



Article

Organizations' Perspectives on Successful Aging with Long-Term Physical Disability

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Abstract: In recent decades, there has been considerable discussion surrounding what it means to age successfully, and what supports, services, and programs are needed to facilitate successful aging. Rehabilitation scholars advocate for models of successful aging that take into account the unique needs and priorities of those aging with long-term physical disability. The aim of this study is to explore how organizations that serve those with physical disability define successful aging for this population, and whether their understanding of successful aging is consistent with the needs and priorities identified by those aging with physical disability. To do so, we analyze qualitative data from a national online survey of disability organizations (N = 106 organizations). Organizations described the following domains of successful aging for those with physical disability: (a) autonomy and/or maximized independence; (b) living arrangement; (c) health and well-being; and (d) social connection and meaningful community engagement. Overall, organizations' understandings of successful aging are consistent with the priorities identified by those aging with long-term physical disability. We discuss strategies that organizations can adopt to ensure that the programs and services that they offer facilitate these elements of successful aging.

Keywords: physical disability; successful aging; older adults; qualitative; organization supports



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1. Introduction

Countries all around the are grappling with how to adapt to meet the needs of an aging population. Within this context, there has been considerable discussion surrounding what it means to age successfully, and what supports, services, and programs are needed to facilitate successful aging [1–3].

Original models of successful aging were developed to challenge the assumption that aging is synonymous with loss of function, dependence, and disengagement by identifying individuals that are aging “successfully” [4,5]. In their model of successful aging, Rowe and Kahn outline three components of successful aging: (1) the avoidance of disease and disease-related disability, (2) the maintenance of high cognitive and physical function, and (3) active engagement with life. They maintain that these factors offer a roadmap for how to promote successful aging and suggest modifications that individuals can make to increase their likelihood of aging well. While this model has been incredibly influential, it has also garnered considerable criticism [6–8].

One of the most prominent criticisms of this model is that it is ableist [6]. A core element of Rowe and Kahn's definition of successful aging is the avoidance of disease and disability [4,5]. This implies that successful aging is not attainable for large segments of the population, including those aging with and into disability. Critics argue that this criterion for successful aging does not map well onto individuals' subjective understandings of what successful aging means [6,9]. According to one study [9], about 43% of older adults with one chronic condition, 35% of adults with two chronic conditions, and 17% of older adults with three or more chronic conditions consider themselves to be aging successfully; however, none of these older adults would be classified as aging successfully according to Rowe and Kahn's criteria [9].

Recently, rehabilitation scholars have sought to develop models of successful aging that are meaningful for those aging with disability and that can be used as a guide for organizations serving this population [7,10–12]. To identify these components of successful aging, they have asked individuals with long-term physical disabilities to define what successful aging means to them and what resources they need to age well. Key components of successful aging that emerge from these interviews generally include (a) valued activity and social connection [7,10–12]; (b) the maintenance of health and function through the management of symptoms and avoidance of secondary conditions [7,10–12]; (c) preparation, adaptation, and resilience in the face of age-related changes [7,10–12], and (d) autonomy (although attitudes regarding the degree of autonomy vary, with some describing independence and self-reliance, and others describing self-efficacy and decisional autonomy) [7,10–12].

The World Health Organization's International Classification of Functioning, Disability, and Health (ICF) defines disability as a gap between a person's capabilities and the demands created by the social and physical environment [13]. The framework outlines two strategies for closing these gaps: eliminating environmental barriers (e.g., inaccessible built environments) and providing facilitators (e.g., access to assistive equipment and technology) [13]. This sentiment is also reflected in the perspectives of those aging with physical disability, who describe how their ability to age successfully is dependent on their environment and access to supports and resources [7,10–12]. However, to date no studies have considered how the organizations that support those aging with physical disability define what it means to age successfully for this population. This gap is notable given that organizations' understandings of what it means to age successfully shape the programs and services that are available to support those aging with physical disability. When the services provided by an organization or provider are centered on clients' concerns and priorities, clients are more likely to engage with and be satisfied with those services, which has positive implications for their health and well-being [14,15].

The aim of this study is to provide a comprehensive understanding of how organizations that serve those aging with physical disabilities define successful aging for this population. To do so, we use qualitative data collected as part of a national survey of disability organizations. Drawing from the rehabilitation literature, we discuss the extent to which organizational perspectives on successful aging are consistent, or inconsistent, with the priorities identified by individuals aging with long-term physical disability.

2. Materials and Methods

2.1. Sampling

The target population for the survey was organizations across the United States that serve those aging with disability. For the sampling frame, we relied on a national database of organizations maintained by staff at the Investigating Disability factors and promoting Environmental Access for Healthy Living Rehabilitation Research and Training Center (IDEAL RRTC) at the University of Michigan. To create the database, IDEAL RRTC staff conduct regular internet searches for U.S.-based organizations that provide resources to those with disabilities. For more detail regarding the resource categories that serve as the basis for the internet search, refer to Table A1 in the Appendix. The total number of organizations in the database as of April 2022 was 3564. Of these organizations, 1917 were excluded from the sample because IDEAL RRTC staff were unable to identify a valid, unique email address for the organization. All of the other organizations were invited to participate in the survey, resulting in a final sample of 1647 organizations.

2.2. Survey Instrument

The aim of the survey was to gain insight into how disability organizations conceptualize what successful aging means for those with a physical disability, as well as the services and programs that they have in place to support the successful aging of this population. To develop the survey instrument, the authors reviewed the rehabilitation and

gerontology literatures, with a special focus on the literature at the intersection of aging and disability as well as the literature that discussed the successful aging of those with physical disability. The survey includes a mixture of closed and open-ended questions. The survey was pretested by members of an advisory board composed of rehabilitation researchers and subject matter experts. To review a PDF version of the survey, refer to Supplementary File S1.

The survey was disseminated online using the survey platform, Qualtrics. Participants were allowed to skip any questions that they preferred not to answer. Adaptive questioning was used. Depending on the participants' responses, they could be asked as few as 12 and as many as 32 questions. Items were not randomized or alternated. Participants had the option to review and change their answers. The survey did not have to be completed in one sitting; if respondents closed out of the survey before completing it, they could follow the link again to return to where they had left off.

2.3. Survey Administration

Organizations were invited to participate in the online, Qualtrics survey by email. The email invitations were distributed in three waves, spanning from October 2021 to May 2022. To ensure that only one survey was submitted per organization, the email contained a unique link to the survey, and only one submission was allowed from each unique link. Email recipients were instructed that they could complete the survey in consultation with others at their organization or forward the email to someone who could answer questions about their organization and the services that it provides.

Both in the email invite and the first page of the questionnaire, participants were informed about the purpose of the study, the source of funding for the study, and the organizational affiliation of the researchers conducting the survey. They had the option to preview a PDF version of the survey instrument (Refer to Supplementary File S1). They were informed that, at the end of the survey, they would have the option to claim an Amazon gift card of up to USD 25 to be delivered by email. They were given the option to opt out of the survey and future email communications regarding the survey. They were also given the contact information of the second author and invited to reach out regarding any questions or concerns they had about the study.

As part of the survey, participants were asked to respond on behalf of their organizations; they were not asked to provide any Personally Identifiable Information (PII). To ensure protection of human subjects, this study was reviewed by the University of Michigan Medical School Institutional Review Board. The study received an exempt determination given that the identity of human subjects could not be readily ascertained through direct or indirect identifiers, and any disclosure of data would pose minimal risk to participants. Survey data are stored on a secure computer server. A version of the data with organization names and other unique organization identifiers removed is available at [ICPSR 38535].

Of the organizations that were sent an email invite, 165 organizations opened the survey (10%), and 139 organizations provided a valid response to at least one survey question (8%). One hundred and twenty-eight organizations reported that they serve individuals with long-term physical disabilities, and therefore were invited to complete the full survey. Long-term physical disabilities were defined as physical disabilities lasting longer than 5 years (such as multiple sclerosis, spinal cord injury, spina bifida, cerebral palsy, amputation, among others). One hundred and fourteen of the organizations that opened the survey completed the survey, resulting in a completion rate of 69 percent.

2.4. Qualitative Measures and Analysis

All organizations that reported serving individuals with long-term physical disabilities were asked, "How would your organization define "successful aging" for those living with a long-term physical disability"? The question was open-ended, so organizations had the opportunity to respond with their own definitions.

The qualitative data were analyzed according to the "immersion/crystallization" method for coding and analyzing data [16,17]. As part of this method of qualitative

analysis, themes are not identified in advance, but rather are derived from the data. During the immersion phase, all qualitative responses were reviewed by the first author. During the crystallization phase, the first author reflected on themes that emerged from the qualitative responses and developed a coding scheme in consultation with the second author. The first author then re-immersed herself in the data to identify cases that confirmed the patterns that had been identified, as well as cases that were exceptions to the pattern. Cases that were exceptions to the pattern were discussed among the authors, and codes were added or revised to account for potential alternative explanations. Codes continued to be refined through this iterative process of immersion and crystallization until no new themes emerged. Excel was used to organize, code, and analyze the qualitative data. Both authors are white women without long-term physical disabilities. No survey weights were applied to the analyses.

The “Materials and Methods” and “Results” sections of this article were prepared according to the Consolidated Criteria for Reporting Qualitative Research (COREQ) [18] and the Checklist for Reporting Results of Internet E-Surveys (CHERRIES) [19]. To review the completed checklists, refer to Tables A4 and A5 in the Appendix A.

3. Results

One hundred and six organizations responded with a definition of successful aging for those with a long-term physical disability; these responses serve as the basis for the qualitative analysis. Descriptive statistics for the organizations in this analytic sample are presented in Table 1. Compared to organizations in the sampling frame (i.e., organizations in the IDEAL RRTC database of organizations), organizations in the analytic sample were more likely to be located in the Midwest. Organizations that provided assistive technology, policy, recreation/leisure, and physical activity services were also overrepresented in the analytic sample. (For more information about how the analytic sample compares to the overall sampling frame, refer to Table A2 in the Appendix A).

Table 1. Characteristics of organizations ($n = 106$).

Characteristics	Percent
Organization Size ^a	
1–10	20.0%
11–25	26.7%
26–50	21.0%
51–100	15.2%
100+	17.1%
Geographic Region ⁺	
Northeast	19.4%
South	29.1%
Midwest	35.0%
West	16.5%
Area Served	
Local/Municipal	7.6%
County	21.7%
Region within a state	35.9%
Statewide	13.2%
Multiple States/Region	5.7%
Nationwide	7.6%
International	2.8%
Other	5.7%
Organization Type [*]	
Non-profit	75.5%
Social Services Organization	31.1%
Advocacy/Policy Organization	28.3%

Table 1. *Cont.*

Characteristics	Percent
Grassroots Organization	13.2%
Government Agency	9.4%
Educational/University Setting	8.5%
Health or health care agency	7.6%
Community or Senior Center	4.7%
Other	13.2%

^a To measure organization size, organizations were asked, "During a typical year, how many people are regularly employed or volunteer at your organization?". + Regions were defined based on the 4 U.S. Census regions [20].

* Organizations were instructed to select all that apply, so responses are not mutually exclusive.

Upon reviewing organizations' definitions of successful aging for those living with long-term physical disability, the following themes emerged:

1. Autonomy and/or maximized independence (58%);
2. Living arrangement (45%);
3. Health and well-being (45%);
4. Social connection and meaningful community engagement (34%).

An overview of these themes is presented in Table A3 in the Appendix A.

Based on organizations' responses, it was clear that these components of successful aging were seen as being highly interconnected, such that success in one domain was dependent on success in another.

When defining successful aging for those with long-term physical disability, forty-three percent of the organizations mentioned social and environmental resources, such as access to transportation, inclusive social activities, and home health services, that are crucial for facilitating successful aging across these domains. This is consistent with the WHO ICF's [13] view of disability as not just a function of an individual's capabilities, but as a function of the interaction between an individual's capabilities and the facilitators and barriers in their social and physical environment.

3.1. *Autonomy and/or Maximized Independence*

Fifty-eight percent of organizations identified maintaining autonomy and/or maximizing independence as an important component of successful aging for those with long-term physical disability. Autonomy and independence are related, but distinct concepts. Autonomy is the ability to exercise choice and live in accordance with one's preferences. For example, one organization describes:

"Successful aging would be living a life of self-determination where individual choice is what decides where and how an individual with a disability lives."

Organizations noted that individuals aging with physical disabilities may need to rely on caregivers, services, and other supports to maintain autonomy.

"[Successful aging is the] ability to access the programs and services necessary to allow the individual to live/work/participate in their community of choice at the level and extent that they want/choose to and have sufficient resources and access to needed supports in order to do so."

Maximized independence is the ability to minimize one's dependence on others. It should be noted that most organizations did not consider total independence to be a requirement for successful aging; rather, the aim was often to maintain as much independence as possible for as long as possible.

"Aging while being able to manage complications and be as self sufficient as possible."

Maximizing independence and autonomy were often considered to go hand in hand; for example, one organization describes:

“Successful aging would be the ability to be as independent as one can be or wants to be in their life.”

However, overall, organizations were more likely to describe autonomy as a characteristic of successful aging (38%), compared to maximized independence (29%).

3.2. Living Arrangement

Almost half of the organizations (45%) considered one’s living arrangement to be an important aspect of successful aging. When describing the ideal living arrangement for individuals aging with physical disability, some common themes that emerged included living independently, aging in place in one’s own home or community, and living in a residence of one’s own choosing. For example, one organization described:

“Our goal is for our clients to age in place, meaning to stay in their home or desired residence safely with independence for as long as possible. We bring services to the senior/disabled individual to help achieve that goal.”

However, some organizations described that living independently or aging in place are not ideal living situations for everyone aging with long-term physical disability. Rather, they stressed the importance of living in an environment that is safe and appropriate given one’s needs and functional ability. For example, an organization serving those with brain injury noted that:

“‘Aging in place’ is a significant issue for our community. The signature symptoms after brain injury of cognitive and behavioral impairments, makes staying in your own home, or living alone, impractical and, quite often, dangerous. Successful aging means the ability to retain as much independence and self-agency as possible while maintaining a safe environment for the individual and those who live with or around them. This also includes aging in the least restrictive and community integrated environment as possible.”

Organizations described the importance of access to home health services, accessible and affordable housing, assistive technology, and accessible transportation for enabling individuals to live in an environment that maximizes independence, self-agency, and safety:

“Being able to live in your own home in the community with supports and services coming to you when you need them, not on an agency schedule, as well as having available accessible transportation.”

“Citizens with disabilities being able to live safely and happily in accessible and affordable homes/apartments of their own, in a safe, accessible, and welcoming community, with easy access to support (if needed), transportation, health care, further education, employment (if necessary), food, friends, family, and entertainment – with maximized choice, options, and potential.”

3.3. Health and Well-Being

Forty-five percent of organizations described a connection between health, well-being, and successful aging. Aspects of health and well-being that were described as being particularly relevant to successful aging include (a) quality of life and psychological well-being, (b) healthy behaviors, (c) managing symptoms and preventing secondary health conditions, and (d) preparing for and successfully adapting to changing physical abilities.

For many organizations, quality of life and emotional well-being were seen as key indicators of successful aging. In particular, organizations often defined successful aging as being happy, personally fulfilled, comfortable, and able to maintain one’s dignity and respect.

“The ability to live their life in a way that makes them happy and healthy.”

“Successful is our members living a fulfilling, content life where they are able to live happily in a safe environment with their needs met in housing, food, jobs, social and health needs.”

Some organizations described the maintenance of a healthy, active lifestyle as key to successful aging for those with physical disability.

“[Successful aging is] Active Aging- moving and staying active, eating healthy & self care.”

Organizations described the “prevention of secondary complications” and the avoidance of “significant deterioration” as important goals for those aging with long-term physical disability. However, organizations noted that successful aging is still possible for those experiencing secondary conditions or declines in physical functioning if they are able to plan for and successfully adapt to these changes. These adaptations may be to one’s behavior, environment, or to one’s mindset.

“Aging successfully with a long term disability means having an ongoing program of adaptation to disability complications as age tends to increase difficulties of independent life. Additionally actively dealing with attitudes about one’s abilities can be a large concern.”

“Aging physically but working to still enjoy life and the things you are able to do.”

When discussing supports needed to maintain health and well-being, organizations described competent medical and mental health care, the fulfillment of basic needs (i.e., food/nutrition, housing), accessible transportation, social support, and accessible activities.

“Having access to everything needed to live the healthiest and happiest life possible. These include basic needs such as adequate food, housing, medical care and transportation, as well as emotional/mental health support.”

3.4. Social Connection and Meaningful Community Engagement

The importance of social connection with others and meaningful engagement in one’s community was a theme discussed by 34 percent of organizations. For example, one organization described:

“Keeping active and engaged as much as possible with others and hobbies and activities. Leaving the house to shop and socialize, vote, see doctors, and engage with the community.”

To facilitate social connection and meaningful community engagement, organizations emphasized the importance of accessible transportation and community spaces. Some organizations described that, in order to facilitate social engagement, they found ways to tailor social activities so that individuals with varying levels of functional limitation could participate:

“Our program offers step down options where as our members age they can participate in a similar event that is less prone to injury. For instance, many progress from down hill skiing to cross country to hiking.”

Others described the importance of fostering a community culture of inclusion.

“Aging successfully means having access to the functional supports that allow an individual to take part in daily life activities that are of importance to them (home, work/school, community, social) and to do so without encountering barriers to participation such as lack of access or others’ perception that they cannot participate or should not participate.”

4. Discussion

In this study, we analyzed qualitative data from a national survey of disability organizations to achieve the following study aim: to better understand how organizations define “successful aging” for those living with long-term physical disability. An organization’s understanding of what it means to age successfully shapes its approach to serving those

aging with physical disability, including the programs and services that are offered. When the services provided by an organization or provider are centered on clients' concerns and priorities, clients are more likely to engage with and be satisfied with those services, which has positive implications for their health and well-being [14,15]. Therefore, it is important to assess the extent to which organizations' definitions of successful aging are consistent with the needs and priorities identified by those aging with a physical disability.

Organizations defined successful aging for those with long-term physical disabilities based on the following domains: (a) autonomy and/or maximized independence; (b) living arrangement; (c) health and well-being; and (d) social connection and meaningful community engagement. Overall, organizations identified domains of successful aging that have been identified as meaningful and important by those aging with a physical disability. With this information, organizations can add or adjust services and programs to ensure that they are providing resources that help to facilitate successful aging across these domains of successful aging. They can also advocate for policies at the local, state, and federal levels that eliminate barriers to successful aging across these domains.

4.1. Autonomy and/or Maximized Independence

The importance of maximizing autonomy and/or maximizing independence was the most common theme that arose from organizations' definitions of successful aging. In the rehabilitation literature, scholars are often careful to note a distinction between autonomy and independence. Independence is often described as self-reliance with no or minimal assistance from others, while autonomy (or "assisted autonomy") is described as maintaining self-efficacy and choice, even in the face of increased reliance on others [3,7,21]. In this study, organizations were more likely to describe autonomy as a characteristic of successful aging, compared to independence. Even among the organizations that described independence as a key feature of successful aging, most described maximized independence, rather than complete independence. They specified that their goal was to help their clients remain as independent and self-reliant as is possible or safe based on their health needs and other factors. Some organizations emphasized that an important aspect of autonomy was ensuring that individuals had the support needed to live as independently as they desire.

Overall, these findings are consistent with the values and priorities described by those aging with physical disability. When asked how they define successful aging, those aging with physical disability tend to describe maintaining autonomy as a key signal of successful aging [7]. Some individuals with physical disability desire to minimize their dependence on others as they age [11–13]; however, not everyone sees independence and self-reliance as a goal [7,10–12]. In order to support successful aging for those with physical disability, organizations should not assume that all individuals seek to maximize their independence; rather they should be prepared to support their clients to live as independently as they would like to live.

4.2. Living Arrangements

Nearly half of organizations believed that one's living arrangement was highly relevant to successful aging for those with physical disability. This is a theme that has also emerged as a priority for individuals aging with physical disability [11]. Many of these organizations described that successful aging means being able to live independently in the community. Others described "aging in place" in one's own home and community as a signal of successful aging for those with physical disability. Research suggests that many older adults express a preference for remaining in their homes and communities [22,23]. However, as some organizations pointed out, independent living and remaining in one's own home may not be feasible, safe, or desired living arrangements for everyone. Without the proper supports, such as home health services, home modifications, accessible transportation, and assistive technology, living independently in the community and in one's home may be socially isolating and detrimental to one's health and well-being [3,24,25]. In order to help

their clients live in a setting consistent with their preferences, it is critical that organizations are prepared to provide or refer clients to these types of supports.

4.3. Health and Well-Being

Almost half of the organizations described health and well-being as a key component of successful aging. Overall, the way that organizations conceptualized health and well-being was consistent with the needs and priorities identified by those aging with physical disability [7,10–12]. While original models of successful aging focused predominantly on physical health [4–6], models of successful aging based on the perspectives and priorities of those aging with physical disability emphasize psychological well-being, resilience, and quality of life as core elements of successful aging [7,10,11]. This emphasis on psychological well-being and quality of life was also evident in organizations' definitions of successful aging. Some strategies that organizations described for promoting the psychological well-being, resilience, and quality of life of their clients include ensuring that clients have access to basic needs, opportunities to connect with others and their community, and access to mental health resources.

Organizations did not see the avoidance of disease and disability as a requirement for successful aging, but rather emphasized delaying or avoiding secondary health conditions and additional loss of function. They described maintaining an active, healthy lifestyle and managing symptoms as key strategies for delaying and avoiding secondary health conditions and additional loss of function. Some organizations acknowledged that, in order for their clients to maintain a healthy lifestyle and manage their symptoms, it is important that they have access to resources, including healthy food, transportation, and competent medical care. Moving forward, it is important that organizations consider not only individual interventions (e.g., physical activity, medication adherence), but also socio-structural interventions (e.g., investments in workforce development, community infrastructure) that may be needed to ensure that clients have access to the resources needed to promote their health and well-being [26].

4.4. Social Connection and Meaningful Community Engagement

Organizations also described social connection and meaningful engagement in one's community as a core element of successful aging. This is a theme that has consistently emerged both in original models of successful aging [4,5], as well as models of successful aging based on the priorities and needs of those aging with physical disability [7,10–12]. There are a number of factors that can facilitate social connection and meaningful community engagement for those aging with physical disability. Accessible built environments (i.e., sidewalks/crosswalks, streets, buildings, parking) [27,28], mobility aids [27], and access to reliable and accessible transportation [28] are critical for ensuring that those aging with physical disability are able to participate in social and community activities.

Organizations did not specifically comment on the use of virtual programming when defining successful aging; however, data from the same survey show that, in response to the COVID-19 pandemic, many organizations have adopted virtual services and programming [29]. Virtual platforms can be useful tools for facilitating social connection for individuals aging with disabilities [30,31]. There are a number of helpful guides for promoting social connection and community integration for those aging with disabilities [32,33], including guides for leveraging technology and virtual programming to facilitate social connection and engagement [30,31].

Both those aging with disability and the organizations that serve them describe the importance of creating a community culture of inclusion and designing social events and activities that can be adapted so that individuals with varying levels of functional ability can participate [10]. While organizations can implement internal policies to promote accessibility and inclusion, it is also important that they advocate for policies and investments at the local, state, and national levels that facilitate a culture of inclusion in their communities.

4.5. Limitations

Data for this article are based on the responses of 106 organizations, which represents 3 percent of the 3564 organizations in the IDEAL RRTC's national database of disability organizations and 6 percent of the 1647 organizations that received an email inviting them to participate in the survey. This low response rate is not entirely surprising, given that online surveys [34] and surveys of organizations [35] tend to have lower response rates than other types of surveys.

Analyses suggest that the geographic distribution and service profiles of the organizations in the analytic sample were generally similar to those of the organizations in the national database (Refer to Table A2 in the Appendix A). However, it is possible that there are other, unmeasured ways in which the organizations in the analytic sample systematically differ from organizations in the national database.

4.6. Directions for Future Research

The aim of this study is to provide a comprehensive understanding of how organizations that serve those aging with physical disabilities define successful aging for this population. Consequently, we selected a sampling frame that included a variety of organizations that serve those aging with physical disabilities. Our analytic sample for these analyses includes the perspectives of organizations of different sizes, of different types, with different levels of geographic reach, and from every region of the United States. It is possible, however, that an organization's characteristics may shape their understanding of successful aging for those with physical disability. Future research should explore how organizations' understandings of successful aging may be more or less consistent with the priorities of their clients depending on these and other organization characteristics.

5. Conclusions

In order to best serve those aging with physical disability, it is important that organizations understand what successful aging means for this population and tailor their services to reflect these priorities. To our knowledge, this study is the first to explore how organizations that serve those aging with physical disability define successful aging for this population. Organizations described the following domains of successful aging for those living with physical disability: (a) maximized autonomy and independence; (b) living situation; (c) health and well-being; and (d) social connection and meaningful community engagement. Overall, the priorities that organizations described for successful aging were consistent with those that have been identified by those aging with physical disabilities. Based on organizations' responses, it was clear that these components of successful aging were seen as being highly interconnected, such that success in one domain was often dependent on success in another. Access to resources such as accessible transportation, community spaces, home health services, and assistive technology is critical for promoting multiple domains of successful aging. These findings can help organizations identify gaps and make adjustments to their programs and services to better support the successful aging of their clients with physical disabilities.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/disabilities3020015/s1>, File S1: Survey Instrument for the Supporting Individuals with Long-Term Disabilities Survey.

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Institutional Review Board Statement: This study was reviewed by the University of Michigan Medical School Institutional Review Board and received an exempt determination on 24 March 2023 (eResearch ID: HUM00178356) per the following federal exemption category: EXEMPTION 2 (i) and/or 2 (ii) at 45 CFR 46.104(d).

Informed Consent Statement: Organization representatives were provided information to inform their decision to participate in the study.

Data Availability Statement: The data presented in this study are publicly available in [ICPSR 38535].

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Description of the IDEAL RRTC database resource categories.

Category Title	Definition	Example Resources
Advocacy	Programs and services that support individuals with disabilities by defending their rights and having their views considered when decisions are being made about them.	<ul style="list-style-type: none"> • Disability Law Centers • The Arc • Area Agencies on Aging
Assistive Technology	Any item, equipment, or product that is used to maintain or improve the functional capabilities of individuals with disabilities. For example, wheelchairs, services animals, adaptive sports equipment, etc.	<ul style="list-style-type: none"> • Medical equipment loan closets • Service animal resources • Libraries for the blind and physically disabled
Community Participation	Programs and resources that enable and empower people with disabilities to become active participants in the community.	<ul style="list-style-type: none"> • Inclusive recreational activities • Vocational rehabilitation and training
Condition Specific (specify in notes)	Programs and services that are specific to a particular health condition.	<ul style="list-style-type: none"> • Brain Injury Alliance • DeafBlind Service Center
Education	Programs and services that provide disability educational material or facilitate educational opportunities for people with disabilities	<ul style="list-style-type: none"> • Libraries for the blind and physically disabled • Michigan Department of Education • The Arc (educational resources) • Wyoming Institute for Disabilities (WIND)
Employment	Programs and services that assist individuals in finding, preparing for, and maintaining employment opportunities.	<ul style="list-style-type: none"> • Vocational Training Program

Table A1. Cont.

Category Title	Definition	Example Resources
Health care	Programs that aid individuals with disabilities in managing health care needs and accessing quality health care services.	<ul style="list-style-type: none"> • Benefits counseling • Prescription management
Healthy Aging	Programs and services that promote healthy behaviors, assist in management of chronic conditions, and enhance quality of life and independence for individuals with disabilities.	<ul style="list-style-type: none"> • Area Agencies on Aging • Health and Wellness programs • Prescription Management programs
Independent Living	Programs and services that enable individuals with disabilities to live independently in the community	<ul style="list-style-type: none"> • Centers for Independent Living • Area Agencies on Aging • Home Modification programs • Assistive Devices services and programs
Physical Activity	Programs facilitating equal opportunities for individuals with disabilities to participate in sports or physical activities	<ul style="list-style-type: none"> • Adaptive sports • Horseback riding/equine therapy • Camping • Fitness programs
Transition Planning	Programs and services that facilitate effective transitions in education, health care, and community living	<ul style="list-style-type: none"> • Centers for Independent Living • Area Agencies on Aging
Disability Organization	Organizations that provide support and assistance for individuals with disabilities. Can exist at the local, state, and national levels.	<ul style="list-style-type: none"> • The ARC • Michigan Developmental Disabilities Council
Policy and Policy Makers	Organizations and agencies involved in policy education and decision making	<ul style="list-style-type: none"> • Regional ADA centers • State Departments (education, health, . . .) • State Independent Living Councils or Disability Advocacy Organizations
Senior Center	Programs that connect senior citizens to community services that help them to continue to be healthy and live a quality-life. Senior centers may include assistive programming or residential services.	<ul style="list-style-type: none"> • Area Agencies on Aging • Bureau of Senior Services
Nutrition	Programs and services that increase an individual's access to healthier, recurring, and reliable food options.	<ul style="list-style-type: none"> • Meal Delivery Programs • Fresh-food Discount programs for seniors • Nutrition programs • Meals-on-Wheels
Transportation	Programs and services that provide alternative transportation options for individuals with disabilities.	<ul style="list-style-type: none"> • Shuttle Programs
Professional	Resources that provide disability research, educational materials, and adaptive opportunities for individuals and organizations.	<ul style="list-style-type: none"> • Americans with Disabilities Act (ADA) Centers • Research Websites • Grant Opportunities

Table A1. *Cont.*

Category Title	Definition	Example Resources
Support Groups	Organizations that promote social support for individuals with disabilities and their families through support groups and peer-support.	<ul style="list-style-type: none"> • Peer-Support programs • Support Groups for parents and siblings
Housing	Programs and services that increase quality of housing opportunities for individuals with disabilities, including home modifications and housing programs.	<ul style="list-style-type: none"> • Local Housing authorities • Home Modification services
Travel/Leisure/Recreation	Services facilitating accessible recreational activities and travel opportunities	<ul style="list-style-type: none"> • Libraries for the blind and physically disabled • Adaptive Sports
Legal and Financial Services	Organizations that assist individuals in financial planning, managing benefits and insurance,	<ul style="list-style-type: none"> • Non-profits facilitating legal consulting and services
Federal Government	Resources and services presented at the National level.	<ul style="list-style-type: none"> • Federal disability resources webpage • ADA information and resources
<u>Other Key Terms</u>		
Community-based organizations	Public or private nonprofit organization that is representative of a community and provides educational or related services to individuals in the community.	<ul style="list-style-type: none"> • Churches • Wellness Center • YMCA • Local ARC

Table A2. Comparison of characteristics of the organizations in the IDEAL RRTC database (N = 3564) and the analytic sample (n = 106).

	Percent of IDEAL RRTC Database (n = 3564)	Percent of Analytic Sample (n = 106)
Geographic Region +		
Northeast	23%	21%
Midwest *	26%	34%
South	31%	30%
West	21%	15%
Services Provided ^a		
Assistive Technology *	9%	16%
Employment	12%	10%
Health Management and Nutrition	23%	23%
Housing	5%	7%
Independent Living and Support Services	46%	46%
Legal and Financial Services/Advocacy	31%	27%
Policy and Policymakers *	2%	9%
Recreation/Leisure and Physical Activity *	14%	30%
Senior Programs	17%	14%
Transportation	10%	9%

* Significant difference between the sampling frame (IDEAL RRTC database) and the analytic sample ($p < 0.05$). + Regions were defined based on the 4 U.S. Census regions [18]. ^a Services provided as identified in the IDEAL RRTC database. The services categories are not mutually exclusive. To learn more about the IDEAL RRTC's framework for identifying organizations, refer to Table A1 in the Appendix A.

Table A3. Qualitative themes.

Percent of Organizations	Successful Aging Domain	Subthemes	Selected Quotes
58%	Autonomy and/or maximized independence	Autonomy; Maximized Independence; Access to accommodations needed to support one's autonomy and independence	<p>"Successful aging would be living a life of self-determination where individual choice is what decides where and how an individual with a disability lives."</p> <p>"Aging while being able to manage complications and be as self sufficient as possible."</p> <p>"Successful aging would be the ability to be as independent as one can be or wants to be in their life."</p> <p>"[Successful aging is the] ability to access the programs and services necessary to allow the individual to live/work/participate in their community of choice at the level and extent that they want/choose to and have sufficient resources and access to needed supports in order to do so."</p>
45%	Living Arrangement	Living independently; Aging in place in one's home and community; Living arrangement consistent with one's preferences; Living arrangement that is safe/appropriate given functional limitations and needs; Access to accommodations needed to support one's living arrangement	<p>"Our goal is for our clients to age in place, meaning to stay in their home or desired residence safely with independence for as long as possible. We bring services to the senior/disabled individual to help achieve that goal."</p> <p>"'Aging in place' is a significant issue for our community. The signature symptoms after brain injury of cognitive and behavioral impairments, makes staying in your own home, or living alone, impractical and, quite often, dangerous. Successful aging means the ability to retain as much independence and self-agency as possible while maintaining a safe environment for the individual and those who live with or around them. This also includes aging in the least restrictive and community integrated environment as possible."</p> <p>"Being able to live in your own home in the community with supports and services coming to you when you need them, not on an agency schedule, as well as having available accessible transportation."</p> <p>"Citizens with disabilities being able to live safely and happily in accessible and affordable homes/apartments of their own, in a safe, accessible, and welcoming community, with easy access to support (if needed), transportation, health care, further education, employment (if necessary), food, friends, family, and entertainment – with maximized choice, options, and potential."</p>
45%	Health and well-being	Quality of life and psychological well-being; Healthy behaviors; Managing symptoms and preventing secondary health conditions; Preparing for and successfully adapting to changing physical abilities; Access to accommodations needed to support one's health and well-being	<p>"The ability to live their life in a way that makes them happy and healthy."</p> <p>"Successful is our members living a fulfilling, content life where they are able to live happily in a safe environment with their needs met in housing, food, jobs, social and health needs."</p> <p>"[Successful aging is] Active Aging- moving and staying active, eating healthy & self care."</p> <p>"Aging successfully with a long term disability means having an ongoing program of adaptation to disability complications as age tends to increase difficulties of independent life. Additionally actively dealing with attitudes about one's abilities can be a large concern."</p> <p>"Aging physically but working to still enjoy life and the things you are able to do."</p> <p>"Having access to everything needed to live the healthiest and happiest life possible. These include basic needs such as adequate food, housing, medical care and transportation, as well as emotional/mental health support."</p>

Table A3. Cont.

Percent of Organizations	Successful Aging Domain	Subthemes	Selected Quotes
34%	Social connection and meaningful community engagement	Social connection with others; Meaningful community engagement and activity; Access to accommodations needed to facilitate social connection and meaningful community engagement	<p><i>“Keeping active and engaged as much as possible with others and hobbies and activities. Leaving the house to shop and socialize, vote, see doctors, and engage with the community.”</i></p> <p><i>“Our program offers step down options where as our members age they can participate in a similar event that is less prone to injury. For instance, many progress from down hill skiing to cross country to hiking.”</i></p> <p><i>“Aging successfully means having access to the functional supports that allow an individual to take part in daily life activities that are of importance to them (home, work/school, community, social) and to do so without encountering barriers to participation such as lack of access or others’ perception that they cannot participate or should not participate.”</i></p>

Table A4. Consolidated Criteria for Reporting Qualitative Research (COREQ) Checklist.

Checklist Item	Location in Manuscript
Research Team Reflexivity	
Personal Characteristics	
Interviewer/facilitator	N/A
Credentials	p. 1
Occupation	
Gender	p. 4
Experience and training	
Relationship with participants	
Relationship established	
Participant knowledge of the interviewer	
Interviewer characteristics	p. 3
Study Design	
Theoretical Framework	
Methodological orientation and theory	p. 4
Participant Selection	
Sampling	p. 2
Method of approach	p. 3
Sample size	p. 2
Non-participation	p. 3
Setting	
Setting of data collection	p. 3
Presence of non-participants	
Description of sample	p. 3; Table 1
Data collection	
Interview guide	p. 3; Supplementary File S1
Repeat Interviews	p. 3
Audio/visual recording	N/A

Table A4. *Cont.*

Checklist Item	Location in Manuscript
Field Notes	N/A
Duration	
Data Saturation	
Transcripts returned	N/A
Analysis and Findings	
Data Analysis	
Number of coders	p. 4
Description of coding tree	Table A3
Derivation of themes	p. 4
Software	p. 4
Participant checking	
Reporting	
Quotations presented	pp. 6–8
Data and findings consistent	pp. 5–8
Clarity of major themes	pp. 5–8
Clarity of minor themes	pp. 6–8

Table A5. Checklist for Reporting Results of Internet E-Surveys (CHERRIES).

Checklist Item	Location in Manuscript
Design	
Describe survey design	p. 2
IRB (Institutional Review Board) approval and informed consent process	
IRB approval	p. 3
Informed consent	p. 3
Data protection	p. 3
Development and pre-testing	
Development and testing	p. 3
Recruitment process and description of the sample having access to the questionnaire	
Open survey versus closed survey	p. 3
Contact mode	p. 3
Advertising the survey	p. 3
Survey administration	
Web/E-mail	p. 3
Context	N/A
Mandatory/voluntary	p. 3
Incentives	p. 3
Time/Date	p. 3
Randomization of items or questionnaires	p. 3
Adaptive questioning	p. 3
Number of Items	p. 3
Number of screens (pages)	
Completeness check	p. 3
Review step	p. 3
Response rates	
Unique site visitor	N/A
View rate (Ratio of unique survey visitors/unique site visitors)	p. 3

Table A5. Cont.

Checklist Item	Location in Manuscript
Participation rate (Ratio of unique visitors who agreed to participate/unique first survey page visitors)	p. 3
Completion rate (Ratio of users who finished the survey/users who agreed to participate)	p. 3
Preventing multiple entries from the same individual	
Cookies used	p. 3
IP check	p. 3
Log file analysis	p. 3
Registration	p. 3
Analysis	
Handling of incomplete questionnaires	p. 5
Questionnaires submitted with an atypical timestamp	N/A
Statistical correction	p. 6

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