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SCHOLARLY REVIEW

Therapeutic Alliance and Its Potential Application to Physical Activity Interventions for Older Adults: A Narrative Review

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Increasing the physical activity (PA) levels of inactive older adults to promote healthy aging and to reduce preventable health conditions is a public health priority. However, there remains uncertainty on what constitutes the most important components and characteristics of effective PA interventions for older adults, and previous research has largely focused on the cognitive and behavioral strategies they adopt to increase uptake and adherence to PA. This narrative review puts forward the novel idea, with supporting evidence, that the strength, quality, and collaborative nature of the professional–client relationship, a concept drawn from the field of psychotherapy and known as therapeutic alliance, may be a vital and foundational element of effective PA interventions. This article will offer a new understanding, and a new direction of research to aid the future conceptualization, design, and development of interventions that aim to increase the PA levels of older adults.

Keywords: behavior change, common factors, intervention design, exercise

The purpose of this narrative review is to highlight the potential relevance of therapeutic alliance as a concept to aid the conceptualization, design, and development of effective interventions that aim to increase the physical activity (PA) levels of older adults. Therapeutic alliance has been established as a foundational element of effective treatments in the field of psychotherapy, and at its heart proposes that a positive and collaborative relationship between client and professional is essential for optimal outcomes regardless of the behavior or symptom being targeted (Fife et al., 2014). In the following sections, the current evidence regarding the effectiveness of PA interventions for older adults, and their notable components and characteristics, will be reviewed. Then, the therapeutic alliance concept and its traditional application in psychotherapy will be introduced and explained. The potential convergence of therapeutic alliance with PA interventions for older adults will then be explored, along with its possible future implications for PA intervention research and practice.

Physical Activity and Older Adults

Lack of PA is a major risk factor for the development of age-related ill health and long-term disease (Booth et al., 2011). There is an abundance of evidence suggesting that participating in regular PA provides preventative health and quality of life benefits for individuals as they reach middle age and beyond. Improvements in cardiorespiratory fitness, muscle strength, balance, and mobility have been found to result from PA participation, which are, in turn, associated with a lower risk of cardiovascular disease, depression, falls, muscle and bone loss, and cognitive decline in older adults, along with improved emotional, social, cognitive, and physical functioning (Cunningham et al., 2020; Paterson et al., 2007; Taylor et al., 2004). The World Health Organization guidelines recommend that to reap these benefits, 55–64 year olds should perform at least 300 min of moderate-intensity PA per week, and over 65s at least 150 min (World Health Organization, 2020). However, in the United Kingdom, recent figures have revealed that only around 60% of over 55s are considered physically active, based on self-reported levels of sporting, fitness, and leisure activity participation (Sport England, 2021). Consequently, increasing the PA levels of older adults has become a priority for public health interventions in the United Kingdom to reduce the risk of preventable health conditions developing and promote healthy aging (Public Health England, 2014).

Despite challenges in synthesizing evidence from heterogeneous studies using mainly randomized controlled trial designs, a recent umbrella systematic review reported the potential effectiveness of multimodal and multicomponent PA interventions for increasing the self-reported and objectively measured PA levels of community-dwelling older adults (Zubala et al., 2017). The review examined the effectiveness of interventions implemented across a range of community settings (e.g., homes, general practice); delivered both face-to-face and remotely by a range of professionals (e.g., general practitioners, nurses, occupational therapists, fitness instructors, PA coaches); incorporating lifestyle counseling, health education and training elements; involving numerous modes of PA (e.g., walking, aquatic exercise, dance); and most commonly of a 3–12-month duration. Generally, positive effects on the PA levels of older adults of small to moderate sizes were reported across interventions, although effects on maintenance beyond 12 months were unclear due to a lack of longitudinal studies.

It was also reported by Zubala et al. that effective interventions typically utilized strategies of a motivational (e.g., to enhance desire and readiness to change behavior, such as providing positive

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feedback); cognitive (e.g., to increase awareness and understanding of behavior, such as self-monitoring); and/or behavioral (e.g., to directly influence behavior, such as activity planning) nature in addition to health education and instruction-type components. However, the authors concluded that there was general uncertainty around the most effective intervention characteristics and components to increase older adults' PA levels, as rarely were any consistently associated with positive or negative outcomes (Zubala et al., 2017). Reflecting similar ambiguity, another umbrella review conducted by Olanrewaju et al. (2016), which looked at various aspects of PA in community-dwelling older adults, concluded that "many interventions," incorporating cognitive and behavioral components underpinned by theory appeared to be effective at promoting changes in older adults' PA levels. Thus, there appears to be no firm consensus or understanding on what constitutes the most important elements of effective PA interventions for older adults. Adding even more uncertainty, prior work conducted by French et al. (2014) suggested that many behavior change strategies that are effective at increasing the PA levels of younger adults may not be as effective for older adults, especially those that involve self-regulation (e.g., goal setting, receiving feedback). The reasons put forward for this were due to their achievement-based objectives being less acceptable to older adults who value meaning and positive emotion as outcomes of PA participation, and to older adults potentially finding them too cognitively complex.

Perhaps as a result of this uncertainty, real-world public health practice often adopts the implementation of "common-sense" PA interventions, which utilize "off-the-shelf" strategies (Hansen et al., 2017). While usually pragmatic and locally contextualized, there are concerns that these types of interventions have underdeveloped rationales for achieving outcomes, due to not considering the theory or evidence underpinning the behavior change strategies they adopt. Furthermore, even when apparently successful at an anecdotal level, they can be difficult to define, and their mechanisms of action and outcomes subsequently hard to explain and measure (Watkins et al., 2016). This makes their evaluation and potential larger scale implementation in novel settings challenging. It is therefore imperative that researchers continue to seek further understanding on how different interventions influence older adults' PA behavior and to attempt to identify their most important components and characteristics. This knowledge could, in turn, contribute to the development of novel, effective, and evidence-based interventions that are implementable at scale by practitioners and commissioners.

Therapeutic Alliance

In the field of psychotherapy, the concept of therapeutic alliance has become one of the most intense subjects of research and established as a key factor that contributes to treatment effectiveness (Flückiger et al., 2012; Horvath et al., 2011). Although no concise definition exists, the term therapeutic alliance essentially refers to the quality, strength, and nature of the collaborative relationship between therapist and client. It is thought to be characterized by three processes: mutual agreement on target treatment outcomes, consensus on a defined set of tasks or processes to achieve them, and the formation of a positive emotional bond (Baier et al., 2020; Flückiger et al., 2012; Horvath et al., 2011). The strength of the therapeutic alliance can be measured using a number of validated tools, with four measures most commonly used in related research: California Psychotherapy Alliance Scale, Helping Alliance Questionnaires, Vanderbilt Psychotherapy Process Scale, and Working Alliance Inventory (Horvath et al., 2011). Since an initial meta-analysis by Horvath and Symonds (1991), the correlation between psychotherapeutic treatment outcomes and therapeutic alliance has been examined meta-analytically numerous times (Flückiger et al., 2012; Horvath & Bedi, 2002; Horvath et al., 2011; Martin et al., 2000). The most recent meta-analysis, conducted by Flückiger et al. (2018), supported previous findings in reporting a robust positive association between alliance and outcomes equivalent to a medium effect size ($d = 0.579$), which was stable across different treatment modalities (e.g., cognitive behavioral therapy, psychodynamic therapy, counseling); patient disorders (e.g., anxiety, depression, posttraumatic stress disorder); alliance measures (e.g., Helping Alliance Questionnaires, California Psychotherapy Alliance Scale, Vanderbilt Psychotherapy Process Scale); treatment outcome measures (e.g., Beck Depression Inventory, Social Phobia Scale); and countries. Furthermore, a recent systematic review has suggested that therapeutic alliance may be an independent mediator of therapeutic change, and thus a possible underlying mechanism of psychotherapy response (Baier et al., 2020).

The concept of therapeutic alliance arguably dates back to the ideas of Sigmund Freud on the important roles in psychotherapy of unconscious interpersonal projection of unresolved conflict (transference), and the patient's conscious attachment to the therapist (Flückiger et al., 2012). The work of Carl Rogers and the humanistic psychotherapy movement in relation to person-centered therapy was the first to highlight the importance of the facilitative conditions offered by the therapist through rigorous empirical investigation (Flückiger et al., 2012; Horvath et al., 2011). Edward Bordin amalgamated these ideas, as well as others, to propose the importance of what he termed the "working" alliance. Bordin emphasized that agreement on goals and tasks, and the bond formed, constituted the vital core of the collaborative relationship between client and therapist (Bordin, 1979). His concept is what the modern definitions of therapeutic alliance are largely based upon.

It is thought that the importance of therapeutic alliance lies in its role in facilitating a client's trust in the therapist who they are working with, which enables them to embrace and participate fully in their treatment (Sturgiss et al., 2016). Rather than a stable entity or "outcome" of collaboration, it is something that unfolds, develops and ebbs and flows over time, needs to be nurtured and sometimes repaired, and infuses every interaction between client and therapist (Flückiger et al., 2018). Therapist attributes, such as empathy, respectfulness, flexibility, and genuine interest are thought to contribute positively to its formation and maintenance (Fife et al., 2014). Flückiger et al. (2018) outlined a number of therapist actions and practices integral to therapeutic alliance, such as responding to the client's readiness/stage of change and capabilities, creating an individual case formulation based on the client's problems and preferences, collaborating in words and nonverbal language, and negotiating on goal and task agreement.

The importance of therapeutic alliance in psychotherapy outcomes illustrates a key distinction between the "specific factors" that characterize different therapies (i.e., the particular therapeutic techniques intended to directly enact symptom change) and "common factors," such as therapeutic alliance, which underpin and are potentially present across all modalities (Guthrie et al., 2018). Fife et al. (2014) drew from this notion when they proposed their "therapeutic pyramid" metamodel. They argued that therapeutic alliance is a foundational layer of any effective psychotherapy treatment, upon which specific skills and techniques, which form the next level and peak of the pyramid, can exert their action (Figure 1).

This concept was very notably implemented by the British Department of Health in the mid-2000s in their development of a

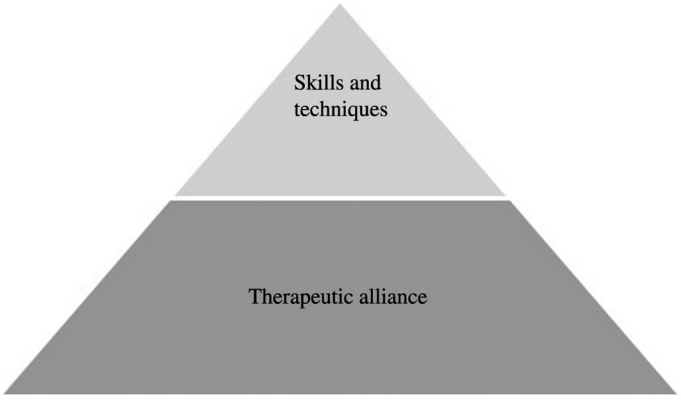

Figure 1 — The therapeutic pyramid. Adapted from "The Therapeutic Pyramid: A Common Factors Synthesis of Techniques, Alliance, and Way of Being," by S.T. Fife, J.B. Whiting, K. Bradford, & S. Davis, 2014, *Journal of Marital and Family Therapy, 40*(1), pp. 20–33. Copyright 2013 by John Wiley and Sons.

national program of psychotherapy treatment for individuals with common mental health problems, known as "Improving Access to Psychological Therapies" (IAPT) (Guthrie et al., 2018). Established in 2008, the underpinning objective of the IAPT program, which still exists today, is to provide effective, evidence-based psychotherapy on a mass scale to the proportion of the population that experience depression and anxiety disorders of a mild to moderate severity (Sreenan, 2013). At the heart of the IAPT program's philosophy is the belief that a properly established, developed, and maintained therapeutic alliance will reap effective client outcomes (Richards & Whyte, 2011). Reflecting this, a core training module in the IAPT National Curriculum for the Psychological Wellbeing Practitioner workforce is focused on enabling trainees to develop core common factors competencies, such as empathy, listening, patient-centered information gathering, consensus, and collaboration for them to be able to develop a strong and effective therapeutic alliance with clients. These competencies are then intended to underpin their subsequent ability to utilize disorder-defined specific factors skills and techniques that target clinical symptom improvement (National IAPT Team, 2015; Richards, 2010).

The Potential Application of Therapeutic Alliance to Physical Activity Interventions for Older Adults

Turning now back to PA interventions for older adults, this article proposes that therapeutic alliance could potentially hold similar importance in the field of PA as it does in psychotherapy. This is because, like psychotherapeutic treatments, PA interventions aim to enact some form of healthy, adaptive behavior, centered on collaborative interactions between professional and client, or "change agent" and "change seeker" (Guthrie et al., 2018; Sturgiss et al., 2016). Furthermore, according to Franco et al. (2015), who conducted a systematic review and thematic analysis of 132 qualitative studies exploring older people's perspectives of PA, social contact, interaction and support, key elements of therapeutic alliance, are particularly important facilitators of PA participation in aging populations compared with the more goal and outcome-orientated motivators of younger adults (Devereux-Fitzgerald et al., 2018). Franco et al. also reported that older adults appear to depend more upon professional guidance and encouragement from others to influence their PA behavior. However, a literature search conducted by the lead author in June 2020 identified no studies to date that had investigated therapeutic alliance in relation to PA interventions for older adults. The MEDLINE, PsycINFO, and ScienceDirect databases were searched, with all article types and languages included in searches, and no limits on time of publication set, to potentially maximize the breadth of articles found. The search terms used were "Therapeutic alliance" OR "Therapeutic relationship" OR "Working alliance" OR "Helping alliance" OR "Alliance" AND "Exercise" OR "Physical activity" OR "Fitness" OR "Aerobic Training" OR "Strength training" OR "Resistance training" AND "Older" OR "Aging" OR "Aged." A further literature search that removed the age-related field also returned no results, suggesting that therapeutic alliance is in fact a concept novel to the entire PA intervention evidence base.

As previously alluded to, research examining the most important components and characteristics of PA interventions for older adults has largely appeared to focus on the motivational, cognitive, and behavioral strategies used to influence behavior. Applying the therapeutic pyramid notion here, it could thus be argued that the emphasis of research has so far been on specific factors and the peak of the hypothetical "PA intervention pyramid," with potentially important common factors, such as therapeutic alliance, overlooked. This could help to explain why uncertainty exists on what constitutes the most important elements of effective PA interventions for older adults and why common-sense interventions are often implemented in the real world. An understanding and appreciation of the foundational layer of the hypothetical PA intervention pyramid is missing from the current evidence base, upon which effective interventions, and a full conceptualization of them, can be built.

The findings of a recent meta-study conducted by Beselt et al. (2021) lend credence to the potential importance of therapeutic alliance to PA interventions for older adults. Beselt et al. synthesized qualitative research pertaining to the experiences of social support of adults aged 55 years and older who had either been involved in some form of PA intervention or who had inquired about PA. Across the 31 studies included in the review, one of the main findings was that participants perceived that the emotional support they received from professionals was very helpful and important. Being made to feel welcome, having care and empathy displayed toward them, being inquired about and checked on, and being accompanied during exercise helped to create a sense of safety, accountability, and motivation. Furthermore, tailoring and person-centered feedback from professionals were also highly valued. These behaviors allowed participants to feel that their presence, ability, and needs had been noticed, and conveyed to them that they were accepted, which engendered feelings of trust and safety to exercise. These findings add to a noted outcome of the previously mentioned umbrella review conducted by Zubala et al. (2017), that client-centered and personalized interventions involving tailored professional guidance and ongoing support in particular led to improved PA participation in older adults.

The findings of recent research by Haynes et al. (2020) are also suggestive of the potential relevance of therapeutic alliance to PA interventions for older adults. In a qualitative study that explored the experiences of older adults aged 60 years and older in Australia who had participated in a preventive healthy aging program targeting physical inactivity to reduce falls incidence, high-quality health coaching was found to be key to participants' positive experiences of the intervention. The participant–coach relationship was said to

mediate accountability, and function as an engagement and maintenance mechanism. In addition, technical expertise, the high-level interpersonal skills of coaches, and their focus on participant directed goals and flexible means of achieving them, enabled trusting relationships to be built that subsequently helped participants to "routinize" PA. The authors concluded by specifically mentioning that these findings strongly resonated with the concept of therapeutic alliance, and had implications for intervention scalability in indicating that the participant–coach relationship was one of the intervention's key ingredients.

Similarly, relevant findings were also reported in recent research conducted by the lead author, which partly inspired this article. In another qualitative study that explored how a lifestyle behavior change support service based in South West England influenced older adults' PA behavior, it was found that participants appeared to most value factors that pertained to the positive aspects of their relationship with their behavior change coach. For instance, it was frequently reported that participants appreciated the kindness, empathy, understanding, encouragement, and nonjudgemental attitude of their coach, as well as the open line of communication via email or telephone that they offered. These things provided participants with a sense of trust and security. Furthermore, participants also alluded to how determining their goals with their coach and breaking them down together into small steps, sometimes with the use of tools, such as activity planning diary sheets, helped them to feel supported and empowered as they attempted to change their PA behavior (Powell & Thomas, 2021). These findings correspond to the three previously mentioned elements of therapeutic alliance: mutual agreement on target outcomes, consensus on tasks to achieve them, and the formation of a positive emotional bond (Baier et al., 2020; Flückiger et al., 2012; Horvath et al., 2011).

Looking at research in other areas that are related to PA, two recent qualitative studies in the physiotherapy rehabilitation field have also supported the potential relevance of therapeutic alliance to PA interventions for older adults. The first study explored the experiences of Norwegian older adults who had participated in an exercise-based intervention during the subacute phase of hip fracture rehabilitation. It was found that participants frequently noted how characteristics of the relationship with their physiotherapist, such as mutuality and respect, trust, shared power, and understandable and tailored communication and instruction, contributed to their motivation to exercise. The authors concluded that the results highlighted the importance of achieving a good therapeutic alliance to facilitate positive outcomes in exercise-based physiotherapy interventions (Vestøl et al., 2020). In the second study, conducted by Moore et al. (2020), interviews were undertaken with older adults in England with knee pain or stiffness who met criteria for a clinical diagnosis of osteoarthritis to find out their experiences and perceived impact of participation in a physiotherapist-led exercise intervention. Participants frequently spoke about developing trusting and empowering relationships where they felt valued, supported, understood, and respected by their physiotherapist and about the importance of building collaboration through continuity over sessions. It was concluded that the presence and quality of therapeutic alliance was a key factor that facilitated their adherence to rehabilitative exercise and PA.

Summary and Applications

This article has highlighted therapeutic alliance as a potentially important, yet largely unexplored concept in the field of PA interventions for older adults. Long established as a key element of successful psychotherapy treatments, a rationale and evidence have been presented here to suggest that (a) therapeutic alliance could be highly relevant for interventions that aim to increase older adults' PA levels and (b) the previous overlooking of therapeutic alliance in PA intervention research could help to explain why there still exists a general lack of foundational understanding on what constitutes their most effective components and characteristics and why common-sense PA interventions are often adopted in the real world.

A notable limitation of the research evidence presented here in support of the potential relevance of therapeutic alliance to PA interventions for older adults is its solely qualitative nature. Therefore, the hope is that the information and arguments put forward in this article will now serve as a catalyst for a novel wave of original quantitative research that looks at the influence of therapeutic alliance on the PA behavior of older adults and on the outcomes of PA interventions. Such research could begin with a preliminary investigation of the association between therapeutic alliance and older adults' PA intervention outcomes. A therapeutic alliance measure, such as the Working Alliance Inventory—revised short version could be used, which has been tested as a valid and reliable questionnaire that reflects the three key alliance dimensions: goals, tasks, and bond (Hatcher & Gillaspy, 2006; Sturgiss et al., 2016). Working Alliance Inventory—revised short version scores could be correlated with intervention outcome measures, such as self-reported changes in PA levels and quality of life ratings, to determine if therapeutic alliance is related to participant outcomes.

Robust evidence on this topic could potentially improve the conceptualization of PA interventions and their different layers of factors that can contribute to effectiveness. As demonstrated through the IAPT program in the psychotherapy field, such an understanding could have the potential to eventually aid public health policymakers, commissioners, and practitioners in the design, development, and implementation of PA interventions at scale that deliver the desired preventative health and quality of life benefits across the older adult population.

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