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STRESS AND CATALOGING PARAPROFESSIONALS IN ACADEMIC AND PUBLIC LIBRARIES IN FLORIDA

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Introduction

Over the years and particularly with the advent of OCLC, more and more tasks once considered the realm of the professional cataloger area being completed by paraprofessionals. This article confines itself to the cataloging paraprofessional, the cataloging record, workload, and training. Who is creating the cataloging record, or, if not responsible for the record in its entirety, who is responsible for parts of it? Does the assuming these higher level tasks, such as creating the call number and subject headings, cause any undue stress for the paraprofessional? What is the stress from workload and pace?

Literature Review

The stress concept has had a variety of meanings and theories. Terms in this paper are “stressors” (from the environment) and “stress reactions” (in the individual). Sonnentag and Frese note that one category of stressors is “task-related job stressors.” Included in this category are “high time pressure,” “work overload,” and “high complexity” among others. One prevention of stress (stress invention or moderator) is increase in skills or competencies (Frese, 2003) which in this paper is referred to as “training.”

The literature of “job stress,” “work stress,” and “occupational stress” is quite extensive. In considering the factor of stress called work overload, French and Caplan (1972) found that not only was overload prevalent but that a distinction can be made between qualitative (too easy – too difficult) and quantitative (too little – too much) overload. Newton and Keenan (1987) noted that time pressure is also important – “More work than can be done in the allotted time.” Bolino and Turnley (2005) concluded that overload is highly correlated to stress. Spector and Jex (1998) noted that “workload concerns

tasks more than people.”

One category of moderators of stress is training, experience, longevity, or age. Articles by Pronto and Leith (1956), Capretta and Berkun (1962), Harvey and Raider (1984), Whitehead (1987) and Lee and Ashforth (1993) indicate that people differ in the amount of stress as a function of experience. Pronto and Leith (1956) experimented with groups both prepared and unprepared for possible emergencies. Those with training had the least “behavior disintegration.” (Leith, 1956) Capretta and Berkun (1962) reported that those with prior experience had “significant reduction in reported stressfulness.” Harvey and Raider (1984) concluded that a potential moderator for stress is “advanced education.” Whitehead (1987) concluded that there was an inverse relationship between age and stress – that more experienced workers could share coping skills with newly hired staff. Lee and Ashforth (1993) concluded that job tenure moderated several of the effects of stress such as “exhaustion” and ‘depersonalization.’ Theorell, Emdad, Arnetz, and Weingarten (2001) reported that training lowered serum cortisol levels in managers who attended biweekly training sessions for sixty hours.

There are a few studies regarding stress in libraries but mostly in regard to librarians. Caputo (1991) reviewed seven studies from the 1980’s on librarian burnout. Stressors, pertinent to this study, that Caputo identified by reviewing the literature of library science and others professions included: “frequent technological changes,” “heavy workloads,” and “the constant need for speed.” Library research cited by Caputo included: Smith and Nelson (1983a), Smith and Nelson (1983b), Smith, Birch and Marchant (1984), Haack, Jones, and Roose (1984), Smith, Watstein, and Wuehler (1986), Taler (1984), and

Bunge (1987). The samples in these studies were composed of reference librarians, library school students, and library directors mostly with the exception of Bunge which will be discussed below. They were also concerned with burnout which is beyond the scope of this study.

Fimian, Benedict, and Johnson (1989) studied stress and burnout in media specialists (30% had only a bachelors degree). They found that “time and workload problems caused the most stress for the specialists.”

Sharpley, Reynolds, Acosta and Dua (1996) conducted a survey in Australia of university faculty and staff. The survey included 3.1% library staff but they did not differentiate between librarians and paraprofessionals. They concluded that “age appears to moderate the incidence of self-perceived anxiety and daily hassles.”

Merwin (2003) conducted a survey of 35 academic librarians in South Carolina. The survey was entitled, “Librarians and Stress.” When asked if they ever felt stressed at work, 77% responded yes. Four types of “non-human sources of job related stress” were measured: “too much work, not enough time” (57%), “constantly learning new technology (29%), “constantly learning new procedures” (20%), and “having tasks assigned minus the authority” (9%). In this survey, the “overwhelming number” of the respondents held “the top position in their library. Ennis wrote a thesis in 1995 on “Technostress in the Reference Environment” and updated it ten years later. She found that the biggest stressors were “pace of change” and “lack of technological standardization.” Training was recommended for relief. In the technology area, studies by Mikkelsen, Ogaard, Lindoe, and Olsen (2001), Beckers and Schmidt (2001), and Venkatesh (2000) found that training reduced computer anxiety.

Siamian, Shahrabi, Vahedi, Rad, and Cherati (2006) reviewed five studies from 1990-2001 regarding stress and burnout primarily in bibliographic instruction librarians. They also conducted their own research project on “stress and burnout” in academic libraries in Iran. Libraries cited included: Patterson and Howell

(1990), Becker (1990), and Affleck (1996). Their research was concerned with bibliographic instruction librarians.

The only research on library staff and stress was conducted by Charles A. Bunge and Dorothy Jones. Bunge conducted workshops and tallied the comments regarding stress. Support staff reported that workload (9.2 %), inadequate training, knowledge (5.3%), frustrations on the job (including fear of making mistakes) (3.9%) were among the stressors on the job. Dorothy Jones surveyed the library staff of three university libraries in 1988 and 1998 regarding technology in the workplace. Regarding whether technology made work more stressful, “only 7.1 percent of the staff reported job difficulty as a source of job stress but 12.7 percent indicated that insufficient training is a source of job stress.” Specifically, “there is too little training,” “things are too complicated,” “the rate of change is too fast,” and “the pressure to produce is unrealistic.”

No one has researched stress, cataloging paraprofessionals, the cataloging record, and training.

Methodology

One of the most popular methods of data collection in stress research is self report. Spector and Jex (1998) say that there is a “sound theoretical reason behind this” and cite three reasons: (1) “perceptions represent an important mediating process in the occupational stress process” (2) many of the strains are psychological in nature so the “only viable means of measurement is to ask people how they feel,” (3) that “objective measures can be less accurate measures than self-reports.” Dollard and Jonge (2003) concluded also that in regard to self-report methods, “empirical evidence has provided support for the accuracy of self-report measures.”

A research instrument was developed for measuring work stress in cataloging paraprofessionals by constructing a test similar in design to a test developed by Ivancevich and Matteson (1980). In this test, the worker selects one of the three options on a scale from “rarely,” “sometimes,” and “often.”

In the spring of 2006, ninety-seven questionnaires were sent to academic and public libraries in Florida. Fifty-one were sent to academic libraries with thirty-four returned for a return rate of 66.6 per cent. Forty-six were sent to public libraries with 29 returned for a return rate of 63 per cent. Each envelope contained one questionnaire for a cataloging librarian and one questionnaire for a cataloging paraprofessional. Also, a postcard was included for each librarian and paraprofessional to drop in the mail when the questionnaire was returned so that I would be alerted as to who had returned their questionnaires and still allow the questionnaires to be anonymous. The librarians were asked the same questions to establish validity. The answers of the librarians and paraprofessionals corresponded closely throughout the study. Maslach and Jackson (1981) note that “one type of validating evidence comes from outside observers whose independent assessments of an individual’s experience corroborate the individual’s self rating.” Because of this close correspondence between the ratings of the librarians and the paraprofessionals and for the sake of clarity, only paraprofessional statistics will be reported.

The libraries were chosen from the 2004 Florida Library Directory with Statistics for Public and Academic Libraries. This directory is maintained by the State Library and the Archives of Florida. The criteria for selection into this study included the following: a cataloging paraprofessional must work at the library, and the library must have at least 70,000 titles. The size was applied in order that the libraries selected did have a paraprofessional devoted to cataloging.

The size of the libraries varied from 70,000 to 4 million titles. However, 27 of 63 (42.9%) were in the range of 150,000 to 499,999 titles. Those libraries with over 500,000 titles made up 17 of 63 (27%). The smallest libraries (70,000 to 149,999) made 16 of 63 (25.4%). Data was missing for 3 of 63 (4.8%). The sample is quite evenly divided between public and academic libraries with 34 of 63 (54%) being academic libraries and 29 of 63 (46%) being public libraries.

Using the US mail was chosen over email because the research showed that the response rate for the US mail was higher than for email. One initial request with two follow-up requests were sent in order to receive the most responses possible. As noted by Bourque and Fielder (2003), “to date, online survey response rates appear to fall well below those of mail surveys.” Data was analyzed using Fisher’s Exact Test (which is used for small samples and two categories in contingency tables).

Results

There is no significant difference between the responses of the academic and the public libraries except for type of classification used. One hundred per cent of the academic libraries reported using the Library of Congress Classification while 100 per cent of the public libraries used the Dewey Decimal Classification.

Who are we?

The questionnaires allow a picture to be drawn of paraprofessionals in academic and public libraries in Florida. Twenty-four of the 63 respondents (38.1%) have less than five years experience in cataloging. Twenty-four of sixty-three (38.1%) have 5-15 years of experience. And 15 of 63 (23.8%) have over 15 years of experience. Fifty-eight of the sixty-three (92.1%) work more than 30 hours per week. Their educational attainment includes: 21 of 63 (33.3%) have a high school education or some college, 18 of 63 (28.6%) have an associate’s degree, and 24 of 63 (38.1%) have a B.S. degree or higher.

The usual definition for paraprofessionals is that they do not have a master’s degree in library science. This is true in this study also with the exception of three individuals with a master’s in library science working in a paraprofessional position. In the past, a definition of paraprofessionals in cataloging were those who did only copy cataloging but this has not been true for sometime as will be shown below.

What do we do?

Forty-two (66.7%) of the 63 libraries have

paraprofessionals doing at least one aspect of original cataloging (once considered the domain of the professional cataloger). In 20 libraries (31.7%), one paraprofessional is doing aspects (parts) of original cataloging. In 16 libraries (25.4%), two to four paraprofessionals are doing aspects of original cataloging. In six libraries (9.5%), five or more paraprofessionals are doing aspect of original cataloging.

For this study, original cataloging involved “creating” rather than “checking.” I investigated five aspects of original cataloging: (1) creating the description, (2) choosing the non-subject entry headings, (3) determining the form of the non-subject entry headings, (4) assigning the subject headings and (5) assigning the classification number.

Five Aspects of Original Cataloging

Paraprofessionals were asked whether the above five aspects of original cataloging were “not important,” “desirable,” or “essential” for them to be able to do. As seen in Table 1, paraprofessionals overwhelmingly thought that these five aspects of original cataloging were “desirable” or “essential” for them to be able to do. Thirty-eight of 39 (97.4%) respondents think that being able to transcribe the description is a “desirable” or “essential” skill. The lowest aspect considered “desirable” or “essential” was the “entire record” with 34 of 38 (89.5%) Respondents indicated that subject headings were considered “desirable” and “essential” by 35 of 39 (89.7%) and classification by 35 of 38 (92.1%).

Format Complexity

The book format was most often designated as “desirable” or “essential” to know with 37 of 40 (92.5%) of the paraprofessionals responding that this was important. Following in importance were videos (31 of 38 - 81.6%), electronic resources (27 of 39 - 69.1%) and sound recordings both with 26 of 38 (68.4%), continuing resources (22 of 37 - 56.4%), and music (20 of 38 - 52.7%) with all respondents indicating “desirable” or “essential” knowledge. There is a high percent of some formats that are not considered important

by the paraprofessionals: 3-dimensional objects (30 of 37 - 81.1%), graphic materials (27 of 38 - 71.1%), micro-materials (26 of 37 - 70.3%), and cartographic (27 of 39 - 69.2%) It is possible that these other formats are cataloged by librarians or could just be cataloged in limited numbers.

Stress

In this study, stress coming from three sources is considered: the environment, the cataloging record, and the format of the material. Stress from the environment covered five concepts: (1) “It is hard not to make any mistakes” (2) “There is so much to know” (3) “It is hard to keep up with the changes” (4) “I have to work fast” and (5) “I have to balance the requests from different depts.”

Stress from the Environment

In Table 2 below, we can see that stress coming from the environment is “sometimes” noticed by 40.5% and “often” noticed by 10.5%. Or, in other words, over 50% of paraprofessionals in cataloging report “sometimes” or “often” have stress because of qualitative or quantitative overload. Sixty-one per cent (25 of 41) of the respondents reported “sometimes” or “often” feeling stress because there is “so much to know.” Reported as over 50% were also the topics “It’s hard not to make mistakes” (22 of 40 - 53.7%) and “It’s hard to keep up with changes” (22 of 41 - 53.7%).

Stress from the Cataloging Record

In regard to the cataloging record, assigning subject headings and classification numbers cause the most stress. Assigning subject headings “sometimes” or “often” causes stress for 5 of 14 (35.7%) of the paraprofessionals reporting. Assigning classification numbers “sometimes” or “often” causes stress for 15 of 34 (44.1%) of the paraprofessionals. From the chart, we see that more of the paraprofessionals are assigning classification number (34 of 41) than are assigning subject headings (14 of 41).

Stress from the Format

Respondents indicated that cataloging books

“rarely” causes stress for 27 of 38 (71.1%), but cataloging books “sometimes” causes stress for 9 of 38 (23.7) and “often” for 2 of 38 (5.3%). Cataloging videos “sometimes” or “often” causes stress for 13 of 26 (50.0%). Cataloging electronic resources “sometimes” or “often” causes stress for 13 of 18 (72.2%) of the paraprofessionals. Because of the low number of responses in regard to stress and certain formats such as cartographic, graphic, 3-dimensional, and micro-materials – these topics having ten respondents or less – I have concluded that a librarian catalogs these formats or that these are cataloged in limited numbers.

Training Needs by Cataloging Record

The primary need for training for aspects of original cataloging is in the areas of subject headings and classification. Of the 41 subjects who did aspects or original cataloging over 50% thought they needed more training in assigning subject headings (69.0%) and classification (57.1%). Respondents indicated that training is also needed for determining the form of the non-subject access points (40.5%), choosing the non-subject access points (38.1%), and description (28.6%).

Training Needs for Format

More than 50% (22 of 41) of the paraprofessionals indicated a need for more training in electronic resources. Over 40% indicated that they needed more training in books, sound recordings, and videos. The lowest need for training was for continuing resources but even that was at 10 of 31 (24.4%).

From the above data, it is evident that paraprofessionals think that they need training in many areas. With all these additional responsibilities, it is important that paraprofessionals have access to these programs. In 28 of 38 (73.7%), the training opportunities for paraprofessionals is the same as for librarians. However, in 10 of 38 (26.3%), the training opportunities are less. Respondents indicated that the complexity of tasks and also productivity for cataloging paraprofessionals is increasing. In addition, about 41 of 42 (97.6%) of the

respondents think that good training lessens stress.

Discussion

Four articles discussing paraprofessionals taking over aspects of original cataloging once considered the purview of professional catalogers were published in the 1980's and 1990's. In two surveys between 1983 and 1987, Eskoz observed a “modest trend” from 32.5% to 35.0% in the number of libraries involving paraprofessional staff in assigning subject headings and from 27.5% to 35% involving classification. Oberg, Mentges, McDermott, and Harusadangkul in the 1992 national survey reported that cataloging paraprofessionals were being assigned to tasks not traditionally assigned to them. In 1997, Deborah A. Mohr and Anita Schuneman reported that 77.1% of the department heads at responding ARL libraries said that paraprofessional were involved at least one of the original cataloging activities with original description ranking the highest and subject analysis the lowest. In 1999 study by Sever Bordeianu and Virginia Seiser, 67% of the libraries use paraprofessionals in original cataloging. In this study, 66.7% of the responding academic and public libraries in Florida did at least one aspect of original cataloging. Of the 63 libraries, 42 libraries had paraprofessionals doing aspects of original cataloging. This survey reports similar numbers to these 1990's studies. However, one question that has not been answered by the literature is whether these tasks once considered in the realm of the professional librarian are causing stress for the paraprofessional. Also, stress can be caused by factors in the environment such as overload. As noted above, 97.6% of the respondents think that good training reduces stress.

In order to investigate this further, Fisher's Exact Test was used (because of the small sample size and because only two factors were involved) to compare the stress from the environment, the cataloging record, and the format with the years of experience (which this study has equated with training). Experience is broken down into three categories: “Less than 5 years,” “5-15 years” and “Over 15 years.”

Stress from the Environment: Experience/Training

Twenty-two of 41 (53.6%) of the respondents “sometimes” or “often” feel stress at “not making any mistakes.” These respondents who “sometimes” or “often” feel stress at not making mistakes could be experiencing either quantitative or qualitative overload. A careless mistake made in haste would be quantitative overload. On the other, a mistake in the cataloger’s judgment would be qualitative mistake. However, those with the most experienced (over 15 years) did not significantly have less stress than the least experienced (less than 15 years).” The category, “There is so much to Know,” is an example of qualitative overload. Sixty-one per cent (25 of 41) of the paraprofessionals report experiencing stress “sometimes” and “often.” The category of environmental stress, “It’s hard to keep up with changes” is qualitative overload. Twenty-two of 41 (53.6%) paraprofessionals “sometimes” or “often” feel stress in keeping up with changes. Again, the statistics do not indicate that experience lessens stress. Having to work fast is an example of quantitative stress. In this category, 19 of 41 (46.4%) indicated that they “sometimes” or “often” have to work fast. Balancing requests causes the least stress of the five examples of overload in this study. Respondents (14 of 41 - 41.2%) indicated that this factor caused stress “sometimes” or “often.” This factor also did not show significantly less stress for experienced paraprofessionals than those with less experience. In fact, none of the stress factors from the environment indicated that experience significantly lessens stress. The most experienced paraprofessionals reported as much stress as the least experienced.

Stress from the Cataloging Record: Experience/Training vs. Subject Headings

Assigning subject headings and classification numbers caused the most stress for paraprofessionals when working on the cataloging record. Assigning subject headings causes stress “sometimes” or “often” as reported by 15 of 35 (42.9%) respondents. Years of experience did not significantly lessen stress.

Stress from the Cataloging Record: Experience/Training vs. Classification

Assigning classification numbers seems to show some relationship between experience/training but not at the .05 level of significance. Fisher’s Exact Test indicates that the relationship is at the .1875 level. Nine with “over 15 years” experience “rarely” experienced stress when assigning classification numbers nearly double the numbers for the less experienced.

Stress from the Format: Experience/Training vs. Formats

None of the formats created significantly less (.05) stress for experienced staff than for less experienced staff.

In this sample, years of experience/training did not lessen the stress at the .05 level. Reasons for not reaching the .05 level could include the following: in libraries as staff gain experience they are most often assigned more difficult tasks, that years of experience does not directly equate to amount of training, or the sample may have been too small.

It would be interesting to know the amount of stress felt by professional catalogers in comparison to the stress felt by cataloging paraprofessionals as professional catalogers have had significantly more training. It would also be interesting to know what else besides “tasks” cause stress in paraprofessionals and also in professional catalogers.

Conclusions

This research shows that cataloging paraprofessionals are experiencing stress from the environment, from the cataloging record, and from the format. Training is recommended as a source to moderate stress. Respondents thought that training moderated stress. They noted, in particular, the need for more training in subject headings, classification, and the format electronic resources. Cataloging paraprofessionals will continue to take on tasks once considered only within the purview of the cataloging professionals and they will need continuing training to meet these new challenges and to moderate the

References

| | Not Important | Desirable | Essential | Total |
|------------------|---------------|-------------|-------------|-------|
| Description | 1 (2.6 %) | 7 (17.9%) | 31 (79.5 %) | 39 |
| Choosing Entries | 3 (7.7 %) | 12 (30.8 %) | 24 (61.5 %) | 39 |
| Form of Entries | 4 (10.3 %) | 12 (30.8%) | 23 (59.0%) | 39 |
| Subject Headings | 4 (10.3 %) | 10 (25.6 %) | 25 (64.1%) | 39 |
| Classification | 3 (7.9%) | 6 (15.8 %) | 29 (76.3 %) | 38 |
| Entire Record | 4 (10.5 %) | 15 (39.5 %) | 19 (50.0 %) | 38 |

| | Rarely | Sometimes | Often | Total |
|------------------|-------------|-------------|------------|-------|
| Mistakes | 19 (46.3 %) | 19 (46.3 %) | 3 (7.3 %) | 41 |
| Knowledge | 16 (39.0 %) | 20 (48.8 %) | 5 (12.2 %) | 41 |
| Changes | 19 (46.3 %) | 16 (39.0 %) | 6 (14.6 %) | 41 |
| Work fast | 22 (53.7 %) | 15 (36.6 %) | 4 (9.8 %) | 41 |
| Balance requests | 20 (58.8 %) | 11 (32.4 %) | 3 (8.8 %) | 34 |
| Average | 48.8 % | 40.6 % | 10.5 % | |

| | Rarely | Sometimes | Often | Total |
|-------------------|-------------|-------------|-----------|-------|
| Description | 28 (77.8 %) | 7 (19.4 %) | 1 (2.8 %) | 36 |
| Choice of Heading | 24 (75.0 %) | 7 (21.9 %) | 1 (3.1 %) | 32 |
| Form of Heading | 24 (77.4 %) | 6 (19.4 %) | 1 (3.2 %) | 31 |
| Subject Headings | 9 (64.3 %) | 4 (28.6 %) | 1 (7.1 %) | 14 |
| Classification | 19 (55.9 %) | 12 (35.3 %) | 3 (8.8 %) | 34 |
| Average | 70.1 % | 26.7 % | 4.4 % | |

| Experience | Stress of Assigning Subject Headings | | | |
|-----------------|--------------------------------------|------------|----------|------------|
| | Rarely | Sometimes | Often | Total |
| Less than 5 yrs | 9 (25.7%) | 2 (5.7%) | 0 (0%) | 11 (31.4%) |
| 5-15 yrs | 4 (11.4%) | 6 (17.1%) | 2 (5.7%) | 12 (34.3%) |
| Over 15 yrs | 7 (20.0%) | 4 (11.4%) | 1 (2.9%) | 12 (34.3%) |
| Total | 20 (57.1%) | 12 (34.3%) | 3 (8.6%) | 35 (100%) |

| Experience | Stress of Assigning Classification Numbers | | | |
|-----------------|--|------------|----------|-------------|
| | Rarely | Sometimes | Often | Total |
| Less than 5 yrs | 5 (14.7%) | 5 (14.7%) | 1 (2.0%) | 11 (32.4%) |
| 5-15 yrs | 5 (14.7%) | 5 (14.7%) | 1 (2.9%) | 11 (32.4%) |
| Over 15 yrs | 9 (26.5%) | 2 (5.9%) | 1 (2.9%) | 12 (35.3%) |
| Total | 19 (55.9%) | 12 (35.3%) | 3 (8.8%) | 34 (100.0%) |

References

- Affleck, M. A. (1996, Spring). Burnout among bibliographic instruction librarians. *Library and Information Science Research*, 18(2), 165-183.
- Becker, K. A. (1993, Spring). The Characteristics of bibliographic instruction in relation to the causes and symptoms of burnout. *RQ*, 32(3), 346-357.
- Beckers, J. J., & Schmidt, H. G. (2001). The Structure of computer anxiety: a six-factor model. *Computers in Human Behavior*, 17, 35-49.
- Bolino, M. C., & Turnley, W. H. (2005, July). The Personal costs of citizenship behavior: the relationship between individual initiative and role overload, job stress, and work-family conflict. *Journal of Applied Psychology*, 90(4), 740-748.
- Bordeianu, S., & Seiser, V. (1999, November). Paraprofessional catalogers in ARL libraries. *College and Research Libraries*, 60, 532-540.
- Bunge, C. A. (1987, September 15). Stress in the library. *Library Journal*, 47-51.
- Capretta, P. J., & Berkun, M. M. (1962). Validity and reliability of certain measures of psychological stress. *Psychological Reports*, 10, 875-878.
- Caputo, J. S. (1991). *Stress and Burnout in Library Service*. Phoenix: Oryx.
- Dollard, M. F., & Jong J. D. (2003). Measurement and methodological issues in work stress research. In M. F. Dollard, A. H. Winefield, & H. H. Winefield, (Eds.), *Occupational Stress in the Service Professions*. (p. 75-101). London: Taylor and Francis.
- Ennis, L. A. (2005, September). The Evolution of technostress. *Computers in Libraries*, 25(8), 10-12.
- Eskoz, P. A. (1990, July). The Catalog librarian: change or status quo? Results of a survey of academic libraries. *Library Resources and Technical Services*, 34(3), 380-392.
- Fimian, M. J., Benedict, S. A., & Johnson, S. (1989). The Measure of occupational stress and burnout among library media specialists. *Library and Information Science Research*, 11, 3-19.
- French, John R. P., Jr., & Caplan, R. D. (1972). Organizational stress and individual strain. In A. J. Marrow (Ed.), *The Failure of Success* (p. 30-66). New York: AMACOM.
- Frese, M., & Sonnentag, S. (2003). Stress in organizations. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski, (Eds.), *Handbook of Psychology* (p. 453-491). Hoboken, NJ: Wiley.
- Haack, M., Jones, J. W., & Roose, T. (1984). Occupational burnout among librarians. *Drexel Library Quarterly*, 20, 46-72.
- Harusadangkul, V., McDermott, P. N., Mentges, M. E., & Oberg, L. R. (1992, May). The Role, status and working conditions of paraprofessionals: a national survey of academic libraries. *College and Research Libraries*, 37, 215-238.
- Harvey, S. H., & Raider, M. C. (1984, Summer). Administrator burnout. *Administration in Social Work* 8(2), 81-89.
- Howell, D. W., & Patterson, C. D. (1990, Summer). Library user education: assessing the attitudes of those who teach. *RQ*, 513-524.

- Ivancevich, J. M., & Matteson, M. T. (1980). *Stress and Work: a Managerial Perspective*. Glenview, IL: Scott, Foresman.
- Jones, D. E. (1999, Spring). Ten years later: support staff perceptions and opinions on technology in the workplace. *Library Trends*, 47(4), 711-745.
- Lee, Raymond T., & Ashforth, B. E. (1993). A Longitudinal study of burnout among supervisors and managers: comparisons between the Leiter and Maslach (1988) and Golembiewski et al. (1986) models. *Organizational Behavior and Human Decision Processes*, 54, 369-398.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99-113.
- Merwin, E. O. Jr. (2003, February). Uptight in libraryland: a confirmation of stress in South Carolina academic libraries. *Against the Grain*, 15(1), 28-34.
- Mikkelsen, A., Ogaard, T., Lindoe, P. H., & Olsen, O. E. (2002, May). Job characteristics and computer anxiety in the production industry. *Computers in Human Behavior*, 18(3), 223-239.
- Mohr, D. A., & Schuneman, A. P. (1997, July). Changing roles: original cataloging by paraprofessionals in ARL libraries. *Library Resources and Technical Services*, 41, 205-218.
- Newton, T. J., & Keenan, A. (1987). Role stress reexamined: an investigation of role stress predictors. *Organizational Behavior and Human Decision Process*, 40, 346-368.
- Pronto, N. H., & Leith, W. R. (1956). Behavior under stress: a study of its disintegration. *Psychological Reports*, 2, 205-222.
- Sharpley, C. F., Reynolds, R., Acosta, A., & Dua, J. K., (1996). The Presence, nature and effects of job stress on physical and psychological health at a large Australian university. *Journal of Educational Administration*, 34(4), 3-81.
- Siamian, H., Shahrabi, A., Vahedi, M., Rad, A. M. A., & Cherati, J. Y. (2006). Stress and burnout in libraries and information centers. In A. S. Chaudhry, D. Chaudhry, & C. Khoo, (Eds.), *Proceedings of the Asia-Pacific Conference on Library and Information Education & Practice 2006 (A-LIEP 2006): Preparing Information Professionals for Leadership in the New Age: Singapore, 3-6 April 2006*. (p. 263-268). Singapore: Division of Information Studies, Nanyang Technological University.
- Smith, N. M., Birch, N. E., & Marchant, M. P. (1984, Fall). Stress, distress, and burnout: a survey of public reference librarians. *Public Libraries*, 83-85.
- Smith, N. M., & Nelson, V. C. (1983a). Burnout: a survey of academic reference librarians. *College and Research Libraries*, 44, 245-250.
- Smith, N. M., & Nelson, V. C. (1983a). Helping may be harmful: the implications of burnout for the special librarian. *Special Libraries*, 7, 14-19.
- Smith, N. M., Watstein, S. B., & Wuehler, A. C. (1986). Burnout and social interest in librarians and library school students. In ERIC Document Reproduction Service: ED 290 493.
- Spector, P. E., & Jex, S. M. (1998, October). Development of four self-report measures of job stressors and strain: interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational health Psychology* 3(4), 356-367.

Taler, I. (1984). *Burnout: a survey of library director's views*. ERIC Document Reproduction Service: ED 283 524.

Theorell, T., Emdad, R., Arnetz, B., & Weingartern, A. (2001). Employee effects of an educational program for managers at an insurance company. *Psychosomatic Medicine*, 63, 724-733.

Venkatesh, V. (2000, December). Determinants of perceived ease of use: integrating control, intrinsic motivation and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342-365.

Whitehead, J. T. (1987). Probation officer job burnout: a test of two theories. *Journal of Criminal Justice*, 15, 1-16.