I. REPORT CHECKLIST

The following checklist must be completed and submitted with the project report. By checking an item, *the student and advisor(s) agree that the work has been done appropriately*.

__X__1.	If the research report will be or has been submitted for publication in a journal, provide the name of the journal here: _____

__X__2.	Project title is concise and clear; lists advisers, course no. & date submitted

__X__3.	Abstract is no more than 250 words and retains headings

__X__4.	Introduction provides a definition of the topic under study, the importance of the topic, and the issue addressed by the study and is no more than two (2) pages.

__X__5.	There is NO literature review section

__X__6.	Purpose(s) of project is clearly and concisely stated

__X__7.	Methods section uses headings and represents a summary of the methods used.

__X__8.	Data analysis described is appropriate and responds to the purpose.

__X__9.	Appropriate tables are included in the results section.

__X__10.	Text of results section interprets the findings reported in the tables, not repeating them.

__X__11.	The discussion section includes a description of the most important findings, and relates findings to the literature.

__X__12.	The final section of the discussion is the limitations section.

__X__13.	The conclusions respond to the purpose statement.

__X__14.	Reference list uses style from DI class (PhPr 861c) or is specific to journal.

__X__15.	Data collection/recording form(s) and/or questionnaire(s)are included in the appendix.

__X__16.	Information is placed in the appropriate section—introduction, methods, results, etc.

__X__17.	Report does not exceed 15 pages excluding tables & figures & appendices.

Date report submitted: April 02, 2018
Student: Kristin Fung
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Title Page

Title of project:

Evaluation of Community Pharmacists' Job Satisfaction Related to Professional Responsibilities

Course Title: PhPr 896b

Date: April 02, 2018

Faculty Advisor: Dr. Dan Malone

Students: Kristin Fung, Whitney Nichols, Amanda Singer

ABSTRACT

Specific Aims: To assess overall job satisfaction among community pharmacists and identify factors that improve job satisfaction and ability to perform professional responsibilities.

Methods: The subjects of this study were Arizona licensed pharmacists, greater than 25 years old, who were employed with a community chain pharmacy including CVS, Safeway, Walgreens or Walmart. This study used a focus group to ascertain perceptions and satisfactions. Participants completed a questionnaire prior to the focus group that assessed satisfaction with their current employment including workplace, compensation, paid time off, and computer system. Demographic data including gender, age, ethnicity, and years of pharmacy practice were collected. Focus group questions included job satisfaction related to staff support, technology, workflow processes, work/life balance, services provided, company respect, job expectations and roles, and expected longevity in the company.

Main Results: A total of 8 persons from four different pharmacy organizations participated in the study. The median age was 31.5 (SD = 9.7) and the median years of practice was 6.5 (SD = 9.7). Overall, all pharmacists reported they were satisfied in their workplace and paid time off, felt that they are adequately compensated for their work, and envisioned themselves with the same company in 10 years. Pharmacists from two organizations stated that their computer systems adequately identified drug interactions whereas pharmacists from the other two organizations disagreed. During the focus group, most pharmacists identified patient interaction as their favorite aspect of their job.

Conclusions: Community chain pharmacists job satisfaction was high and similar among the pharmacy organizations represented in the sample. [250 words]

INTRODUCTION

Chain community pharmacists have the opportunity to provide comprehensive patient care by managing patient's medications, providing immunizations, and consulting on medications. Community pharmacists play an important role in healthcare by providing these clinical services while also verifying medications for drug interactions and monitoring patients' drug adherence. Responsibilities for pharmacists may vary depending on the chain pharmacy, but overall, clinical responsibilities are relatively similar. These are important responsibilities and only account for a small portion of the total expectations set for pharmacists. Tasks that may vary between pharmacies include managing pharmacy staff, meeting metrics set by corporate businesses, and following a workflow process. These responsibilities are essential in the role that pharmacists play in patient's healthcare. There are factors that may impact the efficiency of pharmacists completing these tasks in addition to influencing overall job satisfaction.

The target population for the study is Arizona pharmacists who work as either manager, staff, or floating community pharmacists and have not been assessed for how factors may impact their overall job satisfaction. This study will establish a better understanding of barriers that pharmacists may face and how their overall job satisfaction is affected. Because the study is only surveying chain community pharmacists in Arizona, this study may not be generalizable to other populations.

The purpose of this study is to evaluate satisfaction of community pharmacists related to various job responsibilities expected of pharmacists in different community pharmacy chains including CVS, Safeway, Walgreens, and Walmart.

METHODS

Design This was a focus group evaluation of job satisfaction among community chain pharmacists.

Subjects Pharmacists were eligible to participate in this study if they were greater than 25 years old, an Arizona licensed pharmacist and employed with a community chain pharmacy including Costco, CVS, Fry's, Safeway, Walgreens or Walmart. Flyers concerning the focus groups were distributed by study investigators to Costco, CVS, Fry's, Safeway, Walmart and Walgreens pharmacies in the Tucson area. The study was limited to 10 participants, with no more than 3 pharmacists from the same organization. To ensure anonymity of each chain organization, pharmacies were referred to as Organization A, B, C, and D. The study was approved by the University of Arizona Human Subjects Protection Program Institutional Review Board (IRB).

Measures: Data were collected from all pharmacists using a questionnaire consisting of 26 total questions. The survey was adapted using a survey from Hincapie et al.[1] Pharmacists were asked to answer 10 questions related to their work site and 6 questions related to their job satisfaction. The remaining 10 questions focused on demographic data on gender, age, ethnicity, years of pharmacy practice, degrees attained, certifications held, and their current community pharmacy employer and position. The focus group had 11 questions total concerning staff support, technology, work flow process, work/life balance, services, compensation, company respect, job expectations, and longevity. See Appendix A for a copy of the questionnaire.

Data Collection A focus group was hosted at a restaurant in Tucson, Arizona on June 6, 2017. After providing informed consent, subjects were instructed to complete a questionnaire prior to the discussion. To ensure an accurate accounting of opinions and answers to questions, the focus group was recorded.

Data analysis Continuous data were summarized using medians.[2] All qualitative data derived from the focus group was digitally recorded, transcribed verbatim, and de-identified. Three investigators collectively sorted and analyzed discussion data.[3]

RESULTS

A total of 34 pharmacies were provided letters of participation with an intended sample of 10 participants. Eight pharmacists, representing four different chain community pharmacies, attended the focus group and completed the questionnaire prior to the focus group on attitudes towards their workplace. The demographic characteristics of the pharmacists in this study are shown in Table 1. Pharmacists were similar with respect to their degree and certifications attained, with 7 pharmacists having a Doctorate of Pharmacy degree and also immunization certification. Pharmacists varied in age (median 31.5; range from 27 to 50), ethnicity, years of pharmacy practice (median 6.5; range from 1 to 25), and current pharmacist position (75% were staff pharmacists).

Overall Job Satisfaction

When asked if the pharmacists feel like their role as a health care provider has been fulfilled, the participants responded with a unanimous "yes" during the focus group. In comparison, the questionnaire demonstrates similar satisfaction at each workplace with each pharmacy's study subjects in agreement or

strong agreement that they are currently satisfied (Table 2). Both the questionnaire and focus group also addressed longevity with the company as a means to determine job satisfaction. Seven (87.5%) pharmacists said they see themselves working at the same job in 10 years. A representative from Organization C stated: "I like what I do to keep me there but I'll do it for me, not because I need the money." Another pharmacist from Organization C mentioned an interest in exploring specialty care and a pharmacist from Organization D expressed an interest in long term care pharmacy. This was similarly represented in the focus group questionnaire where a pharmacist from Organization D strongly agreed and the other 7 pharmacists agreed upon envisioning themselves working for the same company in 10 years. 100% of pharmacists also expressed satisfaction with their compensation, with a pharmacist from Organization D stating, "I think we are fairly paid. I think we have no complaints here. At least I don't have any complaints. I think we get paid competitively." Correspondingly, each pharmacy organization had scored between agree and strongly agree in regards to satisfaction with compensation. Another question asked to determine overall job satisfaction was: "Do you feel that the services you do, provide contribute to the well-being of your patients?" There was a unanimous yes from our panel of study subjects.

Factors that Improve Job Satisfaction

The most popular topics discussed attributing to improved job satisfaction were work/life balance, staff support, patient interaction, prescription volume, and workflow. When questioned about which factor would most likely attribute to considering another company, a notable 87.5% of the group agreed upon a better work/life balance, with factors including a Monday through Friday, 9 AM - 5 PM schedule, and not having to work on their days off due to limited staff. A participant from Organization C stated a desire to have an increase in technicians and a participant from Organization B wanted to be closed for lunch. Adjustments to work hours were discussed in depth, with strong opinions supporting reduced hours, increase in overtime hours available, importance of a flexible schedule, and splitting 14 hour work days. One pharmacist from Organization C expressed content with being a floater, allowing him to have a more flexible schedule. Another representative of chain organization C was satisfied with the opportunity to work 32 hour weeks instead of 40 hours. Satisfaction with paid time off and staff coverage was unanimous among all pharmacists, with "strongly agree"

responses by pharmacists from chain organization B and D. Patient interaction was another factor that appeared to be a strong factor attributing to job satisfaction. A pharmacist from chain organization C stated:

"I'd say I like the interaction with patients as well. It makes it worth it.

When you've had a rough day and you get [a patient] that appreciates

what you do."

In addition, it appears that workflow can pose a challenge to pharmacists and negatively affect their satisfaction if it is not efficient and causes more confusion than benefit. This was a concern for pharmacists from Organization C, best summarized as, "...there are so many different scenarios (of work flow) nowadays. And it's supposed to be helpful but you have to adjust…So it's difficult". In Organization C's workflow process, a pharmacist has the ability to remotely input prescriptions, which seems to cause confusion and slow the process if mistakes are made. Co-workers, compensation, technology, and strict metrics were also mentioned as factors affecting satisfaction in the workplace. It appears job satisfaction of pharmacists from Organization A was impacted the most by metrics. A pharmacist from this pharmacy stated: "We have tons of metrics within our company and even the metrics have metrics. It's ridiculous."

Factors that Improve Overall Ability to Perform Professional Responsibilities

Participants discussed barriers impacting their ability to perform professional responsibilities. Technology, specifically pharmacy software, was the most common factor to impact pharmacist's overall ability to perform their responsibilities. Pharmacists reported that their system's high sensitivity for potential drug interactions results in a large number of alerts requiring overrides, resulting in decreased efficiency. Pharmacists also commented that the overabundance of insignificant drug interaction alerts tends to make their job feel robotic, as well as, interrupts workflow. Similarly, respondents from Organization A and C were least satisfied in their computer system's ability to adequately identify drug interactions as shown in Table 2. A pharmacist from Organization B mentioned their company having older software that does not allow allergies to be added to and retrieved from patient profiles. Software issues with patient allergy-related notifications being bypassed too frequently were also reported from Organization C. A respondent from Organization A reported that continuous changes and accompanying re-training processes results in a slower workflow process.

Workflow was the second most common barrier to performing work-related duties. All pharmacists with the exception of Organization D were able to enter prescriptions into the computer system. Organization D's protocol allows technicians to input prescription information, pharmacists to verify prescriptions, technicians to fill the medications, and pharmacists to verify medications for a second time. Respondents from Organization D found this helpful and favored this aspect of their system. In contrast, pharmacists from Organization C mentioned concerns when having to work alone, and stated interest in being able to perform a second medication verification. Respondents from Organization C were the only represented workplace that allows their technicians and pharmacists to input and verify prescriptions remotely. A pharmacist from Organization C stated that they found this workflow helpful at times when they were busy, but also was challenging when issues arose while verifying prescriptions.

Most pharmacies have additional services offered to meet certain metrics which may include compounding, medication therapy management (MTM), and immunizations. All participants held similar views about there not being enough time allotted for these additional services. A respondent from Organization C said during "slow season", staff hours may be reduced to account for the lower volume in prescriptions, but takes away the opportunity for compounding. Also, respondents from Organization A and Organization C agreed that prioritizing MTM services is difficult when stores have a high prescription volume. Two pharmacists (25% of subjects) stated that constant distractions in the pharmacy prevent them from performing MTM duties, with a pharmacist from Organization D saying, "I can't tell you how many times I've logged onto the MTM system and the page gets timed out because I get interrupted a million times..." This seems to frustrate pharmacists and cause them to dislike completing MTM responsibilities. The lack of time allotted for pharmacists to perform these additional pharmacy services was expressed as a factor to be improved and impact these pharmacists' ability to perform their professional responsibilities.

Half of the participants (n = 4) said their staff support varied on a day-to-day basis, depending on if they are cutting hours, a co-worker calls out, and the competency level of the technicians. A pharmacist from Organization A stated, "Some days it's just too easy and some days it's just barely enough to scrape by the day it feels like." A general consensus was that staff support does affect ability to perform professional responsibilities and that staff support can vary.

DISCUSSION

The primary finding of this study is that overall, community pharmacists are satisfied despite variations in employers. The community pharmacists participating in this study would appreciate improvements in certain managerial aspects including: staff support; workflow processes; computer systems; metrics; and time allotted for additional services. Reported areas of improvement appear to be mostly related to corporate and managerial aspects than they are to the pharmacist's role as a healthcare professional.

Varying results have been reported in other studies. One online survey performed by Munger et al evaluating pharmacists nationwide found substantial levels of dissatisfaction and stress amongst community pharmacists. They found that pharmacists with a PharmD reported greater dissatisfaction than their coworkers with a bachelor's degree in pharmacy.[4] The survey in the Munger study evaluated satisfaction in both chain pharmacies and independent community pharmacies. The focus group in this study did not deny the presence of stress in their workplace, but overall satisfaction with a multitude of factors appeared to outweigh their stresses. However, this focus group did not report any differences in satisfaction between those pharmacists with a PharmD and those with a bachelor's degree.

Further studies could examine satisfaction and how it varies between community chain pharmacies and independent community pharmacies and further expand to look at satisfaction in alternative geographic locations.

There were multiple limitations to this study. First, the questionnaire and focus group was limited to pharmacists located in a single city therefore restricting generalizability of the results. Second, this study only evaluated one type of community practice. The results are limited to community chain organizations and cannot be applied to other types of community practice. A third limitation to this study was the small size of the sample group. Finally, considering the hours of operation of most community chain pharmacies, there were likely pharmacists who could not attend based on them having to work the evening shift. Offering multiple meeting times may have benefited the study and allowed for more opportunity for pharmacists to attend.

CONCLUSIONS

The participating community pharmacists appeared to have similar levels of job satisfaction despite employment variation. The pharmacists in this focus group seemed to have varying satisfaction with certain

aspects of their jobs in regards to computer systems and their ability to identify drug interactions. Overall, pharmacists in community chain organizations are satisfied with their positions.

REFERENCES

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2. Szeinbach S., Seoane-Vazquez E., Parekh A., Herderick M. Dispensing errors in community pharmacy: perceived influence of sociotechnical factors. Int J Qual Health Care. 12 Jun 2007; 19(4):203-9.

3. Daniel C. Malone, PhD, Mary Brown, PhD, Jason T. Hurwitz, PhD, Loretta Peters, MBA, Jennifer S. Graff, PharmD. Real-World Evidence: Useful in the Real World of US Payer Decision Making? How? When? And What Studies? Value in Health. 2017. International Society for Pharmacoeconomics and Outcomes Research (ISPOR).

Table 1. Characteristics of Study Subjects

Characteristic	Organization A	Organization B	Organization C	Organization D
Number of Pharmacists	2	1	3	2
Age (median)	27.5	31	46	40
Gender (N) Male Female	1 1	0 1	1 2	1 1
Ethnicity (N) African American Asian American Hispanic Caucasian	0 1 1 0	0 0 0 1	0 1 1 1	1 0 0 1
Years of pharmacy practice (median)	5	1	20	12
Years of community pharmacy practice (median)	5	1	20	5.5
Degree(s) Attained (N) PharmD Bachelors	2 1	1 0	3 0	1 2
Certifications (N) Immunization Compounding Diabetes Educator Lipids Specialist	1 0 0 0	1 0 0 0	3 1 1 1	2 0 0 0
Current Position (N) Staff Pharmacist Pharmacist in Charge Floater	1 1 0	1 0 0	2 1 2	2 0 0

Table 2. Job Satisfaction Questionnaire Responses

	I am satisfied in my work-place.	I am adequately compensated for the work I do.	I get time off when I need.	I have sufficient number of paid time off hours.	In 10 years, I envision myself working for the same company.	The pharmacy computer system adequately identifies drug interaction.
Organization A, Pharmacist 1	4	4	4	3	3	3
Organization A, Pharmacist 2	3	3	3	3	3	2
Organization B, Pharmacist 1	3	3	4	3	3	3
Organization C, Pharmacist 1	3	3	2	3	3	2
Organization C, Pharmacist 2	4	4	4	3	3	3
Organization C, Pharmacist 3	3	3	3	3	3	2
Organization D, Pharmacist 1	3	4	3	4	3	4
Organization D, Pharmacist 2	4	4	3	3	4	4
1: Strongly disagree, 2: Disagree, 3: Agree, 4: Strongly agree						

APPENDICES

COMMUNITY PHARMACY JOB SATISFACTION

This questionnaire has been designed to assess community pharmacists' job satisfaction regarding various responsibilities and services provided.

1) What services do you perform in your pharmacy? (check all that apply)
    ☐ Medication Therapy Management   ☐ Immunizations
    ☐ Blood Pressure Screenings   ☐ Other: _____

2) Volume
    On average, how many prescriptions do you process per shift? _____ prescriptions
    What is your pharmacy's average prescription filling volume per week? _____ prescriptions

3) How many full time equivalent (FTE) pharmacists and technicians are there?
    ☐ Pharmacists: _____   ☐ Technicians: _____

4) Benefits
    Are your personal time off (PTO) and sick leave combined? Y/N
    If Yes, how many days do you receive each year? _____
    If No, how many PTO days do you earn each year? _____
    How many sick days do you earn each year? _____

    What other benefits does your company offer? (check all that apply)
    ☐ Sign on bonus   ☐ Health Insurance   ☐ Yearly bonus
    ☐ 401K   ☐ Match? How much? _____

5) If you were to work at a different pharmacy, where would you work? _____

<u>Job Satisfaction</u>
In terms of your job satisfaction, how satisfied are you with the following aspects of the community pharmacy you work at? Circle the box to the right of the condition that adequately represents your feelings.

I am satisfied in my workplace.	Strongly Disagree	Disagree	Agree	Strongly Agree
I'm adequately compensated for the work I do.	Strongly Disagree	Disagree	Agree	Strongly Agree

I can get time off when I need.	Strongly Disagree	Disagree	Agree	Strongly Agree
I have sufficient number of paid time off (PTO) hours.	Strongly Disagree	Disagree	Agree	Strongly Agree
In 10 years, I envision myself working for the same company.	Strongly Disagree	Disagree	Agree	Strongly Agree
The pharmacy computer system adequately identifies drug interactions.	Strongly Disagree	Disagree	Agree	Strongly Agree

Demographic

Please check one response to each of the following questions:

1) What is your gender? ☐ Male ☐ Female   ☐ Other

2) What is your age? _____ years

3) What is your ethnicity/race:
    ☐ African American   ☐ Asian American/Pacific Islander
    ☐ Caucasian   ☐ Hispanic
    ☐ Other: _____

4) How many years have you practiced pharmacy? _____ years

5) How many years have you practiced in a community pharmacy? _____ years

6) Which of the following degrees have you attained? (check all that apply)
    ☐ Bachelors   ☐ Bachelor of Pharmacy   ☐ Masters   ☐ PharmD

7) Which of the following certifications do you hold? (check all that apply)
    ☐ Certified Asthma Educator (AE-C)
    ☐ Certified Diabetes Educator (CDE)
    ☐ Certified Geriatric Pharmacist
    ☐ Certified Pain Educator (CPE)
    ☐ Immunization Training
    ☐ Lipids Specialist
    ☐ Other: _____

8) For which community pharmacy do you currently work? (circle one)

Costco	CVS	Fry's	Safeway	Walgreens	Walmart

9) What is your current position? (check all that apply)

☐ Staff pharmacist   ☐ Pharmacist in charge   ☐ Floater   ☐ Other: _____

10) For which other community pharmacies have you worked? (circle all that apply)

Costco	CVS	Fry's	Safeway	Walgreens	Walmart