“Shall I Compare Thee to a Dose of Donepezil?”: Cultural Arts Interventions in Dementia Care Research

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The cultural arts have gained attention for their potential to generate social and behavioral changes in people with dementia. Although individual cultural arts intervention studies have reported positive outcomes, most are excluded from systematic reviews because of methodological weakness. We reviewed findings from 27 systematic and integrative reviews of pharmacologic, psychosocial, and cultural arts interventions to identify promising outcomes as well as limitations in current approaches. Although results point to the potential success of interventions tailored to individual interests, most focused on limited measurements of individual change. In moving forward, cultural arts intervention research must not be limited to the tools of the clinical trial model. Instead, researchers should carefully rethink what constitutes rigorous and effective research for interventions aimed at creating a meaningful personal experience for the participant rather than measurable change.

Key Words: Dementia, Creativity, Arts and related therapy, Intervention, Cultural arts, Meaningful expression

A major challenge in dementia care is the lack of successful interventions—including medication—to slow down the progress or restore lost abilities. Increasingly, cultural arts interventions have gained attention for their potential to generate social and behavioral changes. We use Langer’s (1966) classic definition of the cultural arts as “the practice of creating perceptible forms expressive of human feeling” (p. 6). Langer makes the distinction between “perceptible” rather than “sensuous” forms because some works of art are given to imagination rather than to the outward senses” (p. 6). Although imagination may well be what distinguishes cultural arts interventions (e.g., music, poetry, storytelling, dance) from other dementia care practices, it also poses challenges to common research approaches. More specifically, although individual studies involving cultural arts interventions have reported positive outcomes, most are excluded from systematic reviews due to study design issues (e.g., lack of randomization, lack of adequate control groups), small sample sizes, and other methodological weaknesses (Beard, 2012;
In considering the potential that the cultural arts hold for dementia care, we raise three main questions: (a) How do the cultural arts compare with pharmacologic and psychosocial interventions regarding research outcomes? (b) What are the limitations in current approaches to understanding the impact of cultural arts participation interventions on people with dementia? (c) What is the future of cultural arts research in dementia care?

To address our first question, we compare findings from systematic and integrative reviews of pharmacologic, psychosocial, and cultural arts interventions. The purpose of a systematic review is to apply specific criteria to evaluate research on a well-defined clinical topic (Whittemore & Knafl, 2005). Consequently, only a small percentage of studies initially identified by authors are included in the final review; most are excluded because of design (Castora-Binkley et al., 2010). In contrast, integrative reviews summarize empirical and theoretical literature to shed light on a particular phenomenon or issue rather than one clinical topic. Integrative reviews include qualitative approaches and nonexperimental research designs, which in turn allows for the comparison of diverse study approaches and methods (Whittemore & Knafl, 2005). We note that our method of “reviewing reviews” across such different intervention and study types is novel. However, we argue that such an approach is helpful to gain a broad perspective of promising outcomes.

Next, we discuss limitations in current approaches to cultural arts intervention research, especially the “one-size-fits-all” randomized control design that is considered the gold standard. A primary goal of cultural arts interventions is to create meaningful personal experiences for participants. It follows that because individuals vary in their tastes, interests, levels of engagement, and other deeply personal characteristics, people are likely to be affected in very different ways, even when participating in the same intervention. This is in contrast to an intervention such as a medication developed specifically to target a defined mechanism of action in predictable ways. Finally, we consider the future of research using cultural arts interventions and suggest several key areas to be addressed.

### Key Results From Systematic and Integrative Reviews

Table 1 describes our search strategy. Inclusion criteria were dementia specific to older adults, focus on the person with dementia (not the caregiver), and studies published in English. Exclusion criteria were nonhuman studies and studies that focused on biological aspects of dementia such as potential causes or biomarkers. One reviewer

<table>
<thead>
<tr>
<th>Keywords/source</th>
<th>Unique returns</th>
<th>Excluded</th>
<th>Final</th>
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<tr>
<td>Systematic review: Pubmed</td>
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<td>16</td>
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<tr>
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<td>Dementia, drama</td>
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<td>Reminiscence, dementia</td>
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<tr>
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<tr>
<td>Dementia, theater</td>
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<td>0</td>
</tr>
<tr>
<td>Integrative review: Google Scholar</td>
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<td></td>
</tr>
<tr>
<td>Intervention, dementia, arts, music, dance, theater, artist, writing, poetry, poem, museum, creative</td>
<td>42a</td>
<td>37</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>348</td>
<td>321</td>
<td>27</td>
</tr>
</tbody>
</table>

*aRepresents the total number of returns for each individual key word search.
examined titles and abstracts of search returns and discarded publications that clearly did not meet the search criteria or that appeared in more than one search. One reviewer was sufficient because, unlike other reviews where ratings on study quality are necessary and achieved through group consensus, we selected reviews for inclusion based on topic (e.g., pharmacologic interventions for quality of life [QoL]). Individual study quality was not evaluated. Potentially relevant articles were retrieved, reviewed for inclusion and exclusion criteria, and categorized as pharmacologic (i.e., prescription and nonprescription medications), psychosocial (listed in Table 2), or cultural arts. We also included findings from a report commissioned by the Mental Health Foundation (MHF) in London (MHF, 2011) in which participatory arts interventions for older adults were reviewed. Participatory arts describe collaborations between professional artists and participants resulting in the creation of original artistic works (MHF, 2011).

We present results in three categories: cognition, “problematic” behaviors or symptoms (e.g., agitation, anxiety, apathy, wandering), and QoL. For the majority of studies, cognition was measured using change scores in the Alzheimer’s Disease Assessment Scale-cognitive subscale (ADAS-Cog; Rosen, Mohs, & Davis, 1984), a 30- to 40-min measure of memory, attention, learning, and orientation performance. QoL was most commonly measured using the QoL-AD scale (Logsdon et al., 2002) in which caregivers or people with dementia rate 13 items (physical health, energy, mood, living situation, memory, family, marriage, friends, self as a whole, ability to do chores around the house, ability to do fun things, money, life as a whole) on a 5-point scale from “poor” to “fair.” There were often inconsistencies in the reviews regarding definitions of key outcomes (e.g., QoL), measures used, and level of details provided for the studies cited. We note these when possible. Table 3 includes a summary of interventions identified in the reviews as having positive results in the categories of cognition, “problematic” behaviors, and QoL only.

### Cognition

**Pharmacologic.—** Birks and Harvey (2006) conducted a meta-analysis of data from 17 double-blinded randomized controlled trials (RCTs) to investigate donepezil’s effectiveness in improving several areas including cognitive function, measured by the ADAS-Cog (Rosen et al., 1984) and Mini-Mental State Examination (MMSE) (Folstein, Folstein, & McHugh, 1975), and QoL, measured by the QoL Scale (Blau, 1977), in people with mild to moderate dementia. Although the meta-analysis revealed significant improvement in cognition in the treatment group compared with placebo at 12 and 24 weeks, there was no effect on QoL. Olazarán and colleagues (2010) included one RCT where patients were randomized to either donepezil alone or donepezil plus cognitive stimulation (i.e., group activities designed to enhance cognition and social function such as word games or reminiscence). They report a significant cognitive benefit (using the ADAS-Cog) for the treatment group (donepezil

### Table 2. Description of Psychosocial Interventions

| Behavior management or modification | Tailored strategies, such as withholding rewards to discourage negative behaviors or providing rewards to encourage positive behaviors, to implement change (Olazarán et al., 2010). |
| Cognitive stimulation                | Involves engaging in a variety of activities or discussion, usually in a group, aimed at enhancing cognitive and social functioning (Woods et al., 2012). |
| Cognitive training                   | Use of structured strategies for recall, such as method of loci (Clare & Woods, 2004). |
| Reminiscence therapy                | Discussing past activities, events, and experiences with others (Woods et al., 2003). |
| Sensory stimulation                 | An individually oriented activity focused on appealing to several senses (vision, touch, smell, or hearing). *Snoezelen* is a type of sensory stimulation (Kverno et al., 2009). |
| Simulated presence                  | Having a family member “present” through video tapes, audio recordings, photos, or stories (Kverno et al., 2009). |
| *Snoezelen*                          | Sensory stimulation, usually conducted in a special room, designed to stimulate sensory perceptions and experiences such as light, sound, smells, but not centered on cognitive abilities such as language (Kverno et al., 2009). |
| Tailored Activity Program           | A program that builds activities (e.g., building a puzzle board) based on the person with dementia’s preserved capacities (Gitlin et al., 2008). |
| Validation therapy                  | Validation therapy involves acceptance of “the reality and personal truth of another’s experience” (p. 1) using a range of therapies and approaches (Neal & Wright, 2003). |
plus cognitive stimulation) compared with the control. Jaturapatporn, Isaac Mokhtar Gad El Kareem, McCleery, and Tabet (2012) reviewed 14 RCTs investigating the effectiveness of aspirin, steroidal, and nonsteroidal inflammatory agents to improve cognition (measured by the MMSE and ADAS-Cog) and problematic behaviors but found no significant effects.

### Psychosocial

**Cognitive Stimulation.** —Woods, Aguirre, Spector, and Orrell’s (2012) meta-analysis of data from 15 RCTs found significant positive cognitive benefits (measured by changes in the ADAS-Cog) in seven studies. They also reported “significant benefit to wellbeing and quality of life” (p. 14) as shown

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### Table 3. Summary of Interventions With Reported Improvements in Three Outcome Categories

<table>
<thead>
<tr>
<th>Outcome category</th>
<th>Intervention</th>
<th>Area improved (measure used)</th>
<th>Review citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition</td>
<td>Pharmacologic</td>
<td>Donepezil ↑ Cognition (ADAS-Cog; MMSE)</td>
<td>Birks and Harvey (2006)</td>
</tr>
<tr>
<td></td>
<td>Psychosocial</td>
<td>Cognitive training ↑ Cognition</td>
<td>Olazarán and colleagues (2010)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cognitive stimulation ↑ Cognition</td>
<td>Woods and colleagues (2012)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reminiscence ↑ Autobiographical memory</td>
<td>Woods and colleagues (2012)</td>
</tr>
<tr>
<td></td>
<td>Cultural arts</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>“Problematic” behaviors</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Pharmacologic</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>Aromatherapy ↓ Wandering</td>
<td>Robinson and colleagues (2007)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cognitive stimulation ↓ Problematic behaviors</td>
<td>Woods and colleagues (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emotion oriented ↓ Problematic behaviors</td>
<td>Woods and colleagues (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental modification ↓ Exit seeking behaviors</td>
<td>Woods and colleagues (2012)</td>
<td></td>
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<tr>
<td></td>
<td>Group validation ↓ Irritability</td>
<td>Woods and colleagues (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reality orientation ↓ Negative behaviors</td>
<td>Woods and colleagues (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reminiscence ↓ Disruptive behavior</td>
<td>Woods and colleagues (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Simulated presence Snoezelen ↓ Agitation</td>
<td>Woods and colleagues (2012)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TAP; tailored behavior Validation therapy ↓ Irritability</td>
<td>Woods and colleagues (2012)</td>
<td></td>
</tr>
<tr>
<td>Cultural arts</td>
<td>Music ↓ Aggressive behavior ↓ Agitation ↓ Inappropriate vocalization</td>
<td>Woods and colleagues (2012)</td>
<td></td>
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<tr>
<td>QoL</td>
<td>Pharmacologic</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>Behavior modification ↑ QoL</td>
<td>Olazarán and colleagues (2010)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TAP; tailored behavior ↑ QoL</td>
<td>Cooper and colleagues (2012)</td>
<td></td>
</tr>
<tr>
<td>Cultural arts</td>
<td>Music ↑ QoL</td>
<td>Skingley and Vella-Burrows (2010)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** ADAS-Cog = Alzheimer’s Disease Assessment Scale-cognitive subscale; MMSE = Mini-Mental State Examination; NPI = Neuropsychiatric Inventory; QoL = quality of life; TAP = Tailored Activity Program.

*Based on meta-analysis.
through scores on the Life Satisfaction Index (Adams, 1969) in four studies and the QoL-AD scale in one study.

Cognitive Training.—Olazarán and colleagues (2010) evaluated three interventions group sessions and seven individual sessions of cognitive training (e.g., method of loci) to improve cognition. Four of the studies reported positive improvement (a description of assessments used was not provided). We note that administration of cognitive stimulation training differed across studies.

Reminiscence Therapy.—Woods, Spector, Jones, Orrell, and Davies (2005) conducted a meta-analysis of data from four RCTs. They found encouraging evidence that reminiscence therapy may help to improve autobiographical memory and mood, although they note that reminiscence therapy was administered in different ways across the studies.

Cultural Arts Interventions.—No applicable reviews were located.

“Problematic” Behaviors or Symptoms
Pharmacologic.—Kirchner, Kelly, and Richard (2001) extracted data from eight trials for a meta-analysis of thioridazine’s effectiveness in treating anxiety measured by the Hamilton Anxiety Scale (Hamilton, 1959) but found inadequate evidence to support its use. Sink, Holden, and Yaffe (2005) reviewed several meta-analyses of RCTs for typical and atypical antipsychotics in their treatment of neuropsychiatric symptoms and found that only haloperidol showed a modest effectiveness in 18 of 100 patients for treating aggression as measured by the Behavioral Pathology in Alzheimer’s Disease Rating Scale and the Cohen-Mansfield Agitation Inventory (Cohen-Mansfield, Marx, & Rosenthal, 1989) compared with placebo.

Psychosocial

Aromatherapy.—Robinson and colleagues (2007) reviewed two studies on reducing wandering. Although participants in one study showed significantly reduced wandering when lemon balm was applied to their face and arms, participants in another aromatherapy study showed no change in wandering compared with a control group.

Behavior Modification.—Ayalon, Gum, Feliciano, and Arean (2006) examined four RCTs that used observational data to monitor change in behavioral symptoms through tailored behavioral modification strategies (e.g., recognizing unmet needs, withholding rewards for negative behaviors). They reported reduced wandering frequency and reduction in physical and/or verbal aggression. Olazarán and colleagues (2010) cited a study involving 95 patient/family caregiver pairs randomly assigned to behavior management training or a nointervention control group. The intervention group had reduced problematic behaviors and improved QoL, effects which were maintained at the 6-month follow-up point. The authors did not provide details on what assessments were used.

Cognitive Stimulation.—Livingston and colleagues (2005) reviewed six studies that used cognitive stimulation to improve “problematic” behaviors using the Aberrant Behavior Checklist (Aman, Singh, Stewart, & Field, 1985) and other scales as well as observations and staff interview data. They reported mixed results: fewer behavioral problems in two studies, decreased depression in two studies, improved QoL in one study (measured with the QoL-AD), and no changes in another.

Emotion-Oriented Therapy.—Kverno, Black, Nolan, and Rabins (2009) included two studies in their review and reported inconsistent findings. In one study, no change in neuropsychiatric symptoms was detected. In another in which trained nursing staff delivered validation therapy, reminiscence, and other emotion-focused strategies, there were improvements in agitation and depression for people with mild to moderate (but not severe) dementia.

Reality Orientation.—Spector and colleagues (2000) conducted a systematic review and meta-review of eight RCTs using reality orientation and found short-term improvements in behavior and cognition.

Reminiscence Therapy.—Finnema, Dröes, Ribbe, and Van Tilburg (2000) reviewed several studies that used reminiscence and life review. They report that reminiscence leads to improved interest, interaction, social behavior, mood, and cognitive function and decreased problematic behavior.
**Sensory Stimulation.**—Kverno and colleagues (2009) examined two studies that used multisensory stimulation. One found decreases in apathy for the sensory stimulation group compared with increases in apathy for the activity therapy group. Another study found no difference in behavior using sensory stimulation. Robinson and colleagues (2007) reviewed three RCTs evaluating the effectiveness of a multisensory environment to reduce wandering but found no difference between the intervention or control groups. Livingston and colleagues (2005) included sensory stimulation (specifically snoezelen) in their review of six studies and concluded that snoezelen effectively reduced problematic behaviors during and immediately following administration. Chung and Lai (2002) found no effect on problematic behaviors in two snoezelen studies they reviewed. Finnema and colleagues (2000) reviewed five studies (none that were included in Livingston et al.’s systematic review) and concluded that snoezelen led to generally positive change in mood and behavior. They also noted inconsistency among the studies on the duration and magnitude of effects.

**Simulated Presence.**—Kverno and colleagues (2009) included two studies that found decreases in agitated behavior in people with advanced dementia.

**Tailored Activity Program.**—Olazarán and colleagues (2010) included a study in which caregivers in the intervention group (Tailored Activity Program [TAP]) reported fewer negative behaviors (e.g., agitation, argumentative behavior) than the control group. Livingston and colleagues (2005) reviewed two studies that used individualized special instruction and self-maintenance therapy. Findings from both suggest a decrease in problematic behaviors (e.g., agitation, disruptive vocalization) and improved mood.

**Validation Therapy.**—Livingston and colleagues (2005) reviewed three studies. One study found reduced irritability scores after validation therapy. The other two studies did not report any change. Finnema and colleagues (2000) reviewed seven studies, two of which were discussed in Livingston and colleagues’ (2005) review. They report improvements in activities of daily living (ADL) and cognitive function and decreased aggressive behavior.

**Cultural Arts Interventions**

**Visual Arts.**—The MHF (2011) reported on a study that examined affect, agitation, level of engagement, and function of 40 people with dementia who were placed in either a weekly art class or an individual art project. Higher levels of fear and verbal agitation were observed for the people assigned to the individual art project compared with those in the art class.

**Music Therapy.**—Witzke, Rhone, Backhaus, and Shaver (2008) conducted a qualitative review of 11 dementia studies from 1999 to 2007 that used music to manage problematic behaviors. Results across the studies were mixed. Five specifically cited “significant” reductions in agitated behaviors although no detailed data were provided. Others reported reductions in negative behaviors or “favorable impact.”

Sung and Chang (2005) looked specifically at interventions that used “preferred music” (music that family members said that the person with dementia enjoyed) to manage aggressive behaviors. Of the eight studies cited, all but one showed decreased aggressive behavior. Study limitations include inconsistencies in definitions of “agitation.”

Other music therapy reviews include Livingston and colleagues’ (2005) review of 24 studies (six RCTs). They report reductions in agitation in the short term (during and immediately after the intervention) but not in the long term. In another review, Vink, Bruinsma, and Scholten (2003) examined 10 RCTs. Although all cited positive effects on mood and behavior, they cautioned that interpretation of findings was limited due to poor study quality (e.g., insufficient description of the intervention, lack of randomization). Beard (2012) reported reduced agitation, apathy, wandering, and disruptive vocalizations in some studies included in her review but, like others, notes that there is great variation in types and applications of music interventions, as in other cultural arts interventions.

Tang and Vezeau (2010) conducted a “narrative review” of music therapy interventions in health care settings. Their results included five studies involving people with dementia. Although nearly all reported successful outcomes (improved cognitive performance, reduced depression), most had only one participant. The authors note that use of music (e.g., types, duration, frequency) varied greatly across studies. They also noted that lack of
validated instruments made it difficult to interpret findings and compare results across studies.

Quality of Life

Lawton (1997) defined QoL as “the multidimensional evaluation, by both intrapersonal and social-normative criteria, of the person-environment system of the individual” (p. 91). We note that most studies we cite rely on one-dimensional, brief standardized questionnaires (e.g., the QoL-AD scale) in which the responder (the caregiver or person with dementia) is asked to rate level of agreement with several items on a list without providing any additional input on the relevancy of scale items to his or her life, or without any comment on environment or other areas of importance.

Pharmacologic.— Cooper and colleagues (2013), in their systematic review of 15 RCTs and meta-analyses, found a lack of evidence that any of the interventions (naproxen, rofecoxib, ginkgo biloba, testosterone gel, nutritional supplements, donepezil, olanzapine vs risperidone, or tarenflurbil) improved QoL when compared with a placebo using various QoL assessments including the QoL-AD (Logsdon et al., 2002) and the QoL assessment (Blau, 1977).

Psychosocial

Behavior Modification.— Olazarán and colleagues (2010) reviewed one study for people with mild to moderate dementia and their caregivers. Activities involved prioritizing activities deemed to be meaningful by the participants, setting goals, home modifications, and strategy sessions on improving ADL performance. Participants had significantly higher QoL ratings (as rated by the caregiver) than the control group. Specific QoL rating methods or assessments were not provided.

Cooper and colleagues (2012) included a study that examined the effectiveness of weekly discussion groups for caregivers and people with dementia to address social concerns and other issues. There were no significant differences on QoL ratings by people with dementia using the QoL-AD and other scales.

Cognitive Stimulation.— Cooper and colleagues (2012) reviewed three studies and concluded that there is insufficient evidence that cognitive stimulation improves QoL.

Cultural Arts Interventions

Dance.— Beard (2012) reported that studies assessing the effects of dance/movement therapy commonly found increases in communication and QoL as demonstrated through caregiver and participant report rather than a validated assessment tool.

Music.— Skingley and Vella-Burrows (2010) conducted a “mini-review” that excluded music therapy. All five studies reported positive outcomes (e.g., reduced agitation, increased QoL, sense of empowerment) for music. One study found no difference between music and hand massage, and music alone. Limitations included small sample sizes, reliance on subjective reports, poorly defined constructs and outcomes, and absence of validated measures.

Storytelling.— The MHF (2011) included a study that examined the effects of the “TimeSlips” group storytelling program on neuropsychiatric symptoms, QoL, and communication among 56 residents with dementia. Findings suggested improved communication and “expressions of pleasure” but no significant change on measures of neuropsychiatric symptoms or well-being.

Visual Arts.— Beard (2012) reported that although some studies on visual arts interventions found improvement in participants’ ratings of pleasure, the studies lacked standardized outcome measures.

Limits of a One-Size-Fits-All Approach to Dementia Research

In looking at results from the reviews, two clear points emerge. First, the quality of a study should not be judged on its adherence to a RCT design but rather to the appropriateness of what is being measured and how. For example, people with dementia are often at risk of being socially isolated because of their symptoms both in the home and in long-term care settings. Cultural arts interventions, and some of the psychosocial interventions, tap into and develop individual potential and social meaning systems to achieve a transformative experience. Pharmacologic interventions do not. Studies in which a cultural art intervention is assessed in the same way as a pharmacologic intervention therefore make little sense. To create “forms expressive
of human feeling,” as Langer describes it, may be the one way in which a person with dementia is able to accomplish something meaningful. Measuring meaning is more complicated than providing agreement ratings for 15 adjectives or noting a change in affect. It is a measurement issue that is worthy of further consideration.

Second, the incredibly individual nature of the cultural arts must be considered. Even if, with further research, we were able to establish reliable measures of meaningfulness, what is meaningful to one person certainly may not be meaningful to another; levels of meaning may differ in intensity, duration, form of expression, and in other ways that are deeply personal; and the idea of having one person rate how meaningful an experience was for another is problematic.

In addition, measurement of cultural arts interventions should not be limited to the individual but should include larger social networks of staff, family, caregivers, and/or other residents because the cultural arts often occur in a group setting. Not only do cultural arts interventions involve meaningfulness, creativity, and imagination, they involve social connectedness and engagement with the outside world.

**What Is the Future of Cultural Arts Interventions in Dementia Care**

As we have noted, the pharmacologic interventions included in our review, with the exception of donepezil, showed little positive benefit compared with many psychosocial interventions and music therapies in particular, which demonstrated effectiveness, at least in the short term. We acknowledge that our review of reviews is limited, that individual studies may point to different conclusions, and that some interventions (e.g., poetry) were not addressed in our article simply because they did not appear in the reviews. However, we argue that taking a broad approach at looking at potentially successful interventions is important in planning for future research.

In light of our findings, we point to several considerations. First, as stated earlier, researchers must consider new study designs. As Spector and colleagues (2000) note regarding psychosocial interventions, “Unlike drug trials, double blinding is not possible and contamination between groups is more likely” (p. 211). In addition to the problem of randomization and lack of an adequate control group, cultural arts interventions rarely if ever exceed 100 participants. There are several potential reasons for this. The difficulty of finding funding to support cultural arts interventions is a tremendous challenge. It can also be difficult to consistently train facilitators to offer the intervention. In addition, interventions tend to fall into traditional disciplinary divisions (music, dance, drama, storytelling, and visual arts) as demonstrated by the integrative review. We must move away from disciplinary boundaries and instead focus on better understanding what various cultural arts interventions comprise (e.g., movement, recall, verbal expression), how cultural arts interventions are delivered (e.g., how often, by whom), and who are the participants (e.g., residents with dementia, caregiving staff, family). A firm understanding of at least these three areas is needed to inform appropriate designs for future research.

Many reviews cite the lack of clear descriptions of the intervention as a weakness. A stronger understanding of the mechanisms at work in cultural arts interventions would help focus efforts on how the cultural arts work, rather than which separate discipline (e.g., dance, music) is more effective. This would also potentially enable multiple approaches to be tested in the same study to reach higher numbers of participants.

With regard to the social aspects, we note that measurement of cultural arts interventions should not be limited to the individual but rather should include larger social networks of staff, family, caregivers, and/or other residents. The social aspect was an important component in two psychosocial interventions (cognitive stimulation and behavior management) that demonstrated positive potential for cognitive and/or social functioning (Livingston et al., 2005). As mentioned earlier, people with dementia are commonly isolated by others because of their symptoms (de Medeiros, Saunders, Doyle, Mosby, & Haitsma, 2011). Cultural arts interventions have the potential for connecting people and improving the social environment. Measurements and designs that can look at changes in dyads (e.g., caregiver and person with dementia), primary groups (e.g., family members), and larger groups (e.g., all of the residents in one living unit) have the potential to reveal new and important information.

In addition, individual interest must be considered as part of any intervention evaluation. Interventions such as reminiscence, TAP (Gitlin et al., 2008), and music therapy—all tailored to individual needs and interests—showed promise. Given the highly personal nature of the cultural
arts, this is an important but often overlooked consideration in research design. Rather than assign people to a cultural arts intervention and assume they will enjoy it, some type of prescreening may be conducted. This may include asking participants about their interests, obtaining information from family members about participants’ past interests, or providing potential participants with the opportunity to sample an intervention before enrolling in a study.

Finally, poor and inconsistent measurement is also a challenge. Instruments, such as the QoL-AD scale (Logsdon et al., 2002), which may be suitable for clinical trials, are not necessarily appropriate for cultural arts interventions for several reasons. In the case of the QoL-AD, caregivers and people with dementia report their level of agreement with 13 items. Yet, one must ask whether items such as “money” or the ability to “do household chores” indicate QoL and if items on the scale can be assumed to have equal importance for all people. Qualitative approaches, which can yield rich description of the environment and actors, are important to understanding the many facets of a complex notion such as QoL, while also providing insight through which better instruments and measures can be developed and tested.

We note that we have not addressed policy and practice directly in this article because research is at the heart of both. It is through careful rethinking of what constitutes rigorous and effective research that the potential of cultural arts interventions may eventually be understood. In the meantime, it is important we do not lose sight of the tremendous benefits that cultural arts interventions offer to people with dementia, dementia caregivers, and the communities where they live. The cultural arts provide a means to tap into imagination and foster creative expression and meaningful experiences, the essence of which is likely beyond measure.

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