1. Introduction

Public libraries are developing makerspace services, where libraries provide tools, training, programs, and/or space for people to share tools and ideas, create, and build skills. Often these spaces aim to develop STEAM competencies (Science, technology, engineering, art, and math), and include 3D printers, recording equipment, and other digital production tools (Willett, 2016). Makerspaces may include woodworking equipment (Wang, Wang, Wislon & Ahmed, 2016), fiber arts tools (Carmen, 2021), or art programs (Lakind et al., 2019). These spaces are positioned as social and collaborative (Gahagan & Calvert, 2020; Nicholson, 2019).

Makerspaces surfaced in public libraries in 2011, when Fayetteville, New York became the first public library to publicize a “makerspace” (McCue, 2011). By 2016, when this study began, dozens of libraries had added makerspaces. The Institute for Museums and Libraries (IMLS) began funding makerspace grants to build “21st century” skills nationally (IMLS, 2012, 2014). Public, school, and academic libraries of all sizes began developing their own makerspaces.

As soon as these spaces opened, challenges emerged. They were not always used as much as the planners expected (Einarsson, 2021), or the spaces were not inclusive or diverse (Melo & Nichols, 2020). Librarians were sometimes dismayed by how users were using the spaces, with some disparaging a “download a preexisting model and print” use of 3D printers, which did not appear to teach the coding and design skills that they wanted the spaces to inculcate (Crawford Barniskis, 2016). Makerspace
librarians began reframing their work as “teaching,” discovering that diverse users require different types of scaffolding of learning (Einarsson & Hertzum, 2020; Williams & Willett, 2017). As the initial excitement and allure of these “new” services eased, Library and Information Science (LIS) scholars and practitioners wondered how to ensure makerspace sustainability (e.g., Einarsson, 2021).

Scholars started to draw upon Robert Stebbins’ (2009) Serious Leisure Perspective (SLP) to understand makerspace use, with some researchers advocating a “serious leisure” focus to sustain makerspaces and public library programming generally (VanScoy, Thomson, & Hartel, 2020). This study asks: What types of leisure do users desire in public library makerspaces, and what problems arise for users when the library expects a “serious leisure” use of the spaces? Many public libraries suffer from limited resources of time, money and staff. Thus, this study seeks to help librarians make decisions about makerspaces, by exploring staff and user experiences and whether a focus on serious leisure is possible or helpful for them.

2. Literature Review

This study joins three main areas of study: the theoretical framework of the SLP, the study of makerspaces in and outside of libraries, and a specific focus on serious leisure in makerspaces.

2.1 The Serious Leisure Perspective

Sociologist Robert Stebbins’s Serious Leisure Perspective theoretically examines how humans pursue uncoerced activities outside of work. The concepts of serious and casual leisure describe how people pursue interests such as hobbies, in rigorous and sustained ways, or more recreationally, as an intrinsically rewarding activity. People might also pursue leisure activities through short-term, yet intense engagements called “project-based leisure” (Stebbins, 2009), which this study does not address.

Six components characterize serious leisure: proactive knowledge seeking; perseverance; developing skills in stages; a sense of personal reward or fulfillment (often deriving from perseverance); connections to, and identification with, a community; and a culture or ethos shared with that community (Stebbins, 1982, 2009). People who pursue serious leisure are often hobbyists, amateurs, or intensively volunteer, and ascribe a sense of identity to this activity.

In contrast, casual leisure activities are immediate, fun, and require no significant knowledge acquisition. Yet Stebbins notes, “casual leisure, although hardly humiliating or despicable, is nonetheless too fleeting, mundane, and commonplace for most people to find a distinctive identity there” (Stebbins, 2009, p. 627). Stebbins (2020) characterizes casual leisure as hedonic, less complex than serious leisure, and
self-gratifying, though he reports that some casual leisure may facilitate individual or community *eudaimonia*, or human flourishing (p. 32). Social attraction is an appeal of casual leisure, wherein people share their enjoyment. Other benefits of casual leisure include creativity, discovery through play, learning about the world, a feeling of being regenerated, developing and maintaining relationships, and an overall sense of well-being (Stebbins, 2020).

Stebbins regards casual and serious leisure activities as valuable. Yet casual leisure is rarely studied in LIS contexts (Elsweiler, Wilson, & Kirkegaard, 2011). In leisure studies outside of LIS, researchers found various types of leisure help with stress, cultural connectedness, and overall quality of life. While some scholars point to “seriousness” as the correlating factor between leisure and these benefits (e.g. Patterson, 2001), others do not differentiate the impacts of casual or project-based leisure from serious leisure pursuits (e.g. Iwasaki, 2007; Iwasaki et al., 2006). Hartel (2003, 2010) was one of the first LIS scholars to apply the SLP, examining the information practices of amateur chefs. Stebbins (2009) mapped his SLP onto LIS as a subfield of the domain, specifically engaging with the information practices of serious leisure. LIS scholars use the SLP to theoretically ground enjoyment, community-building, and sensemaking in information-rich serious leisure, including participating in fanfiction communities, knitting, and hobbyist collecting (Lee & Trace, 2009; Mansourian, 2021; Mansourian & Bannister, 2019; Prigoda & McKenzie, 2007).

2.2 *The Makerspace Literature*

Outside of public libraries, makerspace research examines an array of impacts. These include self-efficacy (Andrews et al., 2021), identity (Gollihue, 2019; Marotta, 2020; Toombs et al., 2015; Wyld, 2015), and community development (Culpepper & Gauntlett, 2020; Rosner et al., 2014; Taylor, Hurley, & Connolly, 2016). These studies find that making can benefit a person’s sense of self, and stimulate social connection, but are less empowering and more exclusive than
expected. Institutional power-washing occurs around these spaces, in which the organizations present people as having power or abilities they do not have in practice (Ames & Rosner, 2014; Boeva & Foster, 2016; Diaz, Tomás, & Lefebvre, 2021). The DIY and making scholarship on the limits of making and making rhetorics is long-established (Ames et al., 2014; Lindtner, Bardzell, & Bardzell, 2016; Nascimento, 2014), but public library literature often presents makerspaces uncritically: as transformational for their communities, producing empowered, skilled, collaborative inventors poised to benefit in the marketplace (Skåland, Arnseth, & Pierroux, 2020; Willett, 2016).

The scholarly literature on makerspace in public libraries highlights issues of learning and information practice (e.g. Carmen, 2021; Einarsson & Hertzum, 2021; Li, 2021; Willett, 2018; Williams & Willett, 2017). In recent years, scholars have addressed issues of inclusion (Anderson & Phillips, 2021; Higginbotham, 2020; Sanchez, 2020) and social ties (Cirell, 2020; Mann, 2020). Some studies find that libraries appear more concerned with perceptions of positive ideals like inclusivity and collaboration than the practices that support them. For example, when “inventing” in a library makerspace, adult ideas of what constituted “invention” limited children’s abilities to create items that interested them (Skåland et al., 2020). Scholars such as Teasdale (2020) and Li and Todd (2019) challenge uncritical rhetoric, by encouraging assessments grounded in user perspectives, or by asking the makers themselves what outcomes they wish to pursue. Marshall and Melo (2020) also critically respond to library makerspace practices, offering questions to ensure the spaces forward power to their users, and are more inclusive of both various makers and types of making.

2.3 Making, Makerspaces, and the SLP

Previous studies of makerspaces have invoked the SLP. In a discussion of craft and makerspaces, Gorichanaz (2020) suggests that library makerspaces should leverage the SLP to ground “craft” within information science. He suggests that in addition to information, a emphasis on inspiration promotes meaningful, purposeful, and gratifying making practices. Lee
and Ocepek (2022) employ the SLP as they ask how 25 hobbyists perceive libraries, and find that potential users were unsure if they could the library’s space. Other users sought more social making and opportunities to lead workshops. The wished to build hobbyist communities and provide a platform for community voices. Davies (2017) looks at serious leisure in makerspaces outside of libraries and finds that, while making can sustain self-actualization, it is slow and requires significant effort. They also find that making/hacking is a marginalized activity, for a small segment of the population, as is all serious leisure, but that hackers enjoy feeling unusual and counter-cultural in this marginalization.

Einarsson and Hertzum explore the SLP or allied practices in Danish library makerspaces. When interviewing 13 library makers in five libraries, they find that trial-and error experimentation and speaking to other users are fundamental information practices in serious leisure uses of makerspaces (Einarsson and Hertzum, 2021). Their other studies of library makerspaces ignore the SLP, yet describe practices that fit the theory. They find that diverse programming efforts reach different audiences and meet different needs. Formal learning activities are time-consuming for librarians, and users can perceive these opportunities as school-like, reducing exploration and non-scripted engagement with materials, tools, or fellow makers. Nevertheless, structured programs better scaffold learning and impose fewer social barriers than informal and self-directed activities. Such informal, self-directed work allows makers to explore, create and socially connect. Yet not everyone has the initiative, social, or technical skills to use makerspaces in this way. One makerspace worker said, “You could think that now the doors are open and then everyone will come. But no. People don’t. It requires a lot” (Einarsson and Hertzum, 2019, Section 4.3, para. 1). In a related study, Einarsson (2021) finds that a third of the makerspaces “reported struggling to reach participation outside structured activities and to develop or attract communities” (p. 180). They find that fun, social, short-term experiences can recruit new users, and that community-oriented activities may best sustain user interest over time (p. 184).
VanScoy et al. (2020) mention makerspaces in a study of public library programs, grounding their analysis of program descriptions in four large libraries in the SLP. They find that programs tend towards casual leisure, but casual and serious leisure overlaps. They propose more emphasis on serious leisure, stating that a library is “a citadel for knowledge” (p. 6), existing to support “learning and knowledge acquisition—arguably, the raison d’être of the library” (p. 6). They advise narrowing the purposes and outcomes of library programs away from casual leisure. They do not discount the value of casual leisure entirely, as it brings diverse types of people together, but contend that other organizations can accommodate a community’s casual leisure needs.

The SLP literature is burgeoning within LIS, but there are some notable gaps. For example, while larger communities may enjoy multiple organizations to support casual leisure activities, it is unknown if those organizations can do as well as libraries, have a similar access or intellectual freedom mandate, or allow people to access these activities for free. We do not know if fewer leisure options or free opportunities would result in some reduction of equity or access for a smaller community’s casual leisure needs, or how that might impact well-being. LIS scholarship concentrates on “serious leisure” library activities, avoiding discussion of more casual uses of libraries. Studies exploring casual leisure in communities, and why libraries support casual leisure, would advance our understanding. We do not know how or if these casual leisure activities benefit their communities, or only provide low-value fun for individuals. Nor do we know the preferences of library users for serious or casual leisure, nor how or whether casual library leisure users “level up” to more serious uses. This study begins to fill this gap.

3. Methodology

This research arises from a larger comparative case study using ethnographic methods in three public libraries, exploring power in public library makerspaces (Crawford Barniskis, 2022). In 2016, the researcher did fieldwork over seven months, from April to October, spending about 28 days in each library. All data for this study emerged from that fieldwork, including 403 hours
of participant-observation and 65 interviewees. Table 1 describes the participants’ roles and some basic facts of each library. This study was overseen by the University of Wisconsin-Milwaukee Institutional Review Board. Participants were required to be ten years old or older and consent forms were required for all participants to opt into observation or interviews.

The researcher purposively selected the most diverse cases possible in terms of size, urban-rural location, geographic location in the United States, and variety of equipment. The first site, pseudonym “Welcoming Library,” is a small library with a year-old makerspace that includes 3D printers, electronics equipment, arts and craft equipment, and a full wood shop. It is in the Northeast US, in a small village. The makerspace was in a small room, though it has since spread out into the central areas of the library. The second site, “Productive Library,” is the central library in a large south-central Midwestern city. In 2016, the makerspace was a year old, and the largest in the U.S. The space includes 3D printers, a laser etcher, vinyl cutter, Espresso bookbinding machine, recording booth, sewing equipment, and more. The last field site, “Responsive Library,” is an upper Midwestern small city near a larger urban area. The makerspace just opened as the study began, and includes three interconnected rooms. This library has 3D printers, a CNC mill, laser etcher, “test” kitchen, recording studio, and a variety of craft and art tools. Each space is staffed and used differently. Welcoming Library has no staff in the space, except for during programs. During my time there, patrons only used the makerspace during programs, though it is open for at-will use. Productive Library holds almost no programs, is extensively staffed, and is used independently. Responsive Library is staffed when open, and users come to programs and/or use the space independently, at-will.

The field sites were identified through word-of-mouth based on pilot studies and librarian outreach, a map of library makerspaces (Makerbridge, 2014), and Google searches seeking such makerspaces. Each library had to offer independent at-will use for adults and
children to be considered. Beyond these criteria, the cases were convenience-sampled to allow the researcher to spend significant time in each location. The Responsive Library case was selected based on the researcher’s knowledge of, and involvement in, its early planning processes.

Each case was analyzed separately and together using Kathy Charmaz’s (2014) constructivist grounded theory methods to determine which sorts of power enactments were occurring in the makerspaces. In part, this involved comparing the codes derived from the in vivo data to a list of sensitizing concepts developed from the theories of power (e.g. Bourdieu, 1977; Certeau, 1984; Foucault, 1977, 1980; Giddens, 1984; Illich, 1973; Lukes, 2005), and earlier makerspace studies. This allowed the researcher to see if (and how) theory and practice intersected in public library makerspaces.

Interviews, marketing materials, reports, policies, and field notes were coded idea-by-idea, by one coder, to establish 75 codes from over 14,500 lines of data. These codes coalesced into seven categories describing tensions in power, generally between the users and the library. These categories are: **Trust – Doubt**, **Access – Barriers**, **Uplift – Fun**, **Comfort – Unease**, **Communal – Individual**, **Subject – Object**, and **Exposure – Framing**.

**Uplift – Fun** describes the outcomes that the makerspaces were intended to support, comparing institutional aims to those that the library users wanted to pursue, and is the core of the subtheme analysis presented here, though some codes in the other categories illuminate or expand this analysis. Multiple codes could be affixed to each idea, and thus the six codes described in Table 2 also intersect with codes in other categories. For example, Olivia’s statement “They come with their friends, and they want to sit down and do a craft and take something home” was coded as **Identifying casual leisure use**, but also coded in the **Communal – Individual** category as **Wanting to form or develop relationships in the space**. These codes are exhaustive, noting all instances where the SLP applies, while codes from other categories add nuance. Additional insight emerges from the tensions between **Communal – Individual** use of the spaces and how people wish to support communities or relate to others; in **Access – Barriers** descriptions of when, how, and why people have access to needed tools, skills, or resources; and
in *Exposure – Framing*, where participants describe how they learn about and make sense of the spaces.

The researcher invited participants to ascertain internal validity via member checking, rather than following intercoder reliability protocols, to ensure that participants’ understandings were of primary consideration. The four participants who offered feedback agreed that the findings were consistent with their experiences, and reflective of the makerspace cultures. Peer debriefing helped to ensure coding processes, and thick descriptions, were an internally-reliable reflection of the ethnographic data (c.f. Comte & Goetz, 1982).

4. Findings

This report centers on a sub-theme analysis within the category called *Uplift – Fun*, which reveals tensions between how institutions and users understand makerspaces and their legitimate outcomes. The sub-theme establishes a conflict between serious and casual leisure, though these forms of leisure are not entirely binary. Within findings probing barriers or enablers of user power in the makerspaces, the SLP mapped onto some of the expectations and actions within these spaces. The *Uplift – Fun* category includes eleven codes overall. These codes represent how diverse stakeholders identify the reasons, ends, or goals of the space or the activities within it. These include the "appropriate" uses of the space, and often delineate serious or casual leisure. Participants describe these makerspaces as intended to provide some sort of uplift, including learning, skill development for jobs, or other "good-for-you" rhetoric. Some participants position the spaces as fun: furthering creativity, social engagement and/or self-expression. Just as serious and casual leisure may exist on a spectrum, the categories are not binary. For example, people simultaneously describe value in learning a skill AND having fun expressing themselves.

[insert Table 2 here]
To explore the concepts of serious and casual leisure, six codes spanning 629 ideas capture all the mentions of the concepts of the Serious Leisure Perspective in this study. Table 2 demonstrates how the codes emerged from the data in the **Uplift – Fun** category. These codes represent the six criteria of serious leisure and the codes focusing on intrinsic fun, interacting with friends, and trying a type of making that the participant may have had no intent to pursue further reflect casual leisure.

4.1 Few “Serious” Makers

A small core of regulars pursued serious leisure activities, particularly in the two larger libraries. These creators spent hours honing skills, riding a steep learning curve, using the tools, community, and space to build their projects and knowledge in self-motivated, self-directed ways. When young maker Tyler sat in the space daily to learn how to build and program LittleBits (a snap-together system of electronic components) and create complex machines, or jewelry and fashion designer Sabian returned to the space weekly to develop his patternmaking and sewing skills, they were meeting all six criteria of serious leisure:

1. **Proactive knowledge seeking**: “Serious” makers sought out new information from a variety of sources, including online sources, information from friends and family, or other makers, and hands on experimentation. Teen maker Chloe would go down the “rabbit hole” of sewing videos on YouTube, speak to everyone she met about sewing, stand behind experienced sewists and pepper them with questions, and borrow stacks of books on sewing as she pursued her serious leisure passion for making clothes (interview and fieldnotes 9/9).

2. **Perseverance**: Despite numerous failures or less-than-perfectly-successful attempts at making, “serious” makers persevered. When the Wi-Fi dropped during his attempt to program an electronics kit, Tyler wailed, “Oh no, I just lost it! I just lost everything…just because I touched one circuit, I lost everything…but at least I know how to do it. Press connect…” He started the process over (fieldnotes, 8/1). When older maker Fred’s CNC
mill carving of Celtic crosses glitched, he scrapped the failed projects, tweaked the settings in the program he was using, and started over, saying, “This is just part of the process” (fieldnotes 9/27).

3. Stages of development of a skill or hobby: “Serious” makers identified knowledge and skills in terms of levels, and identified themselves and others as being more or less advanced. When teen maker Jack spoke of someday hoping to have skills similar to those of the makerspace staff, and identified how far he had come in 3D printing and design, he was identifying such stages: “I was a total noob, but I’ve leveled up, pretty much.”

4. A sense of personal reward: Each of these makers expressed a sense of joy and reward stemming from the practice of making, as well as the products they made. Fashion designer Sabian said, “I was so excited to add this skill to my jewelry-making and to know I could now create the whole look…so I just kept getting more and more excited and wanting to come down here and make more.”

5. Connections to a community of creators: Participants described connections to other users in the space, staff, and people who were developing skills and products outside the spaces. Travis, who taught 3D printing and Arduino classes at the small Welcoming Library, explained, “I like teaching because I learn more that way... and I know I can get people excited about what I am excited about…and develop the community.” System librarian and makerspace user Robin, explained, “When we made stuff together, we were making the community proud, and we were building up our community.” When sewist Chloe met a woman who talked to her about serging she said, “I have always wanted to meet someone like her, who really knows her stuff...of course it happened in the library!” (fieldnotes 9/9).

6. Shared culture with that community: This was the least visible of the six criteria in this study. Sabian assisted a local woman in opening a for-profit sewing salon where she led classes and made machines available for public use. He described this as “spreading the joy of making.” Some makers in the spaces described being part of the community of
makers, as when Roger, a man who had developed a private makerspace in another city, said, “I’m responsible for being present at some level. I’m responsible for taking advantage of the wonderful space and for the tools that they have gathered. I was part of the community that expressed a desire for such a space and now I need to engage it so that it can continue to be a success.”

These examples showcase the “serious leisure” people that the makerspaces were developed to serve.

4.2 Libraries Want Serious Leisure

The institutional narratives of the makerspaces generally involved self-motivated makers coming to the library and innovating new products and skills through either collaborative activities or, more often, through self-generated and/or individually pursued knowledge. “We want people to come in on their own and just follow their bliss… They can learn and grow through creating together,” said Hannah, the manager of the small Welcoming Library. The reality was often quite different.

I had this dream like in Chicago that people would just wander in and start making whether it was woodworking or designing on a computer or using the 3D printer to print out something innocuous. But that didn’t happen and repeating what we talked about before, people need to have that Thursday night at 6pm to 8pm where there’ll be an instructor and they’ll tell them what to do and then sort of give them permission to express themselves. (Hannah)

In Welcoming Library, independent, at-will “serious leisure” uses of the space never transpired. Instead, users only accessed the space through structured library programs. While people did “learn and grow through creating together,” as Hannah envisioned, they did so in activities that were planned and implemented by the library. The use of this space was largely social and recreational, with people having a great time together, often with shrieks of laughter often ringing through the room. Only two of the 37 participants from this library could be considered “serious leisure” users, one of whom was the facilitator of workshops on 3D printing.
and microprocessors (Travis), and another was a fiber artist (Linda). Nevertheless, both only used the makerspace in the context of formal programs.

In Productive library, the “serious leisure” narrative did describe the activities in the space—but there were few opportunities to pursue more casual leisure activities. There were no programs and few “drop-in” activities. Those that existed, such as button-making, the staff tended to dismiss as “entry-level.” As Jenna, the team leader, said, “They [casual users] want to play with the toys here, but there’s a pretty steep learning curve for all of this stuff, so I just send them to the button station when they just want to play…maybe some will come back in to try some real making” (fieldnotes 5/10). “Serious” users echoed the desire for “real” making. Jordan, a young graphic designer who used the design software and computers, complained about the lack of preference given to such work: “I wish they had some way to help people who are doing real work here, instead of the guys just playing with the computers.”

In the mid-sized Responsive Library, staff preferred “serious leisure” use of the makerspace, but offered mediating activities to bridge the gap between what was and what they wanted to be. During planned events, the libraries that offered programs saw more “casual leisure” makers coming in to enjoy making, while few used the space more “seriously.” Casual makers enjoyed coming to the library to make a pre-selected project, often as a social activity to share with friends and family, and might never pursue the art or craft further, develop deeper skills, or be interested in at-will project generation. Staff members differentiated these casual and serious types of makers, and indicated preferences for activities that aligned with the SLP. Olivia, a staff member in Responsive Library, talked about crafting events called Crafternoons: participants in these events may enjoy learning a new skill or craft that they continue to work on or develop, but mostly these users wanted to hang out with friends and have a finished craft at the end of the program.

Stakeholders in Responsive Library generally described crafting programs as paths toward educational goals. For example, a city council member and the partner of an artist/library trustee said:
Even if [people] just come for Shrinky Dinks which… yeah, there's not a whole lot of life skills that come from that. I mean there's art there and that’s great in itself, but the fact that they’re in this facility and seeing that, hey there’s a 3D printer going … in operation over there. There’s a CNC cutter over here and a laser cutter and a recording studio… that kind of gets people thinking and they think to the possibilities of what they can learn and that’s really what this is about, I think. It’s just giving people the opportunity to experiment and learn and grow (Alan).

Alan saw the space as “really about” learning, or uplift, and hoped that casual leisure use of the space will develop into a more serious leisure use.

4.3 Play is Okay

Some staff members also honored the need to play as an end in itself. Justin, the administrator in charge of the Responsive Library’s makerspace, wanted to ensure that community members could enjoy casual leisure experiences that were purely for fun, not instrumental activities for uplift and skill building. He had been thinking about this for a while. In his blog, before the makerspace opened, he had said:

> We are awash in evidence of the importance of play for learning and have been for years. Yet, I think that the reason we play in the first place–not the reasons we should play or use to justify play, but the reason we do play–sometimes gets lost. We play because it’s fun. So, fun is of the utmost importance for creativity and learning (for kids and adults) and we shouldn’t feel embarrassed about designing spaces, programs, and services for fun first. Fun shouldn’t need to be justified. (J.C., 2016)

Nevertheless, market-centered uplift ideologies were visible in the “serious leisure” preference of the three creative places.

Each makerspace librarian said play was fine, but preferred serious leisure. Justin valued play for its own sake, but rolled his eyes during a discussion of the Crafternoons preferred by many community members. He struggled slightly with what he saw as the “program-dependent” casual recreational maker: “They are a different crowd entirely,” he said (fieldnotes 8/4). Hannah (Welcoming Library) valued play and self-expression, but centered her makerspace on 21st century skill-building for job development purposes. She wished people in her space would escape what she saw as a “program and workshop mentality” and begin to use the space for “real”
making (fieldnotes 4/18). Jenna (Productive Library) spoke of the value of play on one hand, but emphasized that the space was really for learning. Jenna discussed two women making buttons while talking and laughing together. The women were clearly delighted by both their friendship and the buttons they were making. Jenna liked that they were having fun, but also wanted them to “level up to real making” using a 3D printer, which the women had no interest in (fieldnotes 5/10). Staff in all three libraries expected people to leave behind the casual recreational uses of the space in structured programs and focus on serious leisure as independent makers, and that this serious leisure would involve more technologically-advanced tools such as 3D printers, rather than “low-tech” button making.

4.4 Casual Leisure

Casual leisure audiences approached the makerspaces differently. Responsive Library was the only library in this study offering both programs and at-will access to the space, offering the opportunity for comparison. Craft programs and the makerspace served distinct community needs, with some overlap of enjoyment and self-expression. In my three months in this space, I saw only two people move from a casual to a serious leisure use of the space (Sylvie, a sewist, and a man who did not participate in the study).

Despite some library actors’ dismissals of the more recreational uses of the spaces, numerous people in the community desired casual leisure. Tessa, a mother of two at an art program in Responsive Library said,

'I don’t even know if I want to do all the work to learn how to use that stuff [gesturing toward 3d printers] but I love making stuff with my family.’ When I asked her what a good making opportunity looked like for her, in the context of this space, she talked about a low-stakes craft that involved seeing what other people make, helping her kids, and feeling happy with having a souvenir of family time (fieldnotes 9/10).

Casual makers wanted to “mess around” and play in a low-stakes environment, and to “hang out” with friends and family, with making a happy supplement to these relationships (c.f. Ito et al., 2009). The casual makers at programs wanted an object to display, gift, or use.
Casual leisure users expressed goals differently from “serious” users. The people attending programs welcomed social opportunities to learn and make, but may not pursue the activity they learned. Rather, they wanted to have some fun. They did not want a burden of what they saw as work, but a respite from it. In this study, these casual leisure users were all women.

Casual leisure support involved either offering activities for people stopping in for a moment (e.g., button or collage making), or providing a formal program. Library staff perceived “passive programming” with drop-in crafting activities as easy to facilitate, but holding programs was challenging. Programs were expensive, required staff time or a teacher/workshop leader, and involved using the space in ways that could impinge on other uses. Jenna, the team leader in the urban Productive Library, felt programs were a poor use of her staff’s time, that few people attended, and that her patrons were better served through individualized help. Her library did the least to support casual leisure.

4.5 Limits on Serious Leisure

Despite the libraries’ preferences for serious leisure, such uses of the spaces were more difficult than one might expect, due to many policy and procedural limitations. There was no storage space, little to no support for long-term or repetitive making activities, and reserving equipment was challenging. For example, in Productive Library, shifting policy impacted regular users, so they could only reserve makerspace equipment six times in a six-week period. People who had been using design computers daily could no longer access the equipment when they needed it. Nor could serious leisure makers do lengthy tasks involving the equipment. Often people were allowed to use 3D printers for brief spans of time, which precluded making anything more complicated than a small toy. Electronics work or sewing might involve leaving the library’s wires and components in a prototyping breadboard or straight pins in a half-made garment, but such things were not possible. Lack of storage meant that a 70+ year old woman had to lug a 5’ roll of heavy iron-on paper on the bus if she wanted to continue her project. And despite institutional discourses invoking collaboration, “serious” uses of the spaces were more individual.
than social or collaborative, sometimes due to staff interventions in users’ attempts to socially engage, particularly in Productive Library.

Serious leisure makers noticed these barriers to using the spaces. Wyatt, a hand tool-oriented woodworker, helped to develop the Responsive Library makerspace as a member of their Advisory Board, spending years in regular meetings. Yet he never used the space. He felt he could not bring sharp tools there and the lack of storage impeded his use. He wanted to socially make, collaborate, and share his knowledge, but believed that the library itself stood in his way. Roger fretted about whether his work would be censored. Erika worried about getting paint on the furniture and smearing pain when bringing her work home. Many library practices are not conducive to the “real making” of serious leisure that library staff said they wished to support.

5. Discussion

This discussion offers a serious of reorienting questions, as a research agenda about makerspaces and/or casual leisure in public libraries. From these findings, four key points emerge: the marginality of serious leisure use, the challenges of supporting “serious” making in the library, and the subsequent two-audience problem, as well as a reframing of making as joy, love and rejuvenation. In these areas, this study begins a conversation, but more research is needed to continue it.

5.1 Marginality of Serious Leisure Use

Stebbins (1982) notes that, by virtue of the effort required to pursue it, serious leisure will always be a marginal activity in the larger world of recreation. This implies that these spaces may never draw as large a crowd as librarians wish. Not everyone is interested in self-actualizing through the challenging work of serious leisure. This is a striking contrast to the “making is for everyone” mantra that ALL the library actors in this study elucidated. People with an idea to develop through independent making were far less prevalent in this study than users wishing for making as a fun thing to do once or twice with friends. Other studies have seen similar issues of limited makerspace use when libraries pursue an at-will concept of a makerspace: "We had the
space open and found that there was no user need” (Einarsson and Hertzum, 2019, section 4.2, para 1). The makerspace they studied was not used much until the library added scheduled family activities. This has implications for not only the exclusion of many members of the community who are seeking casual leisure, but also for the sustainability of the spaces. If only a few serious leisure users are accessing the makerspaces, libraries may struggle to justify their continued existence, given the equitable access mandate of public libraries. Higginbotham and Rouse (2020) point out that in school library makerspaces, “when teachers employ their makerspaces exclusively for after-school activities or clubs, only a small and specific population of students gains access to the makerspace” (p. 154). This reduced inclusion and diversity in the space they studied. Similarly, in this study, a small and specific population were able to benefit from these spaces. This was not the intent of the libraries, but it was the outcome of their decision making, and may result in similar outcomes elsewhere. For example, women might feel less included and welcome in makerspaces that do not support casual leisure uses, as in this study. More research is needed to explore the impacts of policy decisions on making in these spaces, and on the populations being served.

LIS has just begun to explore the SLP in public libraries. Previous studies that advocate for public libraries to emphasize serious leisure pursuits, such as the VanScoy et al. (2020) study, do not determine WHY different people might want different types of activities (formal or informal, serious or casual). Few studies yet interrogate the value of casual leisure for library users, though Teasdale’s (2020) work on makerspace assessment begins this process by evaluating what outcomes and values are desired and supported. Teasdale found that three primary library goals—providing access, supporting entrepreneurial opportunities, and nurturing creativity—were also valued by makers. The makers she interviewed further expressed goals such as strengthening communities and families, deriving intrinsic benefits from making (i.e., fun), and saving money. More research is needed to understand why people wish to pursue their preferred leisure in the spaces, so libraries can support those needs.
5.2 A Two-Audience Problem

The casual and serious leisure audiences for makerspaces, in this study, were entirely different audiences, though library staff believe that they will all become “serious” in time. Institutional actors in previous studies, such as Willett’s (2018) study of an art-centered urban library makerspace, also see casual use as a gateway to serious endeavors. More research is needed to see if this leveling-up occurs, or is desirable. Even if this study found little evidence of shifts from casual toward serious leisure, people might treat the same activities as casual in some contexts and serious in others. More research is needed to ascertain how much overlap or shifting occurs in library leisure use, or if these audiences remain mutually exclusive, as this study suggests.

Both audiences need support, often through programming. If, as Einarsson and Hertzum (2020) found, many makers need structured programs to scaffold their learning in these spaces, then libraries such as Productive Library, who held almost no programs, may need to revisit their model to ensure casual leisure users have access. Libraries like Welcoming Library, with no at-will use of the space, may be limiting the usefulness of their spaces for more “serious” uses. Responsive Library, who offers both at-will making and formal programs, best supports a wide range of making and makers, suggesting that a path toward inclusive access involves institutional support for casual and serious leisure. If libraries do not recognize that they are attempting to serve two different audiences, they may also find their outreach and marketing is ineffective, promoting services that meet needs that an audience may not have. More research is needed to explore these two audiences, what each audience wants and values, the types of making they can and cannot do in the spaces, and how to reach them.

This two-audience problem could potentially be remediated through a multi-pronged approach to outreach, programming, and social support, but recognizing that the two different audiences exist is a vital first step. In addition, the HOMAGO theory proposed by Ito et al. (2009) may be useful for researchers to explore the SLP in makerspaces, and gauge who needs “hanging out, messing around, and geeking out,” to what extent, and why. Is HOMAGO a bridge between
casual and serious leisure for some people? Without understanding and addressing the two-
audience problem, libraries may be sidelining women’s labor and leisure needs, and are offering
inequitable access to diverse and often marginalized community members.

5.3 Challenges of Supporting Serious Leisure Making

Finally, the most “serious” makers interviewed in this study did not use or were unhappy
with the makerspaces. The spaces were challenging for “serious” making. These participants
identified problems with storage, short equipment reservation periods, the need to retain library
materials in half-finished projects, limits on repeated tool reservations, or other limits to the sort
of sustained and recursive work that “serious” projects often require, especially if they are wet,
bulky, or time consuming. More research is needed to explore the impact of storage and recurring
makerspace uses, and which practices do support serious leisure.

Given the limits on sustained making in these libraries, libraries might consider reframing
their spaces as “learning labs” or “sampling spaces.” As Einarsson & Hertzum (2019) found, “We
call it entry-level or learning makerspace. There you can only make prototypes” (section 4.3, para.
3, italics in original). However, if the emphasis shifts from making to learning, some people and
processes are no longer supported. Learning is not the only desirable outcome of using these
spaces. Reframing makerspaces as limited sampling spaces for those who have the wherewithal to
learn things, often independently, may sideline these goals or benefits. As Cahill, Joo, Howard
and Walker (2020) found in library storytimes and Barchas-Lichtenstein et al. (2020) found with
other library programs, people use the library to interact socially and have fun. Is this enough to
justify the provision of makerspaces? Certainly, libraries support other forms of casual leisure,
including recreational reading.

As discussed above, casual leisure uses were either excluded, devalued, or assumed to be
valuable as a pathway toward serious leisure—which these makers seldom trod. So, who ARE
these spaces benefitting? If makerspaces ignore the potential for large casual leisure audiences,
and do not support the smaller serious leisure audience well, these spaces may fail through lack
of use, particularly in smaller communities with fewer available “serious” users. In this study, these makerspaces were not entirely useful for serious OR casual leisure, which is a true conundrum. To ensure community-wide relevance, libraries need to assist casual audiences with programs, but also deeply engage with “serious” makers and their needs. For example, libraries could check out makerspace storage cubbies for a month, as they do books and other materials. Lack of support for serious leisure use means that libraries cannot meet the needs of makers for whom the spaces were originally intended.

5.4 Joy, Love, Regeneration

This study suggests that there is something special about social making. As Robin, an older woman who participated in a woodworking class said:

For me it’s this wonderful, electricity vibe, vibrant life thing that it happens when people interact with each other and maybe a skill or something—information—but it produces this equality, maybe. It produces confidence, empowerment for lack of a better word, joy.

LIS research on learning and information practices in makerspaces rarely explores makerspace impacts on such social interactions or joy. Worsley (2021) centers the concept of Black joy in a non-library makerspace, and some studies examine the joy of recreational reading (c.f. Simsova, 2008), but library program or service-related joy was little explored until a recent issue of *Library Trends* (Hartel & Siraky, 2022) focused on joy, exploring issues such as informational uncertainty, contemplative scholarship, and classification. One of the articles described joy in words and images painted on rocks placed along walking paths, to connect the community during pandemic lockdowns (Tulloch, 2022). Another article described love as “joy plus solidarity” (Greenshields & Polkinghorne, 2022, p. 459), noting that love is a concept also rarely studied in LIS. Yet people like Robin described love and joy as benefits of library makerspaces. Stebbins (2001) notes that, “casual leisure affords regeneration, or re-creation, possibly even more so than its counterpart, serious leisure, since the latter can sometimes be intense” (p. 306). Offering casual leisure opportunities may be an act of love, useful for solidarity in the face of oppression, or the need to regenerate. This could be especially beneficial for those experiencing
economic or social precarity or marginalization, or those overburdened by undervalued caregiving activities within a capitalist society. Joy and love-centered research could offer library practitioners and scholars a new lens through which to understand casual and serious leisure.

Serious leisure offers the benefits of “self-actualization, self-enrichment, re-creation or renewal of self, feelings of accomplishment, enhancement of self-image, self-expression, social interaction and belonginess, and lasting physical products of the activity…[and] self-gratification” (Stebbins, 1982, p. 257). Despite these clear benefits, some people in these libraries wanted to “self-actualize” in ways that were meaningful to them. Some wanted to create for the sake of creating or self-expression, to seek joy. Some wanted to play, or to take a break and rejuvenate with casual leisure. Stebbins (2001) explains that casual leisure offers particular benefits for interpersonal connection-building, or “relational leisure” (p 206). Many makers in this study sought relational leisure, often through co-making or gift-making. Casual leisure uses of makerspaces have as much value as serious leisure, for the individuals seeking joy, love, solidarity, and relationships. Casual leisure may offer value for communities, as swathes of people rejuvenate through making.

More research is needed to see how joy or love derives from makerspaces and their practices, who is feeling it, what the barriers are, and how libraries can support joyful creation and social interaction. The findings of this study suggest that reframing library expectations of serious leisure toward meeting the needs of the users—whether casual or serious—could ensure all members of the community can benefit from the tools on offer.

This research derives from data from before the COVID-19 lockdowns, using a limited group of libraries, and few member-checkers of the analysis. The subsequent limitations could impact how transferable these findings might be today. The recommendations for research on serious and casual leisure in library makerspaces will help to expand on these findings. The impact of pandemic lockdowns on leisure in libraries, and how leisure uses have rebounded, needs further research as well.
6. Conclusion

This study finds that people value the joy, inspiration, low-stakes learning, and self-expression of structured making programs. They enjoy using programs as opportunities to spend time with friends, much as they would enjoy playing a board game. This is casual leisure. To suggest that such ends are something to be bridged to institutionally-preferred goals is like suggesting that all reading should be instrumental for skill-development, ignoring other types of value people find in recreational reading (c.f. Howard, 2011; Levine, Cherrier, Holding, & Koestner, 2022).

This study offers several implications for practitioners:

- Few people in any community are “serious leisure” makers, and privileging “serious” making may significantly limit the utility and diversity within the makerspace, and the sustainability of the makerspace.
- More users, especially those marginalized by socioeconomic precarity, are social and fun-oriented, and libraries can use casual leisure-oriented programs to connect people and help them rejuvenate.
- Assumptions that casual leisure users will develop into serious leisure users is not supported by the data, and librarians should offer casual leisure makerspace opportunities, just as they offer books to casual readers, and intellectual freedom includes the freedom to decide why one might use a library.
- To ensure inclusive, equitable makerspaces, libraries may need plan for the two audiences’ diverse needs with both structured and unstructured opportunities, storage, and responsive tool use policies.
- Serious and casual leisure users may require different staffing and outreach models, and assistance in making sense of makerspaces.

If these spaces are to reflect the needs of the entire community, librarians need to know the extent to which each of these types of leisure can or should be supported. Librarians need to know if the lack of one type of leisure causes a makerspace to fail, which practices cause a
perception of failure, and for whom. The researcher is pursuing that study now. Librarians need to know if “leveling up” to serious leisure occurs as an outcome of makerspace use. Many other areas of necessary study are described in this research agenda, because libraries need evidence establishing the outcomes of makerspace use and programs, and how makerspaces can better serve library values of access, intellectual freedom, and equity.

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