

Main Street Final Report

Introduction

People with intellectual, developmental, physical, and other disabilities are often living on the fringes of society, typically residing with family members, in supported living facilities, or in low resource communities where access to community participation is extremely limited (Rimmer, 2016). Limited availability of accessible and affordable living situations can lead to social isolation and loneliness among people with disabilities (e.g., Gibson et al., 2012), depressing physical and mental health, and increasing the risk of institutionalization or homelessness. This unfortunate situation has been exacerbated by the COVID-19 pandemic, which had a disparate impact on people with disabilities, including their access to safe, affordable residential options in community integrated environments (Shakespeare, Ndagire & Seketi, 2020). Despite federal fair housing and nondiscrimination laws, such as the Americans with Disabilities Act, as well as court cases mandating least restrictive environments (Olmstead v. L.C, 1999), the vast majority of people with disabilities live in segregated settings, including nursing homes, congregate care settings or group homes designed only for people with disabilities (Brucker & Houtenville, 2015). At the same time, as [Access Living](#) recently pointed out, most affordable housing isn't accessible, and most accessible housing is new construction, so it isn't affordable.

The dire housing situation for people with disabilities has served as a call to action among social justice advocates, who have proposed a number of policy options to improve access to affordable, inclusive living options for people with disabilities (see, for example the [Center for American Progress's Housing Accessibility Policy](#)). One such local option is *Main Street Connect*, an affordable, inclusive apartment complex located in downtown Rockville Maryland that offers accessible apartment units situated within a vibrant urban environment that is proximate to a major metropolitan transit center. Main Street has 70 apartment units, with 75% set aside as affordable, and 25% of the units specifically designated for individuals with varying special needs. The founding principles of [Main Street](#), according to its developers are “affordability, inclusivity, and sustainability” with the goal of creating a “vibrant community for continued learning, social engagement and health and wellness.” The apartment complex officially opened in Summer 2020.

The Main Street apartment complex represents an innovation in affordable and inclusive urban living for residents with and without disabilities. In order to capture the impact that residing in this type of inclusive community on the lives of its residents, Main Street staff partnered with researchers from the University of Maryland (UMD) to conduct an evaluation of the effect of living in Main Street on the life satisfaction, community participation and overall quality of life of residents and family members. This *report* describes our evaluation findings.

Methods

Study Procedures

The evaluation study was conducted as a single group pre and post-test design, with participants assessed just prior to their move-in to the apartment complex, and again about 6-7 months after baseline (generally 5-7 months after the resident had moved in). Assessments included: a) a baseline e-survey, hosted on *Qualtrics* assessing quality of life, subjective well-being and community participation, and b) a brief structured video-taped interview to clarify and/or expand on items related to participants' perspectives on how Main Street affected their community participation, goals, and overall life satisfaction. Baseline surveys and interviews were conducted in summer/early fall 2020, and again in spring 2021. Subsequent to approval from the Institutional Review Board (IRB) at the University of Maryland, Main Street staff invited potential participants who indicated their intention to occupy an apartment if they were willing to share their contact information with UMD researchers, who then reached out to interested residents to assess eligibility, describe the study, secure their informed consent, and schedule assessments.

Three groups of participants were eligible for this study: 1) residents with disabilities, voluntarily disclosed during their eligibility screening; 2) residents without disabilities; and 3) family members of residents with disabilities from whom contact information was obtained during the screening process. A total of 87 residents contacted UMD researchers by the close of the study recruitment phrase to learn more about it. Of these potential participants, we enrolled 26 residents (20 with disabilities and 6 without disabilities), and 31 family members of the 26 residents, for a total of 57 participants who completed the baseline assessments. Forty-four participants (77%) were available at follow-up, which included 19 residents and 25 family members. Sample attrition was primarily due to COVID-19 effects on participants' decision not to change residences (n=9) during the pandemic.

Data Sources

Data were collected from all consenting residents and their family members via an electronic 57-item survey hosted on *Qualtrics*. The survey included scales derived from three standardized instruments measuring quality of life, life satisfaction across multiple life domains, and subjective well-being. These are described below.

Quality of Life Inventory (QOLI; Frisch, 1992) assesses an individual's quality of life through self-report of the importance they attach to each of 16 life domains (on a 3-point rating scale) as well as their current satisfaction with each domain (on a 6-point scale). The QOLI has been normed in a community sample of adults, and has been used to track changes in individuals over the course of treatment or intervention. Examples of the 16 life domains include: work, play, friends, home, neighbors, and community. For this sample, scale reliability (Cronbach's alpha) was .78 at Time 1 and .83 at Time 2.

The World Health Organization Quality of Life_Brief Version (WHO, 2004) is a short scale measuring satisfaction across four life domains: Physical health (Activities of Daily Living), Psychological health (positive and negative affect), Social relationships, and Environment

(community resources and supports), as well as an item measuring global quality of life. Scale reliability (Cronbach's alpha) at Time 1 was .88 at Time 1 and .90 at Time 2.

The Personal Well-being Index (PWI; Cummins, 2013) contains seven items of satisfaction, each one corresponding to a life domain: standard of living, health, achieving in life, relationships, safety, community connectedness and future security. Scale reliabilities for this sample (Cronbach's alpha) were .91 at Time 1 and .92 at Time 2.

Structured Interviews. Brief interviews were conducted with participants to collect demographic and background information, and to expand or elaborate on how Main Street impacted life satisfaction and quality of life issues. As the study occurred in the time frame of the COVID-19 pandemic, all interviews were conducted via *Zoom* and videotaped.

Data Analyses

Quantitative methods were used to analyze the results of the *Qualtrics* Surveys which included the three instruments described earlier. First, aggregate scores on the three instruments: QOLI, PWI and WHOQOL were computed using the scoring keys/instructions located in the respective test manuals. Then, mean scores for the aggregate scale scores and their standard deviations were computed. Finally, to determine whether there were differences between Time 1 and Time 2 scores on the three instruments, and scored sub-scales, we analyzed the data using a paired-sample t-test in SPSS v. 25. For this analysis, we collapsed the three groups of participants into each sample (Time 1 and Time 2), to accommodate the small sample sizes.

Qualitative analysis of select items on the structured interview were first analyzed independently by two UMD research assistants, who coded the major concepts or themes identified, which were then independently evaluated by the report's author. Since we were primarily interested in how Main Street impacted residents at follow-up, we only analyzed selected items from Time 2 for the structured interviews.

Results

Quantitative Findings

Table 2 depicts the descriptive data on the three instruments administered at Time 1 and Time 2. Mean scale scores at Times 1 and 2 improved on each of the aggregate scores on the three measures: Quality of Life Indicator, Personal Well-Being Scale, and WHOQOL. The relatively large standard deviations, which represent the spread of the scores around the mean, is what is generally seen in very small sample sizes.

TABLE 2: Descriptive Data on Three Instruments Scale

Scale	N	Mean	SD
T1_PWI	59	60.88	10.9
T2_PWI	45	60.93	13.5
T1_QOLI	59	180.32	33.7
T2_QOLI	45	192.33	36.8
T1_WHOQOL_Global	58	63.05	7.9
T2_WHOQOL_Global	45	65.82	7.7
T1_WHOQOL/Physical health	58	12.72	1.8
T2_WHOQOL/Physical health	45	13.07	1.9
T1_WHOQOL/Psychological health	58	14.41	2.2
T2_WHOQOL/Psychological health	45	15.40	1.8
T1_WHOQOL/Social well-being	58	7.86	1.5
T2_WHOQOL/Social well-being	45	8.17	1.4
T1_WHOQOL/Environment	58	19.7	3.4
T2_WHOQOL/Environment	45	20.9	2.8

Table 3 shows the results of the paired sample t-tests for the three instruments. The table shows the difference between the means on each of these instruments and subscales at Time 1 and Time 2. The analysis shows that participants reported *statistically significant* increases on four scales: QOLI total scores, WHOQOL total scores, the WHOQOL Psychological Health Scale, and the WHOQOL Environment Scale ($p < .05$). The last column in the table (Effect Size) indicates the size of the difference between the two groups. Cohen's *d* indicates how big the *standardized* difference is between the two scores; it is a way to determine whether a significant difference between two groups is meaningful or substantive. In this case, the effect sizes would be described as large ($>.8$); and therefore, we can conclude that the score increases from Time 1 to Time 2 are meaningful.

Another way to see substantive difference in scores is by looking at the proportion of participants who *exceeded* their Time 1 scores at Time 2. In this case, for example, compared with T1 scores, *more than half of the participants* (53%) reported higher total mean scores on the QOLI and the WHOQOL at Time 2. Moreover, more than a third of participants (38%) had significantly higher scores on two of the WHOQOL subscales (Psychological Health and Environment) at Time 2 compared to Time 1.

Table 3. The Paired Samples T-test

Scale	Mean Difference	SD	t	df	Sig	Effect Size (Cohen's d)
PWI_T1 - T2	0.31	11.315	-0.18	44	.855	-0.05
QOLI_T1 - T2	11.0	27.30	2.69	44	.010	0.81
WHOQOL_T1 - T2	2.1	4.84	2.92	44	.005	0.88
WHOQOL/Physical health_T1- T2	0.3	1.45	1.54	44	.129	0.46
WHOQOL/Psychological health_T1-T2	0.8	1.62	3.04	44	.004	0.91
WHOQOL/Social_T1- T2	0.16	1.35	0.76	44	.448	0.23
WHOQOL/Environment_T1- T2	1.0	2.78	2.47	44	.017	0.74

Note. Mean Difference = T2 score - T1 score.

Cohen's d > 0.5 indicates a "medium" effect size; Cohen's d > 0.8 indicates a "large" effect size.

Qualitative Findings

The video-taped structured interviews, and transcripts, were analyzed by UMD research assistants focusing on Time 2 responses, and questions that tapped their Main Street living experiences over the five to six-month period, their satisfaction with the lived experience, and the extent to which it met their expectations.

In general, Main Street residents with disabilities, and their families, expressed overall satisfaction with their residential experiences. For example, one resident stated, "I have never had an experience where I've felt truly at ease or truly at rest like being at Main Street." Another went a bit further, "they've done an exemplary job with this building and I am truly honored to be a resident at Main Street." Another resident highlighted her independence and autonomy, "I love being at Main Street because I can be by myself and do things as I choose."

Family members of residents shared similar feelings about their adult children moving to Main Street, highlighting independence, community and the future. For example, one parent said, "I think our daughter feels more freedom, more flexibility to do things without having to interact with us." Another parent looking to the future noted: "I am thinking about this in terms of decades...this could be where he lives for decades and [this situation] helps ensure that we set him up for success." The Main Street inclusive community was noted by a parent who said, "I think what's really exciting about Main Street is that the whole facility is the community. That it has a strong presence for residents." Another parent said, "Setting is important in many ways

Main Street is quieter, more secure, they have great programming; my son has improved some of his skills of being independent.”

Residents without disabilities also appreciated the Main Street apartment setting; one noting, “the neighbors are friendly, not a loud apartment, quiet and close to a bus stop; good location.” Another resident who did not disclose her disability, but implied it in the interview noted, “since I have moved in, I’ve started taking care of myself and my mental health.... from my apartment [at Main Street] I can go out a little bit and see people, go out to eat and walk around in the neighborhood.”

Discussion

The generally inadequate and isolated housing situations for the majority of people with disabilities in America has generated the need to develop residential options that are affordable, accessible, and inclusive. Housing advocates are calling for additional state and local incentives that can be used to expand quality housing options for people with disabilities and ensure that these options are situated close to community resources and employment, which are core features of Main Street.

As this evaluation study has demonstrated, quality housing options that feature community integration and inclusive living can significantly contribute to the quality of life of people with disabilities and their families. Although the study sample was quite small, we still observed statistically significant differences in several of the measures of quality of life, life satisfaction and community participation. Moreover, these differences were elaborated upon and amplified in the resident and family member descriptive responses, suggesting that the impact of Main Street on improving various aspects of the quality of life of residents was not only statistically significant, but meaningful to those residents and their families. It is also important to consider the context of this study, which was conducted during the COVID-19 pandemic, which overall exerted a downward pressure on many aspects of quality of life for all citizens. However, Main Street residents and their family members still showed significant improvements in QOL , suggesting that the impact of affordable, accessible and inclusive housing might be even larger than what we found in this limited sample.

Housing advocates are encouraging state and local governments to deploy incentives, such as those in the Affirmatively Furthering Fair Housing (AFFH) Act, described in the earlier cited Center for American Progress’ Housing Accessibility Policy, to explicitly prioritize the needs of the most underserved and at-risk communities, and to end housing discrimination and segregation for marginalized people, such as those with disabilities. The findings of this evaluation study, and others [University of MT's Rural Institute](#) Life Starts at Home, can offer useful evidence of the impact of these housing solutions on the lives of people with disabilities who need them. As one parent said, “I hope the study you are conducting will come up with beneficial [information] for this community of special needs people. I think we need more investment in this type of living environment, because it is so important and because it is in short supply.”

References

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