Towards Sustainable Partnership

Examining Cross Perceptions of Public and Technical Services Academic Librarians

Cathy Weng and Erin Ackerman

Public services (PS) and technical services (TS) librarians play equally crucial roles in providing library services to meet user needs to support institutional goals. For PS and TS librarians to develop effective workplace collaborations, both groups must have a better understanding of the other side's perspectives, values, and concerns. This paper sought to learn how librarians in the two areas currently perceive and/or stereotype each other. The authors conducted a survey on cross perceptions of public and technical services academic librarians. The study tested and confirmed assumptions that previous papers have made about the negative perceptions of TS librarians held by PS librarians. Analysis of survey results, however, found that TS respondents expected to be viewed more negatively than was evidenced by the PS responses. Nonetheless, both PS and TS respondents recognized and agreed on the important role that library technical services play within the larger context.

 ${f P}$ ublic services and technical services librarians play equally crucial roles in providing library services to meet user needs that support their institutional mission and growth. Historically, this so-called "Primal Division" or "Great Divide" points to the essential distance between the type of work, priorities, and goals of public services (PS) and technical services (TS) librarians.¹ As Gorman humorously noted, the difference between the two kinds of librarians is that public services librarians "dwell in the light and serve the readers and [their] glory shall be great," while technical services librarians "dwell in the darkness. Secret shall be [their] ways and hidden [their] practices."2 This division, common in contemporary libraries, is mostly driven by library functional specialization and how users are served by librarians, either directly or indirectly. For the purposes of this paper, the authors define the role of PS librarians as providing reference and instruction support, circulation/access services, reserves, interlibrary loan, scholarly communications, and digital commons/knowledge expertise. TS librarians provide support for electronic resources, serials, cataloging, acquisitions, collection development, and systems. Such divisions can inadvertently create barriers to communication and understanding. The barriers can arise from "physical distance, lack of social interaction, communication barriers and differences in organizational culture."³

In the 1980s, some argued that the rigidity of such compartmentalization created potential impediments to communication and thus reduced opportunities

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The authors wish to thank Dr. Brian Arbour, Dr. Dick Thayer, and Dr. Wayne Weng for their advice and assistance in statistical analysis. for networking and collaboration among TS and PS librarians.⁴ These developments were seen as having a potentially negative impact on user service. As a result, some libraries introduced crossover functions (or cross-training) or staff rotation programs between TS and PS.⁵ The concept of "renaissance librarians" or a "holistic approach"—i.e., gaining a big-picture view of the library and performing a broader range of tasks—to managing library operations was a frequent topic of discussion.⁶ Despite the recognition of barriers to communication and collaboration, prior research, such as that of McComb and other research by Larsen, revealed that implementing a holistic operational system has been possible only for smaller institutions where staff are able to manage cross-divisional responsibilities due to the relatively smaller size of their collections and operations.⁷

In light of the variation in work environments and job descriptions, it is important for PS and TS librarians to develop a shared vision, achieve common objectives, and build constructive partnerships to deliver sustainable service to the library community. To accomplish this, a better understanding of both sides' perspectives, values, and needs can lead to a successful partnership.

To promote a better mutual understanding and to improve relations between PS and TS librarians, an effective approach has been to learn how and why librarians in the two areas perceive or stereotype one another. Based on these perceptions, we can then determine strategies to use to craft a more productive relationship and to resolve potential issues caused by negative or false perceptions. Studies have shown that stereotypes can influence how people are judged and treated, and profoundly affect people's behavior. Exposure to negative perceptions can lead to low professional self-image and low work status, creating an unsatisfying and unproductive work experience. However, stereotype threats (being at risk of conforming to stereotypes about one's social group) and "their undesirable consequences can be reduced by strategies that render the fact of the situation, and one's representation of the situation, as less likely to deliver social identity-based devaluation."8

This study sought to learn how PS and TS librarians currently perceive or stereotype each other. The authors examined and analyzed results of a survey conducted in 2014 to investigate the institutional role and value perceived by both groups of librarians, and the perceived significance of collaboration in the context of achieving institutional goals. The survey represents a timely intervention into recent discussions of librarian stereotypes by investigating the perceptions librarians have of each other and by considering how factors such as years of career experience may influence these perceptions. The authors hope that the study findings can shed some light on cross perceptions of PS and TS librarians. By learning how their colleagues perceive them and how they believe they are perceived, we seek to find connections between librarian perceptions and the potential impact on collaboration. It is our hope that through the survey findings, some misconceptions and misunderstandings can be identified and mutual trust can be developed to achieve long-term sustainable partnerships to better serve users.

Literature Review

There has not been an empirical research study investigating the perceptions of PS and TS librarians and their perspectives on the value of their colleagues in the context of advancing institutional goals. Literature commenting on perceptions of PS and TS librarians provides mostly anecdotal remarks and is largely based on incidental evidence. The current study attempts to build on the literature by collecting real, empirical data to investigate the validity of anecdotal reports or comments.

There is an abundance of literature on images and perceptions of librarians in general. The image and character of PS and TS librarians have been frequently discussed in the literature, though separately in most cases. PS librarians have been perceived, as Leach describes, as "flighty, aggressively friendly, loud know-it-alls who hate math and pay no attention to detail," or according to Manley, as "imprecise, impractical, and illogical."9 Much of the literature on the perceptions of TS librarians is generalized from stereotypes of catalogers.¹⁰ Catalogers, mostly working behind the scenes, have been stereotyped as "overly serious, out-oftouch, socially dysfunctional nitpicker[s]."11 They often have been viewed, according to Banush, as one-dimensional "bibliographic hermit[s], typically housed in some back room." Similarly, Brice and Shanley-Roberts describe catalogers as "bastion[s] of outmoded thinking and stubborn resistance to change," and as exercising a back-room mentality implying their avoidance of participation in activities beyond their workplace.¹² The clichéd image of TS librarians being "bookish, quiet, somewhat quirky and not very social or outgoing" or "never seeing natural light or interacting with other human beings" is also stereotyped in the media and by the general public.¹³

Perceptions of PS and TS librarians and relations between the two groups have been discussed, though almost exclusively anecdotally, in the literature. As noted earlier, PS and TS librarians are expected to develop the individual expertise essential to serving users. The specialization of knowledge and skills is, as described in the literature, similar to creating "a profession within a profession."¹⁴ As a result, there has been a general feeling that librarians in the two areas of specialization "speak two different languages, look at the world from very different viewpoints, and are generally incapable of having a productive conversation."¹⁵ The

relationship between PS and TS librarians illustrated in the literature has not been favorable. The relationship was once described as "shaky, if not rocky" or "uncomfortable."¹⁶ Between the two groups, there exist "rivalries, antagonism, narrowness and misunderstanding."17 Librarians in the two areas "often did not relate well to one another."¹⁸ The conflict between PS and TS was referred to as "war" or a "cold war."¹⁹ There is also an impression that PS has been valued more within the profession. Reference work was once regarded as the only real professional work that took place in the library.²⁰ Many TS librarians felt that the value of TS work was often discounted among library professionals.²¹ TS positions have not been as highly valued.²² Such an impression is evidenced by the fact that some institutions do not grant faculty status to TS librarians. TS has been said to have "little appeal" to library school students, and students expressed greater interest in reference services as compared to other subfields.²³ Furthermore, there exists in libraries an implicit attitude, as Bachus bluntly stated, of "first- and second-class professional positions, reader services the former and technical services the latter."24 This coincides with Manley's informal survey findings in perceptions of reference librarians (PS) and catalogers (TS), in which some negative perceptions of catalogers have appeared among the top "pet peeves" of reference librarians. For example, reference librarians surveyed felt that catalogers refuse to work at the reference desk where one can "find out what the real world is like," and that catalogers "dress like slobs and then complain about their image." $^{\rm 25}$ Not surprisingly, catalogers have felt stung at being referred to by reference librarians as "support staff."26

This difficult relationship, as Moody indicated, "stem[s] from the nature of the roles each takes, the difference in the daily work and issues they struggle with, and the difference in priorities and goals," which speaks to the underlying differences.²⁷ Bluh attributes it to personal and professional competition in the organization, and each side's desire for recognition for the services it offers.²⁸ More importantly, a lack of understanding and communication between PS and TS librarians was considered as one of the major factors causing the discord.²⁹ Recognizing the conflict and the unproductiveness of this relationship, many have issued pleas for increased dialogue and communication for better understanding of each group's work and perspectives.³⁰ Others advocated cross-training to learn the other's work to promote a better understanding of and respect for each individual's expertise and unique contributions to user service.³¹

The existing literature has focused on the content of the perceived images and stereotypes of PS and TS librarians (Manley and Banush, for example) and the relationship between the two groups (Bluh, Moody, Bachus, Wallbridge, McCombs). Such findings, illuminating as they are, consist primarily of anecdotal comments. Evidence-based investigation of how PS and TS librarians perceive their colleagues, or how they believe they are perceived by their professional counterparts, will help clarify stereotypes and relationships, or possible misconceptions of PS and TS librarians.

As indicated in the literature, negative perceptions of TS librarians are common. These negative perceptions are associated with considerations of TS work as less professional or less valuable, and perceptions of TS librarians as being narrow-minded. It should be noted that the authors of those remarks were mostly TS librarians. Such perceptions (i.e., the thinking that PS librarians did not respect or appreciate TS librarians and their work) were known to be shared by TS librarians, which can be interpreted as one aspect of how TS librarians perceive PS librarians. Are these perceptions also shared by PS librarians and to what extent? The current study is intended to investigate perceptions of TS librarians, not only from the viewpoint of TS librarians themselves, but also those of PS librarians. The authors believe that such a study is needed to clarify potential misconceptions between the two broad areas of specialization within librarianship. It is hoped that the study's findings can contribute to a more communicative and collaborative work environment. The goal is to establish a sustainable partnership among PS and TS librarians.

Methodology

To investigate the common perceptions of PS and TS librarians towards each other, the authors conducted a survey study in 2014.32 The survey, administered using the online survey software Qualtrics, was distributed to professional discussion lists used by divisions of the American Library Association (ALA), the Association of College and Research Libraries (ACRL), and other library organizations whose members have PS or TS specializations. The survey used Likert-scale and open-text-response question formats. Only the questions that pertained to consent to participate in the research and self-identification as a TS or PS librarian required responses; whether respondents chose to answer any of the remaining questions was voluntary. Upon selfidentification as a PS or TS librarian, respondents were directed to separate parts of the survey. In addition to four demographic questions (institution type, years of service, size of collection, and size of student body), there were nine questions tailored to TS respondents and eight questions tailored to PS respondents. The two parts of the survey contained the same questions, but in a slightly different order and with wording adjustments to reflect the group to which the questions were directed. TS librarians were also asked some questions that did not appear on the PS portion of the survey. These questions pertain to current TS initiatives and potential organizational changes that might improve the environment for TS.

The study sought to understand the perceptions that TS and PS librarians have of each other. As indicated in the literature, the relationship between PS and TS librarians has not been positive. Low regard and negative anecdotes were associated with TS librarians. Comments from TS librarians often indicated that they felt disrespected by PS librarians. In light of these remarks and observations, the current study was subsequently designed to focus on "shared PS perceptions of TS librarians" as seen by both PS and TS respondents. The authors asked both groups what they thought PS librarians in general think of TS librarians. The purpose was to probe what both groups believe are commonly held perceptions of TS librarians. This is different than what the individual PS librarian survey respondent might think of the TS librarians with whom he or she works, and, instead, gets to the perceptions that are part of the culture of librarianship.

The authors created a codebook to categorize answers for open-text responses. For each open-text question, the authors identified a set of themes emerging in the responses and determined which theme(s) an individual response best exemplified. Categories and themes for particular questions are explained in the Results section. The researchers promoted intercoder reliability by coding overlapping sets of responses for each open-text question and resolving differences in interpretation.

A total of 868 library professionals answered the survey. The overwhelming majority of survey respondents (68 percent, or 586) were academic librarians. Since this part of the study was focused on academic librarians, responses from non-academic librarians were not included.

Results

Demographics

Survey respondents were asked to self-identify as TS or PS librarians. Of the 586 academic librarian respondents, 360 survey respondents (61 percent) identified themselves as TS and 226 (39 percent) as PS. The majority of respondents in both groups had been librarians for more than ten years; 74 percent in the TS category and 58 percent in PS. The distribution of survey respondents by type of academic institution was similar in both groups, with 55 percent identifying as working at research universities, 39 percent at four-year undergraduate institutions, and just over 5 percent at community colleges (see table 1).

Core Qualities

In this study, the authors attempted to explore perceptions of core qualities of PS and TS librarians. The results will

Types of Institutions	Percentage (all respondents)	
Four-year Undergrad	39.	3%
Four-year Research	55.1%	
Community College	5.6%	
Years of Service	Percentage (PS)	Percentage (TS)
> 10 years	58%	74%
5-10 years	22%	16%
1-5 years	18%	9%
< 1 year	2%	1%

help us learn about librarians' expectations associated with core qualities. They asked each group of librarians what they thought were the necessary core qualities that TS and PS librarians needed to support the library and its users. The survey question presented respondents with a list of qualities (responsiveness to change, user centeredness, collaborativeness, adaptability to technologies, forward thinking, motivation) to rank on a spectrum from most important (5) to least important (1). $^{\rm 33}$ Core qualities were not ranked against each other, and it was possible for a respondent to determine that several qualities merited being labeled as "most important." There was general agreement between TS and PS librarians regarding the importance of each quality. The majority of respondents (on average, more than 82 percent of PS respondents and 85 percent of TS respondents, as shown in table 2) felt that it was "most important" or "very important" that TS librarians possess the six qualities presented in the survey, with "adaptability to technologies" being the highest (89 percent of PS respondent and 92 percent of TS respondents felt important) followed by "responsiveness to change" (87.6 percent of PS respondents and 89.5 percent of TS respondents) (see figure 1).

A follow-up, open-text question asked TS and PS librarians to specify any other qualities they thought were needed by TS librarians to support the library and user needs. As noted in the methodology section, the authors identified a set of categories and themes into which responses were grouped. Individual responses could be placed in more than one category if relevant. For this question, the main categories identified were labeled as communication/interpersonal skills, creativity (defined as "Flexibility, problem-solving, 'big picture' orientation, open mindedness, inquisitive, repurposing workflows and products"), detail-orientation, outreach/ advocacy, technology, and time management/efficiency. Of those who chose to respond, the first quality both TS and PS respondents emphasized were attributes the researchers grouped under the theme of creativity, especially flexibility, problem-solving, and "big picture" orientation. The second

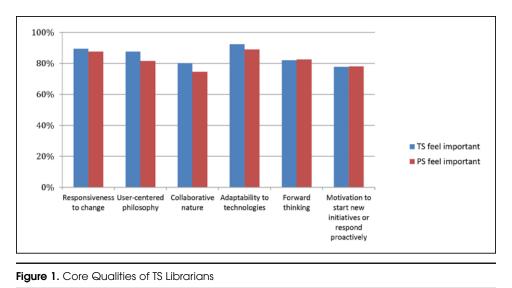


Table 2. Other TS Core Qualities			
TS Respondents	PS Respondents		
1. Creativity, flexibility, problem solving	1. Creativity, flexibility, problem solving		
2. Detail oriented	2. Ability to communicate with co-workers		
3. Ability to communicate with co-workers	3. Technology		
able 3. Other PS Core Qualities			
	PS Respondents		
Table 3. Other PS Core Qualities TS Respondents 1. Ability to communicate with patrons and co-workers	•		
TS Respondents 1. Ability to communicate with patrons and co-	1. Ability to communicate with patrons and co-		

quality identified by TS respondents to the open-text question was the need for TS librarians to be detail-oriented, that is, attentive to detail, rules, and standards. Few PS respondents mentioned this as a quality needed by TS librarians. PS librarians cited communication and interpersonal skills as the second most needed core quality not represented on the original list, while it ranked third among comments from TS librarians. Ranking third among the open-text comments from PS librarians for TS core qualities was the need for TS librarians to possess knowledge of new technology and technological trends and standards (see table 2).

Similarly, regarding core qualities for PS librarians, the majority of respondents (on average, more than 84 percent of PS respondents and 89 percent of TS respondents, as shown in table 3) felt that it was most important or very important for PS librarians to possess the same six qualities, with "user-centered philosophy" ranked highest (98 percent of PS respondents and 99 percent of TS respondents) (see figure

2). Both PS and TS respondents shared a similar view of two qualities, "forward thinking" and "motivation to start new initiatives or respond proactively." These qualities were considered slightly less important among the six qualities. Disparities among PS and TS respondents were also found for these two qualities. Eighty-three percent of TS respondents (73 percent of PS respondents) felt "forward thinking" was an important PS quality. Additionally, 80 percent of TS respondents (72 percent of PS respondents) felt "motivation to start new initiatives or respond proactively" was an important PS quality.

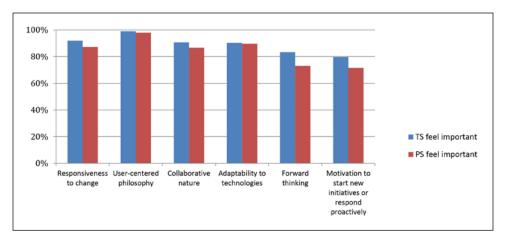
As with the previous questions, all survey respondents were given the opportunity to specify other qualities not provided in the questionnaire that they thought PS librarians needed to support the library and its users. As shown in table 3, both TS and PS respondents mentioned communication and interpersonal skills most often. Among TS and PS responses, the need for PS librarians to be flexible, problemsolvers, open minded, inquisitive, and maintain a "big picture" ori-

entation ranked second. PS librarians also emphasized the need for PS librarians to engage in outreach and advocacy by marketing and promoting services, seeking feedback from users, and assessing user needs. Among TS librarian respondents to this question, quite a few suggested a need for PS librarians to appreciate and understand technical services. Interestingly, no PS librarian comments cited this.

Perceptions

Both groups were asked how they thought PS librarians as a group perceived TS librarians. Respondents were presented with a list of six positive perceptions (responsive to change, user centered, collaborative, adaptable to technologies, forward thinking, motivated) and four negative perceptions (inflexible, disconnected from users, reluctant to change, and care too much about MARC records). The six core qualities that respondents had already ranked on a scale of most to least important were repeated here as the positive perceptions to facilitate comparison of perspectives. Respondents then indicated the degree of agreement on a Likert scale (strongly agree to strongly disagree) regarding how much they thought PS librarians perceived TS librarians in each respect.

There were statistically significant (P < 0.05) disparities of levels of agreement between TS and PS respondents for eight of the ten perceptions. Among those eight, five were positively framed aspects (figure 3) and three were negative (figure 4). For each of these perceptions, TS librarians expected to be viewed far more negatively by PS librarians than the actual aggregate responses indicated. This can also be seen in averaging combined percentages of PS and TS respondents on shared perceptions. As shown in table 4, 40 percent of PS respondents agreed that PS librarians shared the *positive* perceptions of TS librarians listed in the survey, whereas only 29 percent of TS respondents agreed. Conversely, approximately 52 percent of PS respondents agreed that PS librarians shared the *negative* perceptions, whereas a much higher percentage (68 percent)





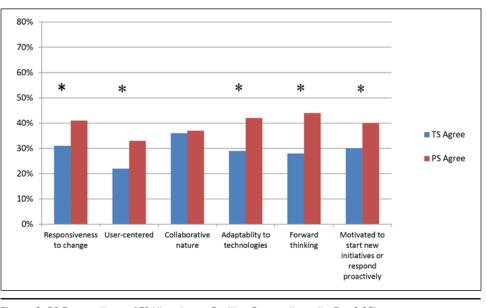


Figure 3. PS Perceptions of TS Librarians—Positive Perceptions (* : P < 0.05)

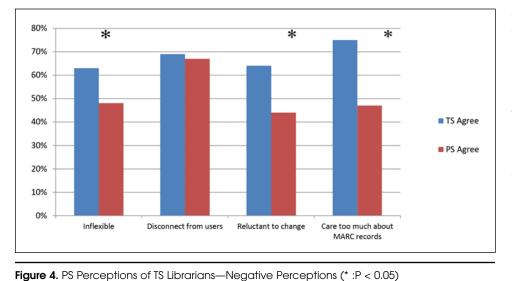
of TS respondents felt that they were negatively perceived. This does not mean that these negative beliefs do not reflect what a significant portion of PS librarians think, but rather that TS librarians predicted a much higher level of agreement with the negative perceptions (and lower levels of agreement with positive perceptions) than PS librarians evidenced.

When reviewing the free-text additional comments to this question from TS respondents, despite a low response rate (15 percent), the overwhelming majority of the comments indicated a negative perception of TS librarians as perceived by PS librarians. For example, TS respondents suggested that PS librarians believe that TS librarians are "too bogged down in minut[i]ae. Unwilling to make modifications to meet local needs." TS librarians felt characterized by PS librarians as "cataloging police, unable to adapt, unable to change or not interested in change, control fre[a] ks, unskilled, useless." Others felt that PS librarians believe that "technical services work is clerical in nature and not professional." The number of responses from PS respondents in the additional comments section was too small and therefore negligible.

The survey results were then grouped by respondents' years of service to determine whether this variable affected respondents' view of shared PS perceptions of TS librarians. Since the majority of TS respondents (approximately 75 percent) had been in the profession for more than ten years, we could reasonably infer that PS perceptions of TS librarians, as perceived by TS respondents, were views from experienced TS respondents. The demographic distribution

TS agree (average)

PS agree (average)



Positive Perceptions

29.3%

39.5%

Negative Perceptions

67.8%

51.5%

their answers demonstrated that both TS and PS librarians strongly value the crucial role of TS in enabling users to find and use library information and resources. As one TS librarian wrote, "[PS Librarians] are the frontline soldiers-[TS Librarians] provide the ammunition and equipment." A representative comment from a PS librarian shows agreement, "Without [TS] work, we would lose track of everything. The collection is useless if it isn't searchable!"

TS-only Questions

Two open-ended questions were Table 4. Aggregate percentage of respondents' view of shared PS perceptions of TS librarians addressed only to TS respondents. Recognizing that, according to previous research, some TS librarians might have feelings of low self-esteem, the authors wanted to know what changes

among the PS respondents in this survey, however, was different (58 percent had more than ten years of experience; 42 percent had less). Although the overall number of respondents to this question is not large enough to be representative of the field more broadly, the results may suggest if and how different views exist between early career and more senior PS librarians. As shown in figure 5 (positive perceptions), more experienced PS survey respondents consistently felt that TS librarians were perceived more positively than less experienced PS respondents, except for the perception of "user-centered philosophy." Similarly, for negative perceptions (see figure 6), to a lesser extent, more experienced PS respondents in this survey consistently felt that TS librarians were perceived less negatively than less experienced PS respondents, except for the perception of "car[ing] too much about MARC records."

TS Direct Impact

Drawing from the remark made in the literature that TS librarians or technical services tasks were not seen as "professional," we sought to learn librarians' perceptions in this respect. Survey respondents were asked, "Do you agree or disagree with the statement 'Your technical services department currently provides/supports service that has direct impact on library users'." Nearly all (97 percent) of both TS and PS survey respondents saw TS as having a direct impact on library users. The reasons to support TS respondents would like to see happen in their libraries to make TS more integral to PS initiatives. The comments or suggestions can be incorporated into building long-term partnership and collaboration. Of the 157 TS librarians who responded to the question, nearly half mentioned the need to improve communication and collaboration. "More interdepartmental communication, promotion of a sense of shared mission," wrote one respondent. Another asserted that he or she "would love to see a more collaborative role in the understanding of technical services and the role that public services librarians play in the work we do." Many TS librarians also expressed desired changes in management and leadership to promote better communication, collaboration, teamwork, and shared goal setting and planning. Cross-training was also mentioned by many librarians. "I would like to see PS librarians cross-trained to some degree in [Technical] Services so that they might learn what we do and why it is important." In response to this question, many TS librarians (mostly from smaller institutions) noted that they are "already integral" to PS initiatives. For example, one commented that TS services "already is integral to public services initiatives. As colleagues in a small staff, all librarians participate in reference work, occasionally doing classroom instruction, and we all discuss proposed initiatives and plan workflow which includes both areas."

Discussion

Based on the study results, the authors confirmed negative PS perceptions of TS librarians as perceived by both PS and TS respondents. This is consistent with observations in the existing professional literature. A more striking finding is that TS respondents expected a higher level of negativity in perceptions of TS librarians than did PS respondents (see table 4). This suggests that the traditional negative image of TS librarians is still widely perceived by both PS and TS librarians, but also that such a negative image is more strongly felt among TS librarians themselves. The finding is also consistent with Leyson and Boydston's study in that a small percentage of catalogers that they surveyed felt their work was valued outside their department.34 This coincides with research in psychology, such as the findings of Cadinu that stereotype threat can lead to greater negative thoughts.³⁵ A plausible explanation is that TS respondents recognized PS librarians' negative opinions of them and internalized those feelings. Such a perception is supported by the "looking glass" model in the field of psychology in that "self-concept is a product of both one's awareness of how others evaluate the self and the adoption of those others'

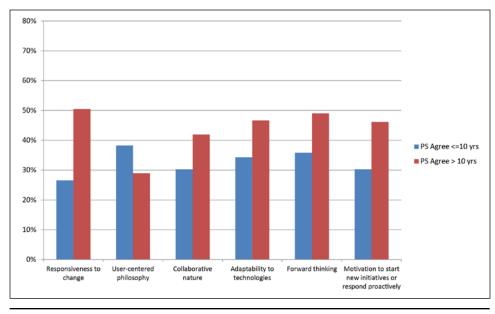


Figure 5. Shared PS perceptions of TS librarians perceived by PS respondents by years of service—positive perceptions

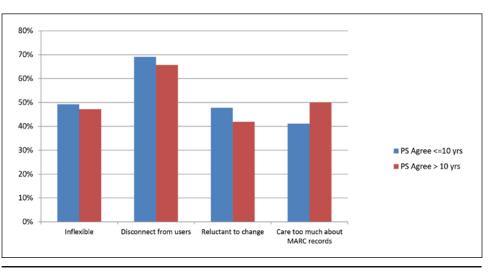


Figure 6. Shared PS perceptions of TS librarians perceived by PS respondents by years of service—negative perceptions

views."³⁶ This stereotype threat activation could result in potential greater hostility between the two parties.³⁷

Such a gap between self-perception (how TS librarians felt they were perceived) and peer perception (PS views of how TS librarians were perceived) is not uncommon in organizations, and it can easily lead to misconceptions and misjudgment, ultimately affecting individual and organizational performance.³⁸ As suggested by Brown and Swartz in their study of gap analysis of service quality between two parties, an effective approach is for either or both PS and TS librarians to adjust their expectations and to also improve service behavior. Education, communication, and a participative

approach can help both parties learn from each other and increase the consistency of expectations and perceptions.³⁹

Our initial examination of the differences of opinions about TS librarians held by early career and more senior PS librarians showed some interesting differences. Early career librarians (under ten years of service in the profession) in our respondent group held slightly more negative views of TS librarians than did their more experienced PS colleagues. The study also shows, however, a relationship between the variable "years of services" and positive perceptions. The longer a PS librarian had worked, the more the individual felt that TS librarians were perceived positively (see figures 5 and 6). One plausible explanation for this is that experienced PS librarians, who might have accrued more knowledge in TS operations and have had more opportunities to collaborate with TS librarians, have developed a better understanding and appreciation for TS work and TS librarians. Conversely, we imagine less experienced PS librarians, who have probably had fewer chances to learn about their TS colleagues firsthand, can hold the ingrained stereotypes common in library schools and the profession in general—hence the more negative perception of TS librarians expressed by this group of respondents. Future research on cross-perceptions of PS and TS librarians could investigate this relationship between viewpoints and years of service and seek to further explore its causes.

Research indicates that core competence, either selfperceived or shared, is closely associated with the shaping of a professional identity.⁴⁰ For the purpose of the study, we examined cross perceptions of PS and TS librarians associated with core qualities. Based on the results obtained, we found a general agreement among survey respondents on core qualities of PS and TS librarians. The majority of respondents felt that it was most important or very important that PS and TS librarians possess the six qualities presented in the survey (see figures 1 and 2). Survey respondents also felt that "adaptability to technologies" and "responsiveness to change" were two more important qualities for TS librarians. This clearly suggests that both PS and TS respondents have high expectations of TS librarians for being capable of continuously adapting and utilizing new technologies and being responsive to a changing environment. This quality was later further reinforced by PS respondents in their open-text comments. Almost all respondents (99 percent of PS respondents and 98 percent of TS respondents) felt that "user-centered philosophy" is the most important quality for PS librarians. This is not surprising, as PS librarians work directly with library users, whether in teaching or in assisting users with academic research.

There were significant disparities between PS and TS respondents regarding PS core qualities in two cases. The two qualities were "forward thinking" and "motivated to start new initiatives or respond proactively." A significantly higher percentage of TS respondents felt these two qualities were most important or very important. This suggests that, more so than their PS colleagues, TS respondents expect PS librarians to be visionary, proactive, and self-motivated. The finding coincides with Saunders' survey findings of core competencies of reference librarians, in which "self-motivated" was not considered by survey respondents (reference librarians and hiring managers) as one of the most important core qualities for reference librarians.⁴¹

The free-text response of additional core qualities of PS and TS librarians reveals both shared and distinct views of PS and TS respondents. The findings that TS respondents need to be "detail-oriented" as identified by TS respondents and "technologically fluent," as highlighted by PS respondents, clearly indicates the different emphases but nonetheless equally valid perspectives from both parties. For additional qualities of PS librarians, TS respondents uniquely felt that there is a need for PS librarians to understand and appreciate the functions, value, and limitations of TS. This implies that TS librarians feel that there was a need for, and a lack of, PS understanding and appreciation of TS librarians, an important motivational factor in the workplace. PS respondents, in contrast, saw the need for PS librarians to reach out beyond their communities and to be library advocates. The differences between PS and TS respondents' perceptions of core qualities provide some insight into the different views held by each group, which can be used to initiate open conversations.

It is heartening, though not surprising, to learn that survey respondents overwhelmingly (97 percent) agreed that TS functions have a direct impact on overall library operations. The reasons provided by survey respondents to support the belief were also well articulated, pinpointing the purpose of TS functions. This suggests that, despite the perceived low esteem of TS librarians, both PS and TS respondents recognized and agreed upon the important role that TS play within the larger context. Perhaps the perceived negative image of TS librarians was not directly associated with TS general operations or functions within an institution, but more associated with persistent stereotypes of the personalities of TS librarians themselves.

In our examination of the open-text responses to the TS only question about what changes could be implemented to make TS more integral to PS initiatives, "more communication and collaboration between PS and TS librarians" was a frequent response. This suggests that TS respondents recognized insufficient communication and collaboration between the two parties, which likely contributed to the divide and to the devaluation of TS librarians. PS respondents provided similar comments in their free-text responses soliciting additional comments. More communication and collaboration are needed to alleviate such a divide. The plea for more communication and collaboration to enhance better understanding has also been frequently addressed in the literature as a way to narrow the divide and ease the discord. It is only through a better understanding of and respect for each other's work and perspectives that realistic and fair expectations of two parties can be established and articulated, resulting in a more harmonious working environment.

Additionally, TS respondents voiced their desire for changes in management and leadership to promote better communication, joint goal setting, and staffing of decision making. This response points to the key factor that influences the formation of institutional culture. Organizational culture and institutional leadership can indirectly facilitate the valuing or devaluing of librarians on either side. It can generate profound long-term influences, positive or negative, within an institution. Nothing is more important than for the leadership to form a positive and healthy teamoriented culture. The ultimate goal is to create a mutually respectful and trusting environment that is conducive to open communications for a sustainable partnership.

From the study results, the authors learned indirectly about TS librarians' perceptions of PS librarians. The current study did not investigate explicitly shared TS perceptions of PS librarians. A future study could focus on this area. When analyzing the study results, the authors limited responses to those from academic librarians. The number of responses from non-academic librarians was too small to analyze. A separate study could be performed specifically targeting librarians working in public and special libraries to learn the shared perceptions of TS librarians and PS librarians in a different setting. Some anecdotal comments from the current survey results indicate that smaller libraries tend to be more integrated and that there is not as great a divide between PS and TS librarians. A future similar study could be conducted, focusing on size of institutions (i.e. staff size, collection size, location/centralization of TS departments, etc.), type (four-year research institution, four-year undergraduate institution, community college) and organizational structure (divisionalized or departmentalized, horizontal or hierarchical structure) to investigate the differences of practices and their association with librarians' perceptions, and whether anything can be learned to help academic institutions alleviate the divide between PS and TS librarians. Lastly, with new areas of specialization introduced in recent years at academic institutions, a future study could be conducted to investigate perceptions of librarians with combined responsibilities of PS and TS functions such as data management, emerging technologies, or repository librarians who often work closely with faculty and staff outside the libraries on special projects.

Conclusion

The study first examined core qualities that PS and TS librarians should possess as perceived by PS and TS respondents as a way to identify expected core qualities of PS and TS librarians. The purpose was to examine TS and PS librarians' perceptions in the context of core qualities. Survey respondents shared their views on librarians' core qualities. They also expressed different, but equally convincing and valid emphases on additional needed qualities for PS and TS librarians from their own perspectives. These findings help us to develop a better understanding and appreciation of librarians' perceptions from either side. As one respondent observed, "Like any disparate groups that ultimately have the same goals in mind, PS and TS librarians need to work together to better understand the other's point of view."

The finding that TS respondents felt TS librarians were perceived more negatively than their PS peers actually felt seems baffling and deserves further attention. This view is reflected in both (low) positive perceptions and (high) negative perceptions. Rather than investigating which perspective is more accurate, perhaps a more productive way of learning from the finding is to determine what can be done to diminish the negative perceptions and ensure more consistent experiences and expectations. Obviously if librarians, consciously or unconsciously, activate those negative perceptions or stereotypes, it is not likely for them to learn to collaborate effectively.

Many survey respondents noted, and the authors agree, that the key solution is to enhance institutional communication and understanding and to build a trusting team culture. Studies have shown that regular, honest and open communication is essential "to move the conversation past cooperating on simple task assignments to understanding the other's perspective and building trust."42 A basic understanding of each other's concerns and future plans and goals, as Moody asserts, will help create a supportive environment conducive to solving problems and implementing new initiatives together. "Only those who take the time to understand one another's viewpoints will be able to successfully interact and work in this type of team environment."43 More importantly, management and leadership play a critical role in cultivating a trusting team environment. As evidenced in Ruppel and Harrington's study, "management sets the tone for the open communications that influence trust."44 It is when trust among colleagues is developed, sustainable partnerships can then be established for the advancement of the institution.

In their final comments of the survey, some respondents pointed to possible directions for the future:

I do wish there were more opportunities for collaborating across these functional areas. When we get too siloed we each develop stereotypes and misperceptions of each other, which gets in our respective ways at the end of the day. But when we work together we each have important expertise to bring, and I think along the way we learn about each other that we each have important skills and qualities that together allows us to keep our institutions thriving.

Both sides need to learn to focus on the needs of the user, and the best way to accomplish that goal within the parameters of the budget, the available software and hardware, best practices, and established standards. Conversation and planning involving both technical services and public services personnel needs to be established practice, with total disregard as to "who wins" a discussion. The only possible winner should be the user.

References and Notes

- Michael Gorman, "Doing Away with Technical Service Departments," American Libraries 10, no. 7 (1979): 435; Kristin Senecal, "Crossing the Great Divide: Retraining Public Service Librarians for Technical Services," in Academic Libraries and Training, ed. Maryruth Phelps Glogowski (Greenwich, CT: JAI Press, 1994), 89.
- Gorman "Doing Away with Technical Service Departments," 435.
- Karen Antell and Jie Huang, "Collaboration Between Referenced Librarians and Catalogers: Barriers, Stereotypes, and Solutions" (paper, International Conference on the Development of Subject Librarianship and Personal Librarianship, 2008, Beijing, China, October 13–16, 2008), accessed September 18, 2015, http://www.academia.edu/5444354/Collab oration_Between_Reference_Librarians_and_Catalogers_ Barriers_Stereotypes_and_Solutions.
- Senecal, "Crossing the Great Divide," 88; Gillian M. McCombs, "Public and Technical Services: the Hidden Dialectic," RQ 28, no. 2 (1988): 141–46.
- Senecal, "Crossing the Great Divide," 88–89; Eleanor Gossen et al., "Forging New Communication Links in an Academic Library: A Cross-Training Experiment," *Journal of Academic Librarianship* 16, no.1 (1990): 20.
- Sharon L. Walbridge, "New Partnerships Within the Library," Journal of Library Administration 15, no. 1–2 (1991): 61–72; Senecal, "Crossing the Great Divide," 88.
- McCombs, "Public and Technical Services," 143–44; Patricia M. Larsen, "The Climate of Change: Library Organizational Structures, 1985–1990," *Reference Librarian* 15, no. 34 (1991): 79–93.
- Claude M. Steele, Steven J. Spencer, and Joshua Aronson, "Contending with Group Image: The Psychology of Stereotype and Social Identity Threat," *Advances in Experimental Social Psychology* 34 (2002): 385.
- Erin Leach, "What We Talk About When We Talk about Technical Services," *Letters to a Young Librarian* (blog), July 24, 2014, accessed October 10, 2015, http://letterstoayoung librarian.blogspot.com/2014/07/what-we-talk-about-when-we -talk-about.html; Will Manley, *The Truth about Reference Librarians* (Jefferson, NC: McFarland, 1996), 8.
- David Banush, "Stepping Out: The Expanding Role of Catalogers in Academic Libraries and Academic Institutions," *Cataloging & Classification Quarterly* 45, no. 3 (2008): 81-90; Elizabeth Brice and Ross Shanley-Roberts, "Beyond the Catalog: The Evolution of the Technical Services Librarian at

Miami University, Oxford, Ohio," in *More Innovative Rede*sign and Reorganization of Library Technical Services, ed. Bradford Lee Eden (Westport, CT: Libraries Unlimited, 2009), 11–19; Henry Wessels, "Gap between Public and Technical Services Librarians," *Information Science Today* April 3, 2010, accessed September 18, 2015, http://www .infosciencetoday.org/type/articles/gap-between-technical-and -public-services-librarians.html.

- Will Manley, *The Truth about Catalogers* (Jefferson, NC: McFarland, 1995): 79.
- 12. Banush, "Stepping Out," 81; Brice and Shanley-Roberts, "Beyond the Catalog," 11.
- Wessels, "Gap between Public and Technical Services Librarians"; Richard A. Murray, "The Whimsy of Cataloging," *LIScareer.com: Career Strategies for Librarians* (February 2002), accessed October 10, 2015, http://www.liscareer.com /murray_cataloging.htm.
- Brian Alley, "Specialization: Too Much of a Good Thing?," *Technicalities* 14, no. 4 (1994): 1, 10.
- 15. McCombs, "Public and Technical Services," 141.
- Marilyn K. Moody, "Reference Librarians and Technical Services Librarians: Who's Accountable?," *Reference Librarian* 17, no. 38 (1992): 191–92.
- 17. Bachus, "The Integration of Technical and Reader Services," 227, 260.
- Sharon Wallbridge, "New Partnerships within the Library," Journal of Library Administration 15, no. 1–2 (1991): 63.
- Pamela Bluh, "Truce or Consequences: the Relationship between Technical Services and Reader Services," *Technical Services Quarterly* 1, no. 3 (1984): 25; Naomi R. Sutherland and Valarie P. Adams, "Territorial Invasion or Symbiotic Relationship?," *College & Research Libraries News* 65, no. 1 (2004): 12.
- David Peele, "Staffing the Reference Desk," *Library Journal* 105, no. 15 (1980): 1710.
- Moody, "Reference Librarians and Technical Services Librarians," 195; Steven Seokho Chwe, "A Comparative Study of Job Satisfaction: Catalogers and Reference Librarians in University Libraries," *Journal of Academic Librarianship* 4, no. 3 (1978): 139–43.
- Ayanna Gaines, "That's Women's Work," in *The Librarian Stereotype*, ed. Nicole Pagowsky and Miriam Rigby (Chicago: ALA, 2014), 92.
- 23. Walbridge, "New Partnershipswithin the Library,"66; Alan Arro Smith, "Capturing the Social Memory of Librarianship," (PhD dissertation, University of Texas, Austin, 2013), 142, accessed October 17, 2015, https://repositories.lib.utexas.edu/bitstream /handle/2152/21671/SMITH-DISSERTATION-2013.pdf?se quence=1&isAllowed=y; Allyson Ard et al., "Why Library and Information Science? Results of a Career Survey of MLIS Students Along with Implications for Reference Librarians and Recruitment," *Reference & User Services Quarterly* 45, no. 3 (2006): 238, 240.

- 24. Bachus, "The Integration of Technical and Reader Services," 227.
- 25. Manley, The Truth about Reference Librarians, 96.
- 26. Manley, The Truth about Catalogers, 79.
- 27. Moody, "Reference Librarians and Technical Services Librarians,"192.
- 28. Bluh, "Truce or Consequences," 26.
- Elaine K. Rast, "Narrowing the Gap: Serials Service Improved by Cooperation Between Technical and Public Services," *Reference Librarian* 12, no. 27–28 (1990): 117; Gillian M. McCombs, "The Reference Librarian as Middleman: Conflicts between Catalogers and Reference Librarians," *Reference Librarian* 4, no.12 (1985): 25; Ruby E. Miller and Barbara J. Ford, "A Relationship Between Cataloging and Reference," *Texas Library Journal* 66, no. 1 (1990): 49; Antonia Olivas and Henry McCurley, "Working Across Divisional Lines: How One Large University Library Cross-Trains and Works as a Whole," *Library Administration & Management* 20, no. 2 (2006): 81–89.
- Moody, "Reference Librarians and Technical Services Librarians," 193; McCombs, "Public and Technical Services," 141; Sutherland and Adams, "Territorial Invasion or Symbiotic Relationship?," 14; Gillian M. McCombs, "Public and Technical Services: Disappearing Barriers," Wilson Library Bulletin 61, no. 3 (1986): 25–28; Senecal, "Crossing the Great Divide," 89.
- Eleanor Gossen et al., "Forging New Communication Links in an Academic Library: a Cross-Training Experiment," 18–21.
- 32. The survey was initially designed and conducted by Cathy Weng, The College of New Jersey and Amy Ward, Gettysburg College. The study results were analyzed and the manuscript was prepared by Cathy Weng and Erin Ackerman at The College of New Jersey.
- 33. William Fisher, "Core Competencies for the Acquisitions Librarian," Library Collections, Acquisitions, & Technical Services 25, no. 2 (2001): 179–90; Barbara I. Dewey, "Public Services Librarians in the Academic Community," in Leadership and Academic Librarians, ed. Terrence Mech and Gerard B. McCabe (Westport, Connecticut: Greenwood Press, 1998), 85–97. According to Fisher, core competencies of librarians consist of professional competencies (i.e., "occupation-related knowledge and skills that make one

technically proficient"), personal competencies (i.e., "individual traits, attitudes, and behaviors needed for success"), and educational competencies. Based on such, the survey authors developed the list of core qualities for the survey. Dewey's discussion of competencies for public services librarians were also incorporated into the six qualities used in the survey instrument.

- Joan M. Leysen and Jeanne M. K. Boydston, "Job Satisfaction among Academic Cataloger Librarians," College & Research Libraries 70, no. 3 (2009): 273–97.
- 35. Mara Cadinu et al., "Why Do Women Underperform Under Stereotype Threat? Evidence for the Role of Negative Thinking," Psychological Science 16, no. 7 (2005): 576.
- Jennifer Crocker and Brenda Major, "Social Stigma and Self-Esteem: The Self-Protective Properties of Stigma," *Psychological Review* 96, no. 4 (1989): 610.
- 37. Mark Chen and John A. Bargh, "Nonconscious Behavioral Confirmation Processes: The Self-Fulfilling Consequences of Automatic Stereotype Activation," *Journal of Experimental Social Psychology* 33, no. 5 (1997): 541–60.
- Francis J. Yammarino and Leanne E. Atwater, "Understanding Self-Perception Accuracy: Implications for Human Resource Management," *Human Resource Management* 32, no. 2-3 (1993): 231.
- Stephen W. Brown and Teresa A. Swartz, "A Gap Analysis of Professional Service Quality," *Journal of Marketing* 53, no. 2 (1989): 92–98.
- Isto Huvila et al., "What is Librarian 2.0–New Competencies or Interactive Relations? A Library Professional Viewpoint," *Journal of Librarianship & Information Science* 45, no. 3 (2013): 198–205.
- Laura Saunders, "Identifying Core Reference Competencies from an Employers' Perspective: Implications for Instruction," *College & Research Libraries* 73, no. 4 (2012): 390– 404.
- 42. Synthia P. Ruppel and Susan J. Harrington, "The Relationship of Communication, Ethical Work Climate, and Trust to Commitment and Innovation," *Journal of Business Ethics* 25, no. 4 (2000): 315.
- 43. Moody, "Reference Librarians and Technical Services Librarians," 193.
- 44. Ruppel and Harrington, "The relationship of communication, ethical work climate," 325.

Appendix. Survey Questions—Cross Perceptions of Public and Technical Services Librarians

Background information

For the purpose of this survey, the role of the public services librarian provides reference and instruction support, circulation/access services, reserves, interlibrary loan, scholarly communication, and digital commons/knowledge expertise.

The role of the technical services librarian provides support for electronic resources, serials, cataloging, acquisitions, collection development, and systems.

The creators of this survey recognize that your library may be organized a little different, however, please select a role with which you identify the most. (Survey respondents will be redirected to different sets of questions depending on the answer to question #1)

- 1. Please select the type of work you do.
 - a. Public services
 - b. Technical services

Demographic Questions

- 2. How long have you been in the library and information science profession?
 - a. 0-1 year
 - b. 1-5 years
 - c. 6-10 years
 - d. more than 10 years
- 3. Please select your institution type.
 - a. four-year college/university (primarily undergraduate programs)
 - b. four-year research university (with doctorate programs)
 - c. Community college
 - d. Other (e.g. public library, special library) (Please specify _____)
- 4. Please select the size of your library collection including both electronic and physical formats.
 - a. Less than 100,000 titles
 - b. 100,000–500,000 titles
 - c. 500,000–1 million titles
 - d. 1 million-3 million titles
 - e. More than 3 million titles
- $5. \quad Please \ select \ the \ size \ of \ your \ student \ body \ (if \ applicable).$
 - a. Less than 2,500
 - b. 2,500–5,000
 - c. 5,000–10,000
 - d. 10,000–20,000
 - e. More than 20,000

Questions for Technical Services Librarians

- 1. What are the core qualities of technical services librarians in support of the development of library and user needs? (rank from most to least)
 - a. Responsiveness to change
 - b. User-centered service philosophy
 - c. Collaborative nature
 - d. Adaptability to emerging technologies
 - e. Forward thinking
 - f. Motivation to start new initiatives or respond proactively
 - g. Other (Please describe _____)

- 2. What are the core qualities of public services librarians in support of user needs? (Likert chart— rank from most important to least important)
 - a. Responsiveness to change
 - b. User-centered service philosophy
 - c. Collaborative nature
 - d. Adaptability to emerging technologies
 - e. Forward thinking
 - f. Motivation to start new initiatives or respond proactively
 - g. Other (Please describe _____)
- 3. What do you think is the shared public services librarians' perception of technical services librarians? (Mostly agree to least agree)
 - a. Responsiveness to change
 - b. User-centered service mentality
 - c. Collaborative
 - d. Adaptability to emerging technologies
 - e. Forward thinking
 - f. Motivation to start new initiatives or respond proactively
 - . Inflexible
 - h. Disconnect from users
 - i. Reluctant to change
 - j. Care too much about MARC records
 - k. Other (Please specify _____
- 4. What current initiatives (projects) does your technical services department have in support of the institution mission and goals? (open ended)
- Do you agree or disagree with the statement, "Your technical services department currently provides support/service that has direct impact on library users."?
 a. Agree. Why ______
 - b. Disagree. Why _____
- 6. What changes would you like to see happen to the technical services position in a role integral to public services initiatives? (open ended)
- 7. In what ways have you sought out opportunities to collaborate with public services colleagues? Have they been successful? Any advice would you like to offer? (i.e. lessons learned) (open ended)
- 8. How do you see public services supporting the mission and goals of your institution? (open ended)

Questions for Public Services Librarians

- 1. What are the core qualities of public services librarians in support of the development of library and user needs? (Likert chart rank from most important to least important)
 - a. Responsiveness to change
 - b. User-centered service philosophy
 - c. Collaborative nature
 - d. Adaptability to emerging technologies
 - e. Forward thinking
 - f. Motivation to start new initiatives or respond proactively
 - g. Other (Please describe _____
- 2. What are the core qualities of technical services librarians in support of the development of library and user needs? (Likert chart—rank from most important to least important)
 - a. Responsiveness to change
 - b. User-centered service philosophy
 - c. Collaborative nature
 - d. Adaptability to emerging technologies
 - e. Forward thinking
 - f. Motivation to start new initiatives or respond proactively
 - g. Other (Please describe _____
- 3. What do you think is the shared public services librarians' perception of technical services librarians? (Mostly agree to least agree)
 - a. Responsiveness to change
 - b. User-centered service mentality
 - c. Collaborative
 - d. Adaptability to emerging technologies

- e. Forward thinking
- f. Motivation to take initiatives and actions
- g. Inflexible
- h. Disconnect from users
- i. Reluctant to change
- j. Care too much about MARC records
- k. Other (Please specify _____
- 4. Do you agree or disagree the statement, "Your technical services department currently provides support/ service that has direct impact on library users."?
 - a. Agree. Why _
 - b. Disagree. Why_
- 5. What role would you envision technical services play in public services initiatives?
 - a. Project management
 - b. Implementation
 - c. Conversation on planning
 - d. Usability
 - e. Technical support
 - f. Other (Please specify _____)
- 6. In what ways have you sought out opportunities to collaborate with technical services? Have they been successful? Any advice you would like to offer? (i.e. lesson learned) (open ended)
- 7. How do you see technical services supporting the mission and goals of your institution? (open ended)