

# Development and Validation of a New Measure of Scholarly Writing Motivation: The Scholarly Writing Motivation Scale



Kacey Hight, PharmD Candidate; Nalin Payakachat, PhD; Melanie Reinhardt, PharmD; Amy M. Franks, PharmD  
Department of Pharmacy Practice, College of Pharmacy, University of Arkansas for Medical Sciences, Little Rock, Arkansas

## Background

- Scholarship is a fundamental responsibility for pharmacy practice (PHPR) faculty
- Most recent publication rate estimates report 0.5 papers/faculty member/year published in peer-reviewed journals<sup>1</sup>
- Literature is lacking on *internal* barriers to scholarly writing

## Objectives

- Develop and validate a noncognitive measure of motivation in scholarly writing
- Determine associations between the Scholarly Writing Motivation Scale (SWMS) and individual publication output of PHPR faculty within U.S.-based colleges of pharmacy

## Methods

- 17-Item Research Motivation Scale (RMS) was modified with permission from original author<sup>2</sup>
- The SWMS was adapted from the RMS and tested for clarity, readability and content among five PHPR faculty
- A survey was administered online to US-based PHPR faculty through department chair listervs
- Internal consistency reliability, dimensionality, and construct validity were assessed using Cronbach's alpha, exploratory factor analysis, and confirmatory factor analysis, respectively
- Discriminative validity was evaluated by t-test using participants' self-reported total number of publications

Presented at the Annual Meeting of the American Association of Colleges of Pharmacy, Boston, MA (July 2018).

### Scholarly Writing Motivation Scale (SWMS)<sup>3</sup>

- Writing for publication provides me with feelings of satisfaction
- \*2. I want to pursue less difficult writing projects that I know will guarantee a successful outcome (e.g. acceptance for publication)
- †3. I write for publication to earn the respect of my colleagues
- I write for publication for the joy of it
- \*5. When the preliminary results of my writing projects have not met my expectations, I want to cut my losses and move on to the next writing project
- I want to be recognized as a competent writer of published works
- I have a general feeling of well-being when I'm involved in writing for publication
- \*8. I sometimes want to avoid difficult writing projects because I'm concerned that I may fail
- I write for publication to leave a mark on my field
- I want to receive awards for my publications
- \*11. I sometimes want to give up when my writing project is not proceeding as I would like
12. Writing for publication in and of itself is enjoyable to me
- \*13. I want to focus my energy on other writing projects when the projects I am working on is not progressing as expected
14. I enjoy writing for publication for its own sake
- \*15. I want to avoid pursuing difficult writing projects that may result in a negative outcome (e.g. not accepted for publication)
16. Time seems to fly by when I'm writing for publications
17. I want to be recognized by my colleagues for sound publications

<sup>3</sup>The SWMS uses Likert scale scoring where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree; final score is a total summary score

\*reversed scored items

†item removed from final scale

## Results

	N (%) or mean ± SD
Female	140 (67.0%)
Age (y)	41.7 ± 10.5
White	171 (81.4%)
Institution Type	
Private	65 (31.0%)
Public	139 (66.2%)
Academic Rank	
Professor	45 (21.3%)
Associate Professor	78 (37.0%)
Assistant Professor	78 (37.0%)
High Publishers (≥19 career publications)	82 (39.4%)
Low Publishers	126 (60.6%)

Table 1: Participant demographic characteristics (n=237)

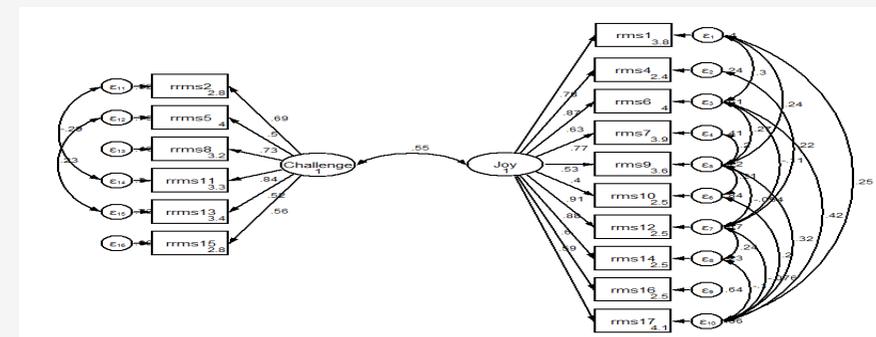


Figure 1: Confirmatory factor analysis for the final 16 item SWMS

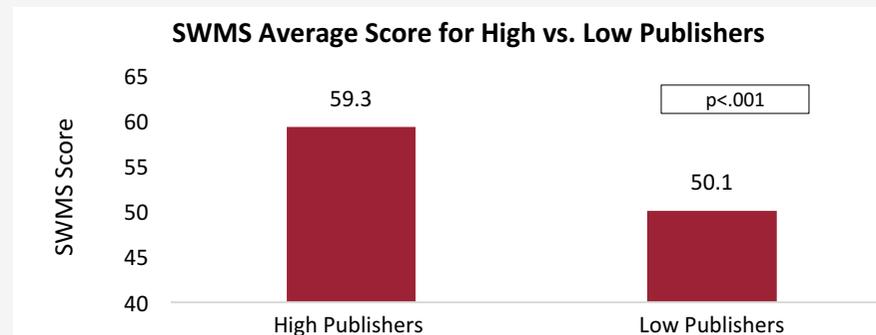


Figure 2: Discriminative validity testing for the SWMS between high and low publishers where high publishers denotes those faculty who reported publishing more than the mean total of 19 peer-reviewed publications throughout their PHPR career

- The final SWMS has 16 items
- Two domains: 'Joy' (10 items) & 'Challenge' (6 items) (Figure 1)
- Item 3 was dropped due to low factor loading, guided by exploratory factor analysis
- SWMS total score ranges from 16 to 80
- Higher scores indicate higher motivation for scholarly writing
- Average SWMS scores of participants in the high publication group were significantly higher than those in the low publication group (Figure 2)
- Internal consistency reliability for the final 16 item scale was demonstrated with Cronbach's alpha coefficients for Joy=0.91 and Challenge=0.81
- Construct validity was confirmed with a good model fit (RMS error of approximation=0.07 [95% CI: 0.05–0.08], Bentler comparative fit index=0.96)
- Domains of 'Joy' and 'Challenge' were moderately correlated (r=0.5), showing convergent validity

## Conclusions

- SWMS is a valid measure to explore motivation for scholarly writing among PHPR faculty
- Brief and simple tool
- Easy to score and interpret
- May be a useful supplement among PHPR department chairs and faculty development leaders to guide faculty development and encourage scholarly writing

<sup>1</sup>Chisholm-Burns MA, et al. A 5-Year Analysis of Peer-Reviewed Journal Article Publications of Pharmacy Practice Faculty Members. *Am J Pharm Educ* 2012;76(7):127.

<sup>2</sup>Deemer ED, et al. Toward a Tripartite Model of Research Motivation: Development and Initial Validation of the Research Motivation Scale. *Journal of Career Assessment* 2010;18(3):292-309.