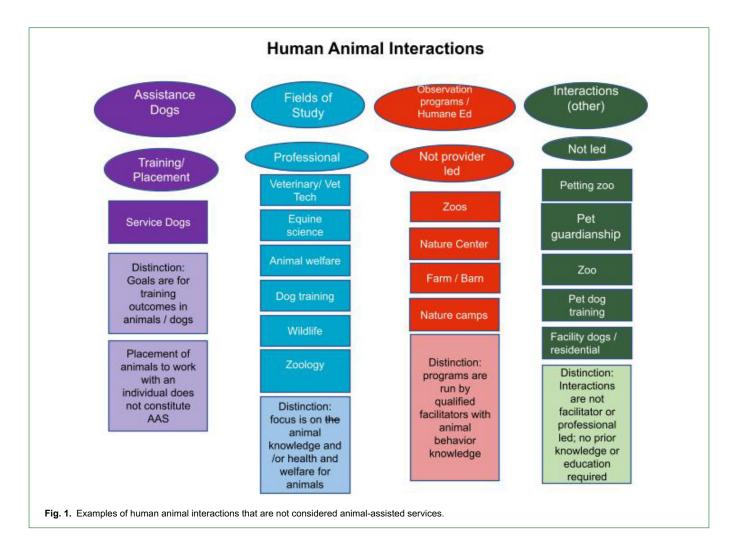
Animal-assisted treatment (AATx) replaces animal-assisted therapy (AAT). In the simplest of terms, AATx is treatment focused. AATx refers to a class of mental or physical health professional treatment modalities for which the integration of animals, directly or indirectly, is a critical component of the treatment approach of the professional. Tx was chosen as it is a common medical abbreviation for the term treatment and is recognized in accepted medical sources such as The American Heritage Stedman's Medical Dictionary (Stedman, 2004) (e.g., Tx for treatment, Dx for diagnosis, Hx for history, etc.).

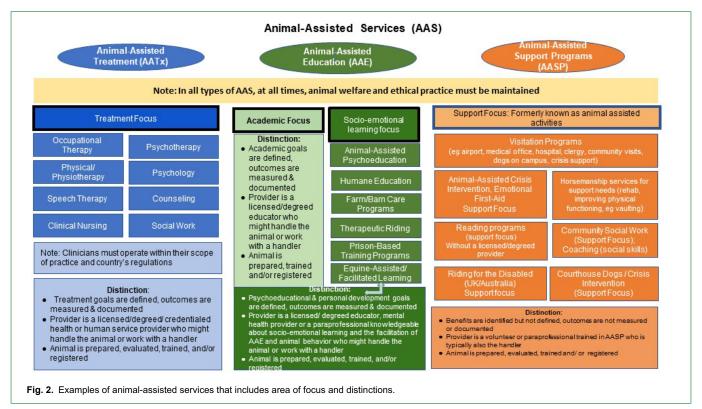
The term *treatment* is more inclusive of professions that employ a variety of treatments by mental and physical health professionals that are not necessarily therapy but are part of the scope of their profession. Each AATx provider subscribes to the goals and techniques defined and accepted in the particular profession

and discipline, as well as to the type and level of professional/ academic training and competencies that are required for licensure and/or accreditation for the particular profession in the country in which the service takes place. Importantly, while AATx can be construed as an adjunct to another treatment approach (e.g., a therapist might use an evidence-based therapy such as cognitive behavioral therapy while interacting with the animal, referring broadly to this practice as AATx), AATx can be integrated as the primary treatment approach chosen with a clear clinical rationale (e.g., humanistic animal-assisted psychotherapy. AATx professionals must practice within the scope of their profession (e.g., occupational therapy, counseling, etc.) and with the accepted target population of that profession, according to the standards, competencies, and ethics of professional practice conforming to those of the country in which it is practiced. It is imperative to note that different countries define the scope of various professions in different ways. For instance, in some countries, psychotherapy may be conducted within the scope of clinical psychology, counseling and social work, while in other countries practitioners in any or all of these professions must obtain further training to become a licensed psychotherapist.

A competent and ethical AATx professional should be trained and supervised first in their licensed/credentialed profession (e.g., counseling, occupational therapy) and then in the specialized area of treatment being provided (e.g., animal-assisted psychotherapy, animal-assisted occupational therapy, animal-assisted speech therapy). The additional education and training would include studying the human-animal bond, animal studies, animal welfare, and ethical considerations, as well as the specific discipline-based AATx theory and practice methodology they are utilizing, if such courses are available in their country. Most professional codes of ethics state that the onus is on the professional to take the necessary steps to find education and training before including specialty modality in their practice (see, e.g., Available at: https://www.apa.org/ethics/code, accessed 10 September 2023). A separate workgroup formed through the IC-AAI is currently working on establishing best practices for the education and training of providers wanting to include animals in a treatment, educational or service program capacity. Depending on the technique of the particular AATx, the professional may work collaboratively with an animal handler or animal/equine specialist in order to further the goals of the treatment. It is recommended that the handler/specialist has attended coursework related to the particular field of AATx.

The AATx practice may take place in a traditional setting (such as a clinic, private practice rooms, hospital, etc.) or in a non-traditional setting, such as a zoo, private stable, animal rehabilitation center,





natural habitat, prison, etc. The following is a list of how AATx professionals might identify their work:

- Animal-Assisted Occupational Therapy
- · Animal-Assisted Physical/Physiotherapy
- · Animal-Assisted Speech Therapy
- Animal-Assisted Clinical Nursing**
- **This may apply to a psychiatric nurse practitioner or an advanced practice nurse who has been credentialed to conduct therapy
- Animal-Assisted Psychotherapy**
- **Psychotherapy practice; providers still need to operate under their scope of profession
- · Animal-Assisted Psychology
- · Animal-Assisted Counseling
- · Animal-Assisted Social Work

ANIMAL-ASSISTED EDUCATION (AAE)

The workgroup has retained the category name of animal-assisted education (AAE), used historically, but modified the definition that was published in the 2018 IAHAIO white paper. In this new definition, AAE refers to any educational program in which animals are integrated, directly or indirectly, as a critical component of an ongoing educational process. Depending on the degree and type of training of the AAE provider, the nature of the goals of AAE programs may be academic, social-emotional, psychoeducational, cognitive, vocational, and/or personal or organizational development, and may focus on emotional regulation, coping strategies, prosocial skills, and/or empathy development. One example would be programs that include reading to dogs. A program set up in a classroom, where students read daily or weekly to a dog and the process is overseen by a teacher or paraprofessional with the goal of increasing reading levels, would fall under the classification of AAE. However, if conducted by a volunteer in a library setting during monthly visits, it would be classified as an animal-assisted support program (formerly activity or AAA).

AAE may take place in a variety of locations, such as schools providing education, prisons, stables, and private centers. Programs with animals specializing in humane education goals may include those operated by animal welfare groups, museum education, nature and environmental centers. Programs in AAE may include equine- and canine-assisted learning, requiring relevant training and knowledge of the animals present in the program. An AAE psychoeducation program may involve working with prisoners or at-risk youth, teaching social skills with the goal of helping the recipient feel a sense of self-worth or self-esteem, acquire positive self-control skills, internalize limits and positive limit-setting skills. The AAE provider may work with facility-owned animals, collaboratively with an assistant or may work with their personal animal. In all cases, it is recommended to have knowledge of animal behavior and communication to protect the health and well-being of the animal and everyone else involved in the process.

Providers of AAE programs fall into two categories, which are differentiated by the degree of training undertaken by those carrying out the program: (1) AAE professionals are required to have an academic degree or certificate in education, depending on the country where the program is taking place. (2) AAE non-degreed professionals are required to have training or coursework relevant to the program they provide. The process of programs runs by any provider of AAE includes structured or semi-structured sessions, evaluation, and documentation of the sessions. Depending on the goals of the program, professional AAE programs may sometimes be carried out by non-degreed professional AAE providers who are actively overseen and directed by a mental health or educational professional.

Animal dissection, animal experiments, or animal collection for research are not considered AAE.

ANIMAL-ASSISTED SUPPORT PROGRAMS

Intended to replace the term "Animal-Assisted Activities," the new category proposed here, animal-assisted support programs (AASP), includes only programs in which animals are engaged, directly or indirectly, in activities aimed at supporting and enhancing the well-being of humans. These programs may have aims that include increased motivation, prevention of loneliness and isolation, reduction of tension and anxiety, distraction from difficult situations, or emotional comfort. In the case of animal visitation services, the human service providers and animal specialists may be volunteer handlers with related knowledge in animal behavior and training at the species, breed, and individual levels. The activities may or may not be documented, depending on the goals and demands of the specific AASP being carried out. Other examples of these AASPs include courthouse facility dog programs, formal crisis interventions, victim advocacy, prison or detention visiting programs, support services and dog training programs for human rehabilitation. An AASP may be an adjunct to AATx or AAE.

These programs can be delivered in three different ways, depending on the background of the provider:

- by professionals with licensure/degree who also have specialized training in this type of AASP in the circumstance/ environment specific to the program (e.g., life skills coach);
- by professionals with licensure/degree or equivalent, working together with an assistant who is a trained, qualified animal handler:
- by volunteers (see provider-specific terms below) who have education, skills and/or experience in delivering this specific type of support activity (e.g., visitation animal team), interaction or intervention in the specific circumstance, environment, or target population.

The term "support programs" is likely to help support service providers feel that their work is important for making a difference in the life of the recipient, more so than simply "running an activity." This work is of equal importance to that of a therapist, but is different in nature (goals, methods, training of service provider, etc.).

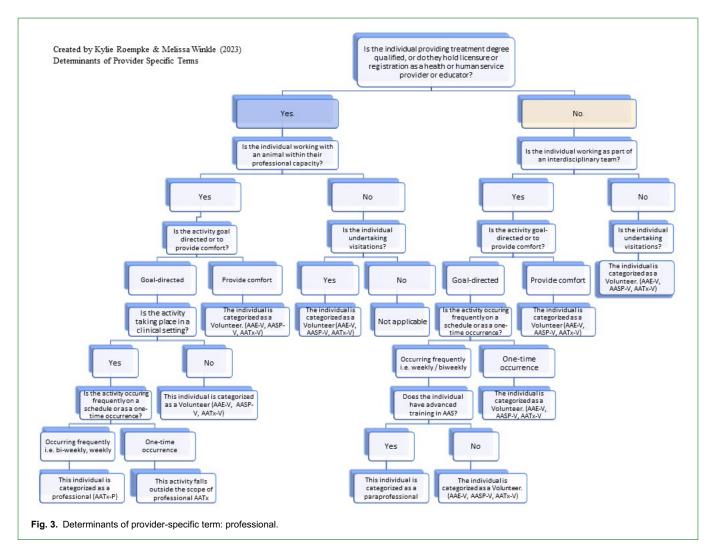
PROVIDER-SPECIFIC TERMS

Historically, terms used to describe the human's participation in conducting AASPs have been somewhat unclear. The terms used by individuals to describe themselves have often also been unclear and inconsistent. For example, individuals who are volunteering with their registered visiting dogs on hospital visits may have referred to themselves as animal-assisted therapists. However, this would not be accurate because no "therapy" is being conducted. The authors of this article recommend the following terms to best represent the work being done within specific categories: Degreed and non-degreed professionals, paraprofessional, volunteer (Fig. 3).

This decision tree can help the provider determine their role and category of AAS being conducted.

Professional - AATx-P

The professional provider of treatment (AATx-P) is the individual providing treatment with an academic or professional degree, related licensure or registration as a health or human service provider (e.g., occupational therapist, physical therapist, psychologist, licensed professional counselor, registered psychotherapist, social worker, or psychiatric nurse). The service would be defined as AATx if the professional provider is overseeing or directing the interaction with set outcomes for the client in a clinical setting on a consistent schedule. The service would not be AATx if that same professional provider were visiting a hospital setting with their dog outside of their work schedule or professional role. That professional provider would be a volunteer in that scenario, potentially providing animal-assisted support.



The next consideration involves desired outcomes. What goals or outcomes are the individuals looking to achieve with their clients? Goals and outcomes should have value for the therapy process that helps with short-term and long-term goal attainment related to the particular profession. If the goal is to provide comfort, while considered therapeutic, it would fall outside of the professional scope of AATx-P.

And finally, the frequency of the interactions needs to be taken into account. Treatment is conducted over a period of time rather than a one-time interaction. Meeting weekly or bi-weekly to work toward achieving a therapy outcome with the inclusion of an animal in sessions with a therapy professional best meets the criteria of treatment.

Paraprofessional - AATx-PP

A paraprofessional is "a person to whom a particular aspect of a professional task is delegated but who is not licensed to practice as a fully qualified professional". This definition describes the work of a volunteer (paid or unpaid) who works under the supervision or direction of a professional.

Volunteer - AATx-V, AAE-V, AASP-V

The abbreviation would be, based on the context of the interaction, animal-assisted treatment volunteer (AATx-V), animal-assisted education volunteer (AAE-V), or animal-assisted support program volunteer (AASP-V). The difference between a paraprofessional role and a volunteer role would be whether the handler is a part of the interdisciplinary team or providing one's animal in a visitation capacity. The role of the volunteer in this context is animal handling. This could be a visiting dog team in a hospital setting or an animal

handler bringing a dog into the school setting to visit with students or allow students to read to the dog.

Discussion

COMPETENCE AND QUALIFICATIONS

One of the main criteria differentiating the types of AAS is the qualification and expertise of the provider (and those who offer training and continuing education to providers). Every person delivering any type of AAS needs to be a competent provider. However, depending on the technique or approach involved in delivering the AAS, each type of service will require a particular set of skills needed for the provider to reach competence, skills that are developed through training and the awarding of qualifications as well as continuing education or professional development.

Although there are published standards and guidelines for including animals in services (IAHAIO, 2018; AAII, 2014, 2020, 2022) as well as competencies (ISAAT/ESAAT; IAAAP – Israeli Association of Animal-Assisted Psychotherapy, 2015; American Counseling Association, 2020; Chandler, 2017; VanFleet and Faa-Thompson, 2017; AAII, 2020); and ethics endorsed by national professional organizations (American Counseling Association, 2020; IAAAP – Israeli Association of Animal-Assisted Psychotherapy, 2016; American Psychological Association Human-Animal Interactions Section 13, 2020), there remains the challenge to reach consensus on specific training and qualifications that accommodate regional, national, and international differences in definitions (e.g., specialists) and qualifications.

Currently, there are wide variations in course content and what qualifications and job titles represent. In trying to reach consensus

in terminologies in AAS, we need to also be clear about what is meant by terms such as "professional," "licensed," "qualified," "evaluated," "certified," "registered."

While all animals should be screened for suitability to the AAS they are participating in, some animals will require additional education, training, and evaluation for their specialized role, including animal registration (e.g., a dog trained and included in a speech therapy room-based session). The type and degree of training and evaluation depend on the goals, process involved, population served, setting, and type of animal. Other AASs may not require such training, but rather the animals may be chosen for their temperament or personality. Comprehensive training, supervision and registration of the *specialized* AAS provider will serve to promote animal and recipient safety, limit risk and liability to the provider, and contribute to the overall efficacy and professionalism of each of the specialized branches of AAS's (within the AATx, AAE, and AASP specialties).

The maturing field of AAS, with its increasing and diversifying range of services, will demand the growth of more *specialized and comprehensive education, training and registration pathways* and opportunities for future service providers from within each AATx, AAE, and AASP specializations. This maturation involves moving away from the more popularized, generalized, information-based AAS courses (former AAI virtual courses) and "one size fits all" animal registration or certification trends towards more service-specific, in-depth academic and practice-based training and education available at graduate and postgraduate equivalent levels (when appropriate for licensure), as well as a more well-developed understanding of evaluation for the animal for the role that they have in the service.

As noted earlier in this article, there is a separate workgroup, part of the IC-AAI, working on provider and animal qualifications, education, and training primer to align with the work presented in this article on terminologies, that should be ready in 2024.

ANIMAL WELFARE AND WELL-BEING

As the range of services of AAS has grown, so too has the awareness of the central importance of animal welfare and well-being and ensuring health and safety of both humans and animals engaging in AAS (Haubenhofer and Kirchengast, 2006; Grandgeorge and Hausberger, 2011; Glenk *et al.*, 2014; Glenk, 2017; Enders-Slegers and Hediger, 2019; Fine *et al.*, 2019; Winkle *et al.*, 2020; Wijnen and Martens, 2022). Additionally, it is crucial that the animals included in AAS are not only suitable for their roles, but they willingly participate and/or thrive in the AAS environment. Further inspection of terminologies should also consider these issues, making the participating animal's suitability and welfare needs an integral part of the process.

REGIONAL AND NATIONAL DIFFERENCES IN LANGUAGE AND MEANING

Reaching consensus in AAS terminologies requires sensitivity to regional differences in terms of how the language and terms translate across different regions, and how various training and qualifications compare in different parts of the world. For example, our description of the training and qualifications required by someone delivering AATx, that is, a degreed, licensed professional in human health or human services, may in many countries describe a "therapist." In other countries, the term "therapist" may have a broader application and include people with specialist training but without degrees or a license to practice in a specific field.

Another example is the use of the term "paraprofessional." Within several disciplines in the United States, individuals who do not have clinical or educational degrees, but who collaborate with health or human service professionals who do, are called paraprofessionals. If acting as a paraprofessional within the AAS context, these individuals should have extensive knowledge of their animal at a species, breed, and individual levels, of their skill and preference sets, as well as

knowledge of laws, regulations, outcomes and techniques related to their roles working with the degreed professional. In different parts of the world, the term paraprofessional is not widely used and instead, reference is made to "handlers" or "specialists" who meet these same or very similar criteria.

A third example is the term "counselor." Depending upon the region, a counselor may be formally educated, degreed, and certified or licensed to diagnose and develop treatment plans. Other regions have counselors without training to diagnose or write treatment plans, but have been certified to provide social support services to students/clients. Further debate and discussion is needed to provide more clarity but for now it would seem that the onus is on the professional to understand how their governing bodies classify them within their region.

CONCLUSION

This internationally represented workgroup has sought to describe the problems with the current ambiguity in the range of services that have been commonly referred to as AAI (pursuant of the term AAS), to provide clarity on definitions and terminologies, and to specify criteria for differentiating between them. The overall umbrella term AAS is recommended, which encompasses three major categories. AATx refers to the integration of animals into the practice of mental and physical health professional practice, in which the professional practices according to the scope, goals, techniques of that profession. AAE refers to an educational service with academic, instructive, cognitive, social-emotional learning, and psychoeducational goals, practiced by credentialed and informal educators. A new category proposed is AASP which includes previously existing services (e.g., animal visitation activities), as well as those that have evolved and have been developed over the past 10 years (e.g., courthouse facility dog programs). AASP, which may be motivational and social in nature, or provide emotional comfort, involves programs aimed at supporting and enhancing human well-being with the aid of animals. Providers may or may not be credentialed but must have some training in their service program. Provider-specific terms are also proposed to clarify the roles of providers of different services.

All service providers must have education and training in the specialty AAS area they are providing, including appropriate knowledge and skills related to the integration of animals into the service (e.g., animal studies, animal care, animal welfare, ethics). A separate work group in the International Consortium of Animal-Assisted Interactions will detail outcomes for provider education in a different paper.

Animal well-being, sometimes overlooked in AAS services focusing on human benefits, is included as a crucial part of each service's scope and responsibility, firmly embedded in the definition of AAS. A reconsideration of the misleading term "therapy animal" is also put forward but has been rigorously addressed by another work group as part of the IC-AAI as well as another large group of collaborators comprising researchers, practitioners, and end beneficiaries (Howell *et al.*, 2022).

We have presented a typology that sets clear expectations for each AAS, with clear distinctions between them. We encourage all providers of AASs to identify and describe their work using the three main categories proposed. Dialogue may then develop between various AAS about issues concerning all, such as ethics and possibilities for cooperation, leading to improvements in practice, research, and policy decisions.

Individuals, organizations, and educational providers, who have a special interest in HAI and AAS in any capacity, can help to make this change by being part of the movement to professionalize the services in these areas. They may do so by participating in the activities listed below:

 review updated terminology and the rationale for the changes (such as this article or any following tools) with boards of directors, other decision makers, members of organizations, and students;

- publish terminology changes on websites, social media, intraand interdisciplinary groups;
- contact journal editors that publish content about HAI or AAS with a summary of these updated terms as well as enforce this terminology with journal reviewers;
- write and publish summary commentaries about the changes for professional journals and magazines;
- submit this article or summaries to professional organizations of various disciplines (example, American Counseling Association) and add articles to practitioner areas that attract those interested in HAI or AAS;
- provide short workshops in state or national conferences;
- · provide webinars, blogs and social media posts;
- contact official regional news authorities (televised, recorded or written) and pitch this content as a story;
- contact related organizations such as those that train assistance dogs, welfare groups, training organizations;
- initiate discussions at staff meetings, with colleagues, interns, volunteers, and students;
- contact national and regional governmental agencies that may have official documents, laws or rules;
- make a summary recording and share the link on social media and other web-based platforms;
- revise or construct internal or official documents in your company, organization, etc.;
- modify the name of the consortium and sign a new International Consortium of Animal-Assisted Interactions (IC-AAI) Memorandum of Agreement (MOA) that will be developed by IAHAIO and AAII for updated terminologies that includes endorsing and sharing the recommendations on organization websites.

NOTE

¹This article will not address the terminology of "therapy animals," as this was recently done (Howell *et al.*, 2022) but will focus on the terminology referring to the interactions themselves. The authors recommend readers familiarize themselves with the aforementioned article, and consider the misunderstandings, complications and ethical implications of continuing to use the term "therapy animals" in non-therapy or non-treatment contexts.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICS STATEMENT

This research followed ethical standards for conducting research.

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AUTHOR CONTRIBUTIONS

Melissa Winkle spearheaded the project and connected with Amy Johnson Binder (representing AAII) and Marie-Jose Slegers-Enders and Jo-Ann Fowler (IAHAIO) to begin the initial startup of the consortium and recruitment. This core group developed the first draft of the article and provided continuous review, edits, and

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