Animal-assisted interventions for improving engagement in mental health services
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Background

Client engagement has been operationally defined as the client’s motivation, involvement, active participation, and adherence to the mental health service that they are undergoing (Tetley et al., 2011; Morris, Fitzpatrick, & Renaud, 2014). Engagement can mean that the client is actively behaviorally, cognitively, or emotionally involved with the clinician, the intervention, or if applicable other participants in a mental health service (Hock et al., 2015). Client engagement in mental health services is an important construct to examine as it has been linked to improved clinical functioning, improved outcomes, and treatment completion (Lees, Proctor, & Fassett 2014; Bamberger et al., 2014; Hock et al., 2015). Generally, interventions utilized to improve engagement have been largely monetary compensations at the end of each therapeutic session or at the completion of the mental health service (Stanley et al., 2016; Wall et al., 2006). The use of animal-assisted interventions (AAIs) as a tool to impact engagement in a mental health service has not been thoroughly researched.

Animals have been incorporated into mental health treatment since the 1800s as a tool to facilitate connection and interest between the patient, the clinician, and the therapeutic technique being used (Connor & Miller, 2000). Today, inclusion of animals by health or human service professionals is increasingly common and is associated with positive physical and psychological benefits (Bert et al., 2016; Davis et al., 2015). More specifically, research evidence suggests that inclusion of animals into therapy settings may improve client engagement. For instance, various studies report that direct social interaction among humans is increased in the presence of animals (Beetz, 2017; Corson, Corson, Gwynne, & Arnold, 1977; McNicholas & Collis, 2000). Therapists that use animals in mental health services are seen as less threatening, which can reduce barriers to client engagement (Balluerka, Muela, Amiano, & Caldentey, 2014), prompt clients to be more authentic during therapy (Fine, 2015; Kruger, Trachtenberg, & Serpell, 2004), and boost clients’ sense of safety (Barlow, Hutchinson, Newton, Grover, & Ward, 2012; Eaton, Hoagwood, Acri, Morrissey, & Peth-Pierce, 2016) and motivation to attend therapy (Lange et al., 2007; Morrison, 2007). AAIs have been theorized to promote client engagement due to this potential to enhance social connection, but this has yet to be examined with rigorous research.

This review aims to combine these two constructs and examine the effects of AAIs on engagement in mental health services. Data collected on the effectiveness of various AAIs on engagement will inform decisions to implement AAIs in mental health services.
Objectives

To assess the prevalence of existing evidence of AAIs that aim to affect engagement in mental health services.

1. Have AAIs been utilized in mental health services to affect engagement?
   a. How are these interventions structured and delivered (e.g., procedures, duration, and frequency)?
   b. How is treatment fidelity monitored?
   c. What outcomes are measured and, if so, how (e.g., research experiments, qualitative observations)?
   d. How is engagement operationally defined by these studies?

Existing reviews

No previous systematic reviews or protocols exist on this particular topic. However, there are systematic reviews that cover very specific aspects of AAIs in mental health treatment and mental health services. Hoagwood et al. (2017) reviewed evidence for animal-assisted therapies for children with or at risk for mental health problems and found that AAT is extremely useful for children, specifically equine-assisted therapy for autism and canine-assisted therapy for trauma. Brelsford et al. (2017) focused on AAIs in educational settings and found that AAIs have the potential to create positive impact in classroom settings as long as the animals and children’s welfare was taken into account.

Bert et al. (2016) utilized 36 articles to determine the benefits and risks of AAIs and found they were suitable and safe for inpatients with varying mental health issues. Iancu et al. (2015) conducted a systematic review that examined the impacts of AAIs on people with mental disorders. This systematic review was unique as it included only interventions that took place in farm settings. Maujean, Pepping, & Kendall (2015) examined the effect of AAIs on clients’ psychosocial outcomes based on experiments that used randomized controlled trial designs. Another systematic literature review focused on AAIs for treating trauma, focusing specifically on post-traumatic stress disorder, abuse, and veteran affairs (O’Haire, Guérin, & Kirkham, 2015). Davis et al. (2015) inquired about the use of AAIs to treat children with autism spectrum disorder. Selby & Smith-Osborne (2013) focused their review specifically on equine-assisted interventions as an adjunct or complementary therapy. Finally, Virués-Ortega et al. (2012) found that AAT affected elderly populations with psychiatric disorders by improving their social functioning in those with psychiatric disorders and decreasing behavioral disturbances in elderly folks with dementia.

The definition of AAIs used in these systematic reviews of “the use of an animal to provide therapeutic benefit based on a positive relationship between the client and the animal” (Davis et al., 2015, & Maujean, Pepping, & Kendall, 2015) informed our decision to define AAIs as an all-encompassing term that includes, but is not limited to, animal-assisted therapy and animal-assisted activities.

With regards to systematic reviews on engagement, Kim, Munson, & McKay (2012) specifically looked at adolescents and young adults’ engagement in their mental health treatment, as engagement can be difficult with this population. Aggarwal et al., (2016)
reviewed clinician-reported descriptions of communication strategies to improve engagement for racial and ethnic minorities who are seeking care in mental health service settings. Walton et al., (2017) looked at engagement with interventions aimed at changing behavior interventions, and offer the idea that engagement is related to whether the client has the required skills to participate in and cognitively understand the intervention.

### Intervention

Eligible interventions will include the use of an animal in a mental health service setting or in the provision of mental health services to affect or improve engagement. Mental health service settings will be defined as spaces that provide mental health services, including schools, farms, mental health organizations (e.g. community counselling centres or residential treatment settings), and medical organizations (e.g. hospitals or nursing homes). The animal-assisted interventions include any non-human species of animal utilized in any setting that provides mental health services for any period of time.

Comparison conditions will include mental health service settings that do not include an animal to affect engagement (e.g., incentive programs) and that use variants of AAIs.

### Population

The population under study will include participants of all ages, races, and ethnicities receiving mental health services in studies from any country that reports their findings in English.

### Outcomes

**Primary outcomes**

1. Eligible studies included in this review must report outcome(s) related to engagement. These reported outcome(s) will be coded.

### Study designs

This review will include randomized controlled trials (RCTs), quasi-randomized trials, observational studies, mixed methods studies, and qualitative studies. We will include all these to understand the scope of research on this topic.

### References


**Review authors**

**Lead review author:** The lead author is the person who develops and coordinates the review team, discusses and assigns roles for individual members of the review team, liaises with the editorial base and takes responsibility for the ongoing updates of the review.

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Roles and responsibilities

- Content: Zoller, Flynn, Morris
- Systematic review methods: Zoller, Flynn
- Information retrieval: Zoller, Flynn
- Statistical analysis: No statistical analysis will be performed

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Potential conflicts of interest

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Preliminary timeframe

Date you plan to submit a draft protocol: July 2018
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