

# Key Aspects of Movement Assessment in Dance/Movement Therapy: Insights from Therapists

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## Summary

Dance/Movement Therapy is a psychotherapeutic approach that uses dance, movement, body awareness, and embodied communication, to foster healing and wellness for individuals including service members and veterans [1]. Movement is used as a primary mode of intervention as well as an assessment tool [2]. To develop a meaningful way to assess and quantify movement this project investigated what aspects—measures of speed, balance, coordination, accuracy, agility, available space and breath—dance/movement therapists rated as important. Preliminary results suggest that speed, balance, coordination, accuracy, agility and, notably, breath are important aspects to quantify. Future work tracking these measures within and between sessions may help dance/movement therapists track patient progress alongside subjective measures of rehabilitation.

## Introduction

Dance/Movement Therapy (DMT) is a psychotherapeutic approach that uses dance, movement, body awareness, and embodied communication, to foster healing and wellness for individuals including service members and veterans [1]. DMT uses movement as a primary mode of intervention as well as an assessment tool [2]. Recent advances in wearable technology for motion capture and assessment of movement [3] may make it easier to quantify aspects of movement within DMT clinics. However, which aspects are important for clinical assessment remain unknown. Therefore, this investigation aimed to examine how dance/movement therapists in military health care facilities and other settings rate the importance of specific components of movement, use of available space and quality of breath. These ratings were collected to facilitate the tracking of meaningful objective measures in future clinical sessions.

## Methods

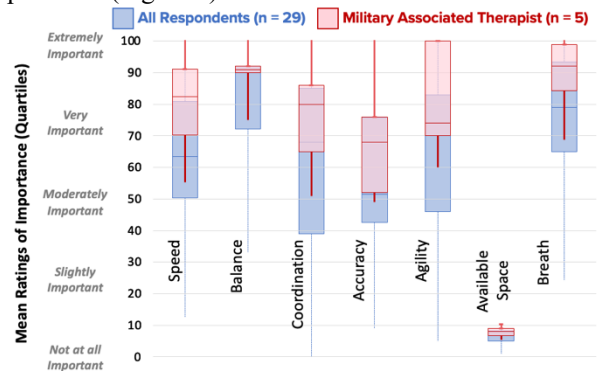
All methods were approved by the Towson University Internal Review Board (#2253). An anonymous online survey (Qualtrics, Provo, UT) was distributed and participants provided consent online before participating and self-reported their demographic, background, and work experience information.

The survey included sets of visual analog scale (0-100) questions about speed or reaction time (initiating movement, faster shift, dynamic use of time, playfulness), balance (spatial awareness, dynamic stability, falling risk, body stabilization, mobility), coordination (movement phrasing, development of movement patterns, self-synchrony, music synchrony, tension flow), movement accuracy (attunement, body shaping, phrasing), agility (change position, start/stop quickly, change

direction, dynamic range), available space (dynamic use, shaping in directions, shaping in planes), and breath (direct flow, cadence control, synchronization). Average ratings from all questions associated with each component were generated for each respondent. Responses from all participants were used in a one-way ANOVA ( $\alpha = 0.05$ ) with LSD post hoc tests to compare the importance of each pair of aspects.

## Results and Discussion

Twenty-nine therapists (including five from military health care) completed the survey. Figure 1 shows the distribution of importance ratings. The ANOVA indicated a statistically significant difference in importance ratings between the different aspects,  $F(6,193) = 37.99$ ,  $p < 0.001$ . Post hoc analysis indicated using available space was significantly less important (all  $p < 0.001$ ) than all other components. Breath was significantly more important (all  $p > 0.045$ ) than all aspects except for coordination ( $p = 0.74$ ). Ratings from military associated therapists were similar to trends for all respondents (Figure 1).



**Figure 1:** Quartile distribution of importance ratings across all respondents (blue) and therapists from military health care facilities (red; for visual reference only).

## Conclusions

This preliminary analysis indicates that speed, balance, coordination, accuracy, agility, and breath quality are important measures to track in DMT. Rating specific to military and sub-questions of each aspect may be explored as more responses are collected. This investigation offers an evaluation of theory to guide future research and ensure clinically meaningful measurements of movement aspects.

## References

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