
WHO Plays?

Play, Older People, and Age-Friendly Policy

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The authors assert that as the world's population ages, play becomes an underappreciated and underdeveloped opportunity to address many of the challenges associated with growing old. But no systematic examinations exist for the role of play in age-friendly policy. The authors seek to determine the extent to which play has been integrated into such policy landscapes and conclude that the importance of play and playfulness for the well-being of older people in building and maintaining relationships has simply not been recognized. **Key words:** age-friendly cities; age-friendly practices; aging and social relationships; Global Database of Age-Friendly Practices; individual connectedness and the elderly; older populations; play and aging; positive emotions and the elderly

Just as people need food to eat and air to breathe in order to survive and be happy, they also need to recreate or Play. This is not an optional activity. Rather it is something we need to sustain and refresh ourselves.

—MICHAEL B. FRISCH

SOME HAVE LONG PROPOSED THAT, from an evolutionary perspective, humans are built for play (Brown 2009; Groos 1912). Although play changes throughout the human life-span, scholars widely consider it to impart flexibility, adaptability, versatility, and resilience to behavior (Fagen 2011). As such, play enables human brains to develop, adapt, learn new things, and find ways to derive joy and pleasure during our lives. As Brown (2009) summarizes: “Lifelong play is central to our continued well-being, adaptation, and social cohesiveness” (58).

As the world continues demographically to transform into an older society, the study of play and older people becomes increasingly relevant. Of particular

concern for the health and well-being of older adults is their ability to maintain and build new social relationships (World Health Organization 2021). For many reasons, older people's social networks and connections tend to shrink, and they are vulnerable to social isolation and loneliness (for recent related discussions see Gao et al. 2021; Susanty et al. 2025; Wen et al. 2023). Older people themselves perceive social relationships to be even more meaningful for their well-being than traditional markers of healthy aging, such as freedom from disease and disability (Teater and Chonody 2020). One of the longest studies of aging in the world—the study of adult development at Harvard University—found that creating a new social network and rediscovering how to play are two of four inter-related tasks essential for joyful aging in older people (the other two tasks are being creative and engaging in lifelong learning) (Vaillant 2008).

The importance of play for the social and relational health and well-being of children is well known (e.g., Yogman et al. 2018). Extant research on play and adults shows that playful interactions also contribute in important ways to social relationships beyond childhood and throughout the life-span. Playful exchanges among adults have been linked to the cultivation and facilitation of relationships (Proyer 2014), increased group camaraderie (Plester and Hutchison 2016), and increased engagement in relationships (Farley et al. 2021). Van Vleet and Feeney (2015) think adult playful interactions both signified and augmented the feelings of trust and security among their subjects and also induced feelings of excitement and positive affect. A compelling body of research shows that playfulness proves important for healthy adult romantic relationships (for an overview see Brauer et al. 2021), including those of older couples (Brauer et al. 2023). Empirical research specifically about older people has found playfulness to be associated with a better mood, contributing to social connectedness (Bronikowska et al. 2011) and positive relationships (Mortenson et al. 2017). Playful interactions promote a shared sense of well-being and enjoyment (Mahdjoubi and Spencer 2015; Yarnal 2006) and belonging (Hoppes et al. 2001) for older people. City and community public spaces have particular potential to enable adult social play (Mahdjoubi and Spencer 2015; Stevens 2007; Hartt and Vincent 2024).

Since the beginning of this century, the World Health Organization (WHO) has been working to expand understanding of aging beyond physical health to encompass all forms of meaningful engagement, including social, economic, cultural, spiritual, and civic (Fulmer et al. 2020). In 2007, having identified a framework of eight domains of characteristics of the urban environment that

influence the quality of life for people as they age, the WHO launched the age-friendly cities (AFC) movement (World Health Organization, n.d.-c). The AFC framework is considered an international benchmark for evaluating and developing age-friendly communities (Beard and Montawi 2015). The movement has been, and continues to be, very influential around the globe. It has motivated local governments worldwide to review their planning decisions and policies to meet the criteria of age friendliness within their local, urban environments (Fulmer et al. 2020). The WHO, in its online global database of age-friendly practices (<https://extranet.who.int/agefriendlyworld/afp/>), encourages communities, cities, and regions to share their experiences implementing age-friendly initiatives, such as those with a desired outcome of building and maintaining relationships.

The influence of the WHO's AFC policy framework and the importance of play for supporting the social relationships of older adults poses the questions: To what extent is social play integrated into the age-friendly practices recognized by the WHO for building and maintaining relationships? And, as a corollary, what, if any, are the spatial and temporal trends linked to age-friendly practices that contemplate social play? Also, what benefits of play and play-related attributes for older adult's social relationships are reflected in these best practices?

We examine these questions through a systematic content analysis of the WHO's Global Database of Age-Friendly Practices for building and maintaining relationships. Content analysis "rests on the assumption that texts are a rich data source with great potential to reveal valuable information about particular phenomena" (Kleinheksel et al. 2020, 128). We first present an overview of the WHO AFC movement and the global database of age-friendly practices, followed by a brief review of the literature pertaining to the phenomena of play to ground the subsequent analysis. We then detail the research methodology and present our findings. Lastly, we discuss the implications of the findings, present our conclusions, and reflect on the opportunities for future research.

The WHO AFC Movement

The WHO premises its AFC movement on the notion that "age-friendly environments foster healthy and active aging" (World Health Organization n.d.-b). It focuses on locally led structures and services that endorse health, inclusiveness, participation, and security of older adults within built environments (World Health Organization 2007). More specifically, the WHO (2007) classifies urban

characteristics that underpin age-friendly environments into eight domains: housing, social participation, respect and social inclusion, civic participation and employment, communication and information, community support and health services, outdoor spaces and buildings, and transportation. From a policy and practice perspective, these interconnected domains can help identify key barriers that affect aging people (World Health Organization, n.d.-g). As such, they enable the development of cities and communities that reflect “the wide diversity of older people, promote their autonomy, inclusion, and contributions in all areas of community life, respect their decisions and lifestyle choices, and anticipate and respond flexibly to aging-related needs and preferences” (World Health Organization 2023, iv). As Hartt and Biglieri (2021) highlight, “Two key facets of the AFC framework are its holistic nature (encompassing nearly every action a local government can undertake), and its flexibility (which allows the framework to be place-based and context-specific to the needs of older adults in a particular locale)” (5).

In 2010 the WHO launched the global network of age-friendly cities and communities (GNAFCC) to catalyze age-friendly policies and actions (World Health Organization, n.d.-g). Requesting membership in the GNAFCC requires the support of either a directly elected or mandated public official (e.g., the mayor) of a city or community (World Health Organization n.d.-e). The official must commit to sharing and promoting the AFC values, principles, and processes, including engaging older people in a meaningful way in all stages; commit to planning, implementing, and measuring actions toward creating an age-friendly local environment; and participate in the GNAFCC (World Health Organization 2019). The AFC movement and GNAFCC have grown immensely and captivated global consciousness and commitment to address topics surrounding aging populations within the rapidly urbanizing world (Fulmer et al. 2020). At present, the GNAFCC includes more than fifteen hundred cities and communities across fifty-one different countries covering 320 million people worldwide (World Health Organization n.d.-a).

The WHO Global Database of Age-Friendly Practices

In 2010, as part of the GNAFCC initiative, the WHO launched the global database of age-friendly practices (hereafter referred to as the global database). It is intended to help recognize communitywide, citywide and regional efforts to develop age-friendly environments, facilitate the exchange of information, and encourage local age-friendly actions. Communities, cities and regions are invited

to contribute summary descriptions of their age-friendly practices—defined as “any concrete action aimed at enabling healthy aging” (World Health Organization n.d.-f)—to the global database to be shared publicly online.

The WHO proposes that age-friendly environments promote healthy aging by helping build older individual’s abilities in one of five ways: meet basic needs; learn, grow, and make decisions; be mobile; contribute; and build and maintain relationships (World Health Organization n.d.-c). These abilities are framed as the desired outcomes of age-friendly practices (World Health Organization n.d.-d). Submitters of age-friendly practices (AFP) to the global database are asked to identify which of these five desired outcome abilities their practice supports (World Health Organization n.d.-e). Practices in the global database are classified accordingly.

Given its aim to be a global public online forum of positive, concrete, age-friendly actions, the global database can be understood to reflect what local, directly elected or mandated public officials around the world perceive to be the most relevant age-friendly practices for supporting older people in their cities and communities. More simply put, this reflects those initiatives that public officials are proud to share with the world. We suggest the global database may present a unique insight into the current place for play among older people in the minds of local city and community officials concerned about building age-friendly environments. While recognizing that play might be part of AFP in several of the outcomes desired by the WHO, and considering the direct relevance of play for social relationships, the researchers for this study chose to explore the AFP classified with a desired outcome of building and maintaining relationships. At the time of writing, the global database contained a compilation of over 700 AFP, 140 of which were classified as having a desired outcome of supporting older people to build and maintain relationships.

Play, Older People, and Social Relationships

Perhaps because of play’s fundamental importance to being human, agreement on a single definition of play (and playfulness) has long eluded researchers, despite many meanings from a range of disciplines who have grappled with this issue (including, though not exhaustively: Sutton-Smith 2008; Sicart 2014; Burghardt and Pellis 2019; Gordon 2014; Proyer et al. 2020; Henricks 2023; Masek and Stenros 2021). In the context of adults and older people in particular,

playfulness has been the object of greater study than play per se (Van Vleet et al. 2019). Although separate constructs, play and playfulness are clearly related terms and inform each other (Van Vleet and Feeney 2015). An emerging body of research has explored the relevance of play and playfulness for promoting and enhancing older people's social relationships (Yarnal and Qian 2011; Farley et al. 2021; Guitard et al. 2005; Outley and McKenzie 2008; Mortenson et al. 2017; Guardabassi et al. 2024; Keisari et al. 2020; Parker et al. 2022; Brauer et al. 2024). Evolution and animal play research also point to the importance of play in adult social relationships. In a recent review of such research, Burghardt and his associates (Burghardt et al. 2024) found that "adult-adult play behaviors can be found in many different contexts, but what they seem to have in common is that play is used to create familiarity between subjects, negotiate social relationships, and lower social tension. . . . [It] can also be highly rewarding" (10).

Rather than attempting a specific definition for play, this article explores evidence of key words associated with play and playfulness in the global database practices that are classified for building and maintaining relationships among older people.

Data and Methods

To measure the integration of play and playfulness in initiatives that local city and community officials deem relevant for building an age-friendly environment, we conducted a latent content analysis of the textual descriptions of age-friendly practices included in the WHO global database of age-friendly practices. A description of each age-friendly practice is published on a separate web page in the global database and includes a brief summary of the practice, its location (city and country), the year it was first implemented, its desired outcome for older people, the government sectors into which it fits, the issues it addressed, and whether the practice was evaluated. The global database includes a search function for these characteristics. As we said, the WHO frames older people's abilities for healthy aging as the desired outcomes of age-friendly practices, and a submitter assigns to each age-friendly practice a desired outcome. The data set for this study comprised the web pages texts describing the age-friendly practices plus the desired outcome to build and maintain relationships. We used latent analyses to interpret the meaning of the age-friendly practices texts with respect to play by analyzing beyond what was explicitly written (Bengtsson 2016).

Specifically, we conducted two types of latent analysis: latent pattern content analysis, which “seeks to establish a pattern of characteristics in the text itself,” and latent projective content analysis, which “leverages the researcher’s own interpretations of the meaning of the text” (Kleinheksel et al. 2020, 129). As typical in latent pattern analyses, we used theory for deductive coding in this study. We created codes a priori from key words associated with play as identified in the literature (Kleinheksel et al. 2020). In addition to the key word code “play,” ten more were derived from the literature because of their close association with play and playfulness: leisure, recreation, games, joy (and enjoyment), fun, pleasure, creativity, imagination, spontaneity, and humor. A brief overview of these key word codes follows.

Key Word Codes Associated with Play and Playfulness

Many people consider the terms play, leisure, and recreation to be similar and interchangeable (Wise 2023). But scholars agree that, as with play, both leisure and recreation are unique conceptualizations, although the differences between the three terms have long proven difficult to establish (Hurd et al. 2022). Depending on the field of study, definitions for each term can also look very different (see Miller 2017 for an overview of this issue with respect to play). Issues of bias and equivalence in translation for non-English, non-Western, and cross-cultural research also complicate alignment concerning specific meanings and definitions (Ito et al. 2014; Gui et al. 2019; Mgonja 2020). Nonetheless, the authors suggest that ongoing study of how best to delineate these terms should not preclude exploring city and community best practices for recognizing their value in supporting older people’s social relationships.

For people of all ages and in all scholarly disciplines, play and playfulness are strongly, although not exclusively, intertwined with positive emotions (Miller 2017; Tonkin and Whitaker 2024; Shen and Masek 2024). We included in this research three positive emotions codes—joy (or enjoyment), fun, and pleasure. For older people, feeling socially connected involves experiencing such positive emotions with others (Akhter-Khan et al. 2023; Bruggencate et al. 2019). Although researchers have found that most people perceive a difference in quality between joy, enjoyment, fun, and pleasure, these terms have been found to be used interchangeably by the general public (Kawabata and Mallett 2022).

Play is also intrinsically linked to creativity and imagination (Bateson and Martin 2013; Resnick 2017; Tsai 2012). Play and playfulness drives humans to practice and create (Gray 2013), and engaging in play and creativity seems essen-

tial for joyful aging (Vaillant 2008). Likewise, as Lieberman (1977) said almost fifty years ago, spontaneity and humor are also closely associated with play and playfulness. Humor, like play, helps people see—or imagine—the world in new ways, which in turn reduces stress and supports social bonding (Bateson and Martin 2013; Yue et al. 2016). Research frequently cites spontaneity as a critical component of play (Fagen 2011; Miller 2017), reflecting the idea that play is voluntary, unconstrained, and independent of needs (Glynn and Webster 1992).

Finally, play has also long been associated with and even regarded as synonymous with engaging in games (Caillois 1961). Traditional games have a strong socializing influence on older people, fostering the building of relationships by providing a focus for social interaction (Bronikowska et al. 2011) and a sense of belonging (Hoppes et al. 2001). Digital games are valued by older people to the extent that they foster playfulness and social interaction (Kukkohovi et al. 2023; De Schutter and Vanden Abeele 2010). Building on existing knowledge of the therapeutic power of play, a recent randomized control trial found active participation in group social play involving a combination of traditional and modern games to be effective for alleviating loneliness among older people (Jamei et al. 2024).

Content Analysis Methodology

Using an adaptation of the four steps of content analysis proposed by Bengtsson (2016) (decontextualization, recontextualization, categorization, and compilation), we began by searching for each of the key word codes in each of the 140 age-friendly practices classified in the global database as having the desired outcome of supporting older people in building and maintaining relationships. Three researchers engaged in a process of latent pattern content analysis and recorded their findings on an Excel spread sheet developed specifically for this study. Each of the 140 age-friendly practices has a unique web page within the global database. Using the website search function available through the Google Chrome browser, we searched for the root of each key word on each age-friendly practice page to allow us to contemplate related words (e.g., imagine, creative, etc). Upon identifying a key word code, we assessed its meaning within the context of the specific age-friendly practice to ensure it was being used in a way that described the concept of play. We first assessed the sentence in which the key word appeared. For example, the key word code “play” appears in the following sentence in one of the age-friendly practices: “Older people play a central role in the School of Seniors, not only as active learners but also as mentors,

contributors, and innovators within the program.” Our analysis of the meaning for this key word led us to exclude it from the study. When the sentence did not provide clarity to the researcher, we analyzed a broader unit of meaning—the paragraph in question. Our example demonstrates that latent content analysis requires the researcher to be “intimately involved in interpreting and finding meaning in the text because meaning is not readily apparent on the surface” (Kleinheksel et al. 2020, 131).

After we recorded a key word code on the study spreadsheet, we then categorized it. We undertook these largely subjective categorizations of the key word codes to explore and provide more structure to the data (Kleinheksel et al. 2020). These closely resembled latent projective content analysis, and we used them to help us analyze the text for evidence of benefits associated with play (and its associated key words) regarding the social relationships of older adults. To guide the analysis, we determined five general benefit categories: participation, inclusion, and accessibility; interaction and connection; socialization and friendships; health and well-being; and artistic and cultural expression. We analyzed the context of each key word code subjectively and assigned one of these five benefit categories (see figure 1). We also assigned a secondary benefit as needed.

Following development of the codebook and coder training, we used investigator triangulation to assess the reliability of the methodology. All coders analyzed the same sample of fourteen age-friendly practices (10 percent of the set of practices) (Denzin 1970; Farmer et al. 2006). There was full consistency in terms of the latent pattern content analysis of the key word codes. In the latent projective content analysis related to categorizing the key word codes into benefit categories, the investigator triangulation exercise revealed occurrences of varied interpretations of the data. This is not unexpected in this type of analysis (Kleinheksel et al. 2020). We offered the option for coders to assign a second benefit category to a particular key word code context analysis to facilitate identifying practices to be discussed in the peer debriefings. We used regular peer debriefings during the data collection process as a form of verification between the data collectors and the remaining members of the research team. This method allowed all members of the research team to discuss their interpretation of the data and the coding scheme to maximize consensus regarding the data collection methodology (Roller 2019). Review of the collected data by a fourth researcher two months after the initial coding and categorization process found only three instances of key word coding and five instances of benefit categoriza-

tions that that researcher would have recorded differently. This suggests that the steps taken to ensure inter-rater reliability were relatively effective because reproducibility is not typically the goal of qualitative research (Kleinheksel et al. 2020).

After we completed the content analyses for each age-friendly practice, we used descriptive statistical analyses to determine the number and proportion of cases that included a key word and the frequency of each benefit category per key word. Lastly, we examined the geographic distribution of the use of key words associated with play.

Findings

Of the 140 age-friendly practices (AFP) with the desired outcome to build and maintain relationships, just over half included at least one of the play-related key word codes included in this study. In this report about our findings, we focus on the analyses of this 54 percent—or seventy-five AFP—that we have referred to as the AFP play-related subset.

Geographic and Temporal Distribution

The AFP play-related subset heralded from five continents and twenty-four

Key word codes	Benefit categories
Play	1. Participation, inclusion, accessibility
Creativity	2. Interaction; connection
Fun	3. Socialization, friendships
Games	4. Health and well-being
Humor	5. Expression (artistic, cultural)
Imagination	
Joy (and Enjoy)	
Pleasure	
Spontaneous	
Leisure	
Recreation	

Figure 1. Study key word codes and benefit categories

countries, notably with no representation from Africa. Just over half (thirty-eight of seventy-five) of the AFP play-related subset (51 percent) were from a dozen countries in Europe: eleven from Spain; eight from France; four each from Portugal and the United Kingdom; three from Ireland; two from Poland; and one each from Bosnia and Herzegovina, Czechia, Estonia, Slovenia, Sweden, and Switzerland. Ten AFP (14 percent of the AFP play-related subset) were from four countries in Asia: four from Japan; three from Turkey; two from China; and one from Qatar. Ten (13 percent) were from North America with four from Canada; and two each from Costa Rica, Mexico, and the United States. Nine AFP (12 percent) came from Oceania with eight from Australia and the remaining one from New Zealand. Of the eight AFP (11 percent) coming from South America, six were from Brazil and two from Argentina.

The spatial distribution among continents of the play-related subset mirrors quite closely that of the full set of AFP associated with the desired outcome of building and maintaining relationships. In descending order of representation, AFP from Europe accounted for 49 percent of all AFP contemplated and 51 percent of the play-related subset; North America, for 16 percent and 13 percent respectively; Asia, for 14 percent and 10 percent; Oceania, for 11 percent and 12 percent; and, finally, South America, for 10 percent and 11 percent.

Spain was the country with the most AFP that included a play-related key word, eleven, and the most AFP in the full set of AFP with a desired outcome of building and maintaining relationships, nineteen. Spain was also the country that mentioned the greatest variety of play-related key words, seven (i.e., leisure, creativity, fun, games, humor, imagination, and joy) and, when mentioned, used them the most frequently in all cases except the word games (as shown in figure 2). Notably, there was no use of the word play itself in any of the AFP from Spain, nor was there mention of pleasure, spontaneity, or recreation. The three countries with the most AFP with play-related key words after Spain were, in order: France with eight AFP, Australia with seven, and Brazil with six.

Of the ten AFP from countries in Asia that used a play-related key word, only one, Turkey, mentioned play, while two mentioned leisure (including the one from Turkey that mentioned play) and one, recreation. Of the affective key words (fun, joy, and pleasure), only joy was mentioned in these practices, in four of the ten AFP. The other play-related key words used in these ten AFP were creativity in five AFP and games in three AFP.

From a temporal perspective, 2018 was the year with the most AFP (thirteen) in the AFP play-related subset. In the fourteen years prior, from 2004 to

	Number of AFP	Proportion of AFP	Mode country*
Play	6	4.3%	Brazil, Canada, Mexico, Poland, Switzerland, Turkey (1)
Creativity	35	25.0%	Spain (7)
Fun	12	8.6%	Spain (3)
Games	15	10.7%	Brazil (4)
Humor	1	0.7%	Spain (1)
Imagination	1	0.7%	Spain (1)
Joy	25	17.9%	Spain (5)
Pleasure	2	1.4%	France, United Kingdom (1)
Spontaneous	0	0.0%	None
Recreation	8	5.7%	Argentina, Costa Rica (2)
Leisure	7	5.0%	Brazil, Spain (2)

Note: The mode country (or countries in the event of a tie) for a key word is that which submitted the most AFP (specific number indicated in the parentheses) contemplating the particular key word in a play-related context.

Figure 2. Presence of key word codes in the age-friendly practice (AFP)

2018, the number of such cases included per year ranged between one and five. The year 2019 had nine AFP, while 2022 had twelve, with fewer in the years between—four in 2020 and seven in 2021. Both were marked by the COVID-19 pandemic. Notably, in 2023, only one case with a play-related key word was included before September.

Key Word Distribution

The number of AFP in which the key words most closely associated with or including play appeared varied from none to thirty-five practices, as depicted in figure 2. Notably, the word play and its corollaries were used in only six AFP (4 percent) in the context for which it is intended in this article. There was no overlap of usage of the key word codes play, leisure, and recreation, except for one AFP that mentioned play and leisure as well as games. Whereas play was mentioned in six AFP, leisure and recreation were mentioned in seven and eight AFP respectively in a way that can be interpreted as synonymous with play. All seven of the AFP that mention leisure in a way that mirrors play also included at least one of the key words for characteristics associated with play. Of the eight AFP that mention recreation in a context that remits play, five made no mention of any of the other key word codes.

Of the key words for play-related characteristics, creativity and its corollaries appeared in just under half (thirty-five) of the AFP play-related subset or 25 percent of all AFP. In second place, in terms of number of practices, joy and its offshoots, such as enjoy, were used in twenty-five AFP (18 percent of all). Games and fun appeared in fifteen (11 percent) and twelve (9 percent) AFP respectively. Finally, pleasure appeared in two AFP and imagination and humor were each mentioned in one AFP. Spontaneous was the only key word not mentioned in any of the AFP. In twenty-eight AFP (20 percent of all) more than one key word was used. Overall, there were 112 unique references of the play-related key words in the AFP play-related subset of practices, not counting multiple mentions of the same key word in a practice.

References by Key Word

As we noted previously, the key word play appeared in only six AFP. These six AFP were from six different countries on four continents, with one each from Brazil, Canada, Mexico, Poland, Switzerland, and Turkey. In only two AFP was play mentioned more than once. A 2014 AFP from Merida, Mexico, mentioned play twice, both times in the context of playing music, with benefits related to cultural or artistic expression and well-being. A second AFP, from Gdynia, Poland, in 2020, referenced play three times, linking it to the desired benefits of cultural expression (theater plays) and to participation in plays, all in an online environment. This case also referenced fun once and creativity three times, all associated with a benefit of cultural or artistic expression. Two of the four AFP that mention play only once, linked it with games as in “playing games.” These were practices from Jaguariuna, Brazil, and Kadikoy, Turkey, the latter of which also mentioned leisure. Both these practices associated playing games with benefits of participation and inclusion, as well as socialization and friendships in the Kadikoy practice. Finally, two AFP mentioned play only once and did not include any of the other play-related key words. One, from 2018 in Fredericton, Canada, referred to play in the context of a survey to be conducted to explore how older people work, live, and play. The other, from 2007 in Geneva, Switzerland, referred to play in relation to a program aimed at encouraging a free flow of conversation in different languages among participants. Its benefits were associated with expression, socialization, and friendships.

The key word fun appeared in twelve AFP, twice as many as used the key word play but still only 13 percent of all AFP. Use of the word fun was concentrated in practices from eight countries (Australia, Brazil, Canada, France, Ire-

land, Poland, Spain, and Sweden). There was none from Asia or Africa. There were three practices from Spain, two each from Australia and Brazil, and one each from the remaining five countries. As we have stated, the two key words fun and play were used together in only one practice (see figure 3). Almost half (five) of the twelve AFP that included the key word fun also referenced the key word creativity. This is in keeping with the ratio with which creativity appeared in the AFP play-related subset. The second word most used in conjunction with fun, was joy, predominantly in its corollary form, enjoy. They appeared together in three AFP, one each from Brazil, Spain, and Sweden. In descending order, the other key words mentioned together in an AFP with fun were games in two AFP, and pleasure, humor, and leisure in one AFP.

The key word games was used in fifteen AFP, a similar number of AFP to the key word fun (twelve). Although fun appeared most often with creativity, games appeared in conjunction with creativity only in one AFP, which was from Canada. In the ten AFP with which games appeared with play-related key words other than creativity, three of them also mentioned joy and leisure, two of them also mentioned fun, two others also mentioned play, and one other also men-

	play	creativity	fun	games	humor	agination	joy	pleasure	ontaneous	recreation	leisure
Play	3	1	1	2	0	0	0	0	0	0	1
Creativity	1	21	5	1	1	1	9	0	0	0	2
Fun	1	5	3	2	1	0	3	0	0	0	1
Games	2	1	2	5	0	0	3	1	0	3	3
Humor	0	1	1	0	0	0	1	0	0	0	0
Imagination	0	1	0	0	0	0	0	0	0	0	0
Joy	0	9	3	0	1	0	10	1	0	1	2
Pleasure	0	0	1	3	0	0	1	0	0	0	1
Spontaneous	0	0	0	0	0	0	0	0	0	0	0
Recreation	0	0	0	3	0	0	1	0	0	5	0
Leisure	1	2	1	3	0	0	2	1	0	0	0

Note: The shaded squares indicate the number of AFP in which the key word appeared alone (i.e., without mention of any of the other key words). The key word spontaneous is not included as it did not appear in any of the 140 AFP.

Figure 3. Presence of key words in the age-friendly practice (AFP) with another key word

tioned recreation. Of the five AFP that mentioned games, none used other play-related key words. The key word games appeared most often in the context of traditional games, including card games, board games, singing games, acting games, and movement games. Only two AFP (one from Australia and one from China) mentioned digital games.

Although thirty-five AFP used the key word creativity and its corollaries, such as create, fourteen of them (10 percent of all) only did so with another play-related key word. These fourteen AFP came from a broad range of countries, with one from Australia, Canada, France, Ireland, Poland, Portugal, Sweden, Turkey, and Qatar and five from Spain. The key word joy most often appeared with the key word creativity—they were used together in nine of the AFP. This is perhaps not surprising since the verbs linked to both creativity and joy, create and enjoy, lend themselves to use in a wide variety of contexts. Indeed, after creativity, the key word joy appeared in the largest number of AFP (twenty-five). It appeared in more AFP than all the other key words, except creativity and games, which combined appeared in twenty-four. In ten AFP (7 percent of all), joy was the only play-related key word that appeared, in the form of enjoy. Enjoy was used with one other key word in thirteen AFP and in two AFP with three other key words. The analysis of the contexts in which the key words appeared points to the usage of enjoy as qualitatively more similar to “like,” a less profound synonym, than to joy.

The key words pleasure, imagination, and humor appeared least in the AFP after spontaneity, which was not present at all. Pleasure appeared in two practices. In one, from France, it appeared with the key words fun and leisure. Although leisure was associated with the benefit of interaction and connection, the key words pleasure and fun were linked to the benefit of participation, inclusion, and accessibility. Pleasure specifically was understood as a benefit of the friendly environment required to retain older people in a practice aimed at fostering digital inclusion. The second practice, from the United Kingdom, mentioned pleasure in conjunction with the key word joy in the form of enjoy, both terms referring to the experience of older adults. In this AFP, pleasure got linked with the benefit of participation, inclusion, and accessibility. Joy, as in enjoy, on the other hand, became associated with the socialization and friendships benefit, one of only six cases in which a key word got associated with this benefit. Imagination and humor each appeared only once in the AFP.

Only one fifth of AFP (twenty-eight or 20 percent of all) mentioned more than one of the play-related key words. The most play-related key words were

used together in an AFP numbered four, and this occurred once (less than 1 percent of all AFP). Notably, in this practice from Spain, the four key words mentioned were creativity (as in create), humor, fun, and joy (as in enjoy)—play was not mentioned. This practice about a theater group of older people used the four key words to refer to the benefits of participation, inclusion, and accessibility (as in engagement) and expression (as in artistic and cultural). This was the only practice mentioning the key word humor. It referred to humor and laughter as the means through which the theater successfully addressed topics related to a healthy lifestyle. Continuing in descending order for the number of key words used in the same AFP, six AFP (4 percent of all AFP) used three different key words, twenty-one (15 percent of all AFP) used two key words, and forty-seven (34 percent of all AFP) used only one play-related key word.

Benefits Associated with Play-Related Key Words

Latent projective analysis of the AFP showed that at least one of the play-related

	Participation, inclusion, accessibility	Interaction, connection	Socialization, friendships	Health and well- being	Expression (artistic and cultural)
Play	3	0	0	1	2
Creativity	7	10	1	5	12
Fun	5	3	1	1	2
Games	7	4	0	2	2
Humor	0	0	0	1	0
Imagination	0	0	0	0	1
Joy	8	5	1	7	4
Pleasure	2	0	0	0	0
Recreation	3	1	3	1	0
Leisure	3	1	0	3	0
Total benefit associations in AFP	38	24	6	21	23
Proportion of all key word mentions	34%	21%	5%	19%	21%

Note: As more than one key word may appear in each age-friendly practice (AFP), the total AFP frequency does not refer to unique AFP but the number of times that benefit was associated with the group of key words.

Figure 4. Key word code-benefit frequency

key words was associated with each of the five hypothesized benefits, as depicted in figure 4.

The benefit with which the play-related key words were most often associated—in a third of the ninety-six unique instances of key word usage in the seventy-five AFP play-related subset—was that of supporting older individuals’ participation, inclusion, and accessibility. In just under a quarter of the uses, the play-related key words were associated with the benefits of interaction and connection and expression (as in artistic and cultural). The fourth most noted benefit, health and well-being, related to just under a fifth or 18 percent of the play-related key word usages. Finally, socialization and friendships was a benefit attributed to only three of the ninety-six play-related key word usages (3 percent) and these key words were creativity, fun, and joy. Of all the key word associations with the benefits interaction and connection and expression (as in artistic and cultural), almost half of each related to the key word creativity. In contrast, joy, the second most mentioned key word after creativity, became most associated with the benefits participation, inclusion, and accessibility and health and well-being. All five benefits were associated with six of the eight play-related key words, except for interaction and connections (associated with four) and socialization and friendships (associated with three). Specifically, with respect to the key word play, half (three) of its usages appeared in the context of participation, inclusion, and accessibility. Another two associated play with the benefit of expression (as in artistic and cultural), and one linked it with health and well-being.

Discussion

The AFP global database showcases concrete actions that cities and communities have taken toward making their community “a great place to grow old in” (World Health Organization, n.d.-a). To achieve this vision, the WHO (World Health Organization, n.d.-c) states that age-friendly environments “enable people, even when experiencing capacity loss, to continue to do the things they value” and that age-friendly practices “anticipate and respond flexibly to aging-related needs and preferences.” As a reflection of policy and municipal intent, AFP are then an extension of what public actors valued concerning older people.

In answer to our primary research question, the findings suggest that play for older people is not yet highly valued by public actors because it has not been

adopted in the vocabulary used to describe age-friendly practices on the WHO global database. Play, as an age-friendly practice, is markedly absent from those shared on the WHO AFP database: 4 percent of all AFP mentioned play. Although half the AFP mentioned a play-related synonym or characteristic, the findings suggest that there may still be a general lack of recognition of the value of play for the well-being of older people by public actors at the municipal and community levels across the globe. When included in the AFP, play was most often used in the context of playing games or music and theatre, and was most often associated with benefits related to cultural or artistic expression, participation, and inclusion. In none of the AFP was play itself featured as an activity worthy of older people's focus and practice. Nor was the word playfulness—the play mind-set—or two of its core components, humor and spontaneity, mentioned in any of the AFP, except for one reference to humor. Given the importance attributed to cultivating a play mind-set for the well-being of older people, this absence is troubling.

Although the relevance for older people (and not just children) of play and playfulness may still be difficult for public actors to grasp, the findings also showed limited use of the affective words associated with play: fun, pleasure, and joy. Reference to these positive emotions appeared in only 23 percent of the AFP. Joy appeared most frequently in the AFP and often—44 percent of the time—with none of the other key words; however it appeared almost exclusively in the form of the word enjoy. Although enjoy and joy are evidently correlated, the contextual analysis suggests a more superficial association of emotional experiences linked to their usage. Regardless, the limited reference to these affective key words overall suggests that, at best, experiencing positive emotions is valued for older people, but that it is assumed to be intrinsic to the age-friendly cities' (AFC) desired outcome of building and maintaining relationships. At worst, these findings demonstrate a real lack of appreciation for the value of such positive emotions for the well-being of older people.

Of all the play-related terms and concepts explored in this study, creativity was found to be the key word that was most used in the AFP, while the related term imagination appeared in only one AFP, and that was together with creativity. This suggests that creativity may be the characteristic most valued by public actors with respect to the AFC desired outcome of building and maintaining relationships. However, the findings also suggest that these actors may lack understanding or appreciation for the importance of play and a playful attitude for fostering creativity. Only one of the thirty-five AFP that mentioned the key word creativity also mentioned play, yet as we discussed in the literature review,

play and playfulness are widely acknowledged by researchers to be an essential component of creativity. It is also noteworthy that the higher number of usages of the key word creativity also reflects the frequent appearance of its related term, create, which the qualitative contextual analysis suggests did not always indicate an explicit aim of fostering older people's creativity to support social interaction and connectedness.

From a spatial perspective in general, around half of the AFPs with an outcome of building or maintaining relationships from any given continent mentioned a play-related key word, with the notable exception of Africa for which there no AFP with this outcome at all in the global database. In absolute numbers, almost half (thirty-four) of the seventy-five AFP play-related subset came from countries in which the principal language has Latin origins (Argentina, Brazil, France, Mexico, Portugal, and Spain). However, this is not altogether unexpected because 48 percent of all 140 AFP with the outcomes we studied originated from a romance language country. Considering the relative size of the populations of Asia and Africa, it is notable that zero African and only ten Asian AFP mentioned a play-related key word. These findings suggest the WHO movement, at least with respect to the outcome of building and maintaining relationships, has yet to gain a foothold with public actors in these two continents. From a temporal perspective, we find it worrisome that during the first eight months of 2023, only one AFP was posted that contemplates play-related key words (it mentioned fun and creativity).

In answer to our second key research question, latent projective content analysis found each of five general benefit categories of play and play-related characteristics for the social relationships of older people reflected in the seventy-five AFP that contemplated at least one play-related key word. Notably, the benefit of socialization and friendships was interpreted as associated with only 5 percent of the 112 play-related key word mentions in this subset of AFP. The benefit most often identified was participation, inclusion, and accessibility (associated with 34 percent or thirty-eight of the 112 play-related key word mentions). This may reflect a tendency for public actors to value participation above all else, or it may reflect an understanding that participation, inclusion, and accessibility are necessary first steps toward building and maintaining relationships. In this sense, perhaps socialization and friendships are considered a second or more advanced step related to the quality of relationships and, as such, not yet a primary objective for public actors. Notably, the second least identified benefit was health and well-being. Twenty-one (or 19 percent) of the 112 play-

related key word mentions were associated with this benefit. This further suggests that the importance of play and its characteristics for the health and well-being for older people is not yet appreciated and valued by public actors.

Limitations

Of the 140 AFP contemplated in this study, eighty-three (59 percent) were flagged as having been evaluated by the submitting public actor. Within the seventy-five AFP play-related subset, forty-seven (63 percent) of the practices were evaluated. It was not within the scope of this study to judge the quality or merits of the AFP. Nonetheless, we observed that the length of the description of the practices varied greatly one from the other, with some containing only a short paragraph and others several long paragraphs of text. This can be expected to have naturally affected the likelihood of key word usage, an effect that cannot be objectively determined. To compensate for this variation in length, although we controlled the number of times a given key word was used in a single case, for the purposes of this analysis, the key word count referred to the number of unique practices in which the word appeared. In the case of multiple uses of the word, we determined the outcome to be that which best fit most of the mentions of the word. This approach may have reduced the precision with which we determined outcomes. But the researchers in aggregate judged it to be the most objective approach.

In this study, the texts of all the AFP examined were in the English made available through the translation feature of the global database website. This raises the issue that the translation may be affected if the key words selected as play related do not closely represent these concepts in other languages. Using latent content analyses, the researchers in this study considered the key words in the context of the sentences and, where necessary, the paragraphs in which they were used. Nonetheless, the key words inherently reflect an English-language users' bias in the study.

Conclusion

This research studied the extent to which play is integrated into WHO's recognized age-friendly practices. Eight key words that reflect characteristics of

play relevant to older people were explored through latent pattern analysis for evidence of the concept of play—the positive emotions of joy, fun, and pleasure, as well as creativity, imagination, humor, spontaneity, and games. We found that just over half (54 percent or seventy-five) of the 140 AFP for which the submitters declared had a desired outcome of building and maintaining relationships, referred to play through one of the play-related key words. But the concept of play as expressed by the specific key word play appeared in only 4 percent of the AFPs. Since the AFP reflect the values and beliefs of the public actors who have submitted them, this finding suggests that the explicit importance of play and playfulness for the well-being of older people in building and maintaining relationships is not yet fully recognized. Key words associated with the positive effects of play—joy, fun, and pleasure—were also notably lacking, appearing in just 23 percent of the AFP. Although it can be expected that most public actors agree that the emotional well-being of older people is very important, the submitted descriptions of AFP programs and outcomes suggest that, like play, the value of joy, fun, and pleasure is not yet being effectively promoted and realized for older people.

The researchers also conducted a latent content projective analysis of five benefits attributed to play and its characteristics in the AFP. We found that in a third of the key word mentions, participation, inclusion, and accessibility constituted the principal associated benefit. In contrast, socialization and friendships, which reflects a deeper, more meaningful connection than participation in a group activity, was identified as pertaining to only 6 percent of the key word mentions. Health and well-being formed the second benefit least often found to be linked to mention of the play-related key words. Our findings point to the critical need for more research into stakeholders' perceptions about play for older adults and the urgency for further education and awareness on this front.

Spatially, we found the proportion of AFP that mentioned play-related key words to be similar on the continents represented in the AFP. The lack of any AFP from Africa and very few AFP from cities and communities in Asia compared to their share of the world's population points to a challenge of the GNAFCC to expand active participation beyond its strong base in Europe. The similar low proportionality of the usage of play-related key words on the continents studied suggests that research providing insights into the links between older people, play, and relationship building and how to value and foster these connections may contribute meaningfully to creating more age-friendly cities and communities around the world. Our finding that only one of the AFP submitted in the first eight

months of 2023 (when data was collected) mentioned any of the play-related key words, lends increased urgency to this call for researchers and practitioners alike to turn their attention to play and older people.

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