

An International Study of Chaplains' Attitudes about Research

ABSTRACT

An online survey was conducted by twelve professional chaplain organizations to assess chaplains' attitudes about and involvement in research. A total of 2,092 chaplains from 23 countries responded to the survey. Over 80% thought research was definitely important and nearly 70% thought chaplains should definitely be research literate. Just over 40% said they regularly read research articles and almost 60% said they occasionally did. The respondents rated their own research literacy as 6.5 on a 0-10 scale. Significant positive inter-correlations were found among all four measures: importance of (1) research and (2) research literacy; (3) frequency of reading articles; and (4) research literacy rating. Approximately 35% were never involved, 37% had been involved, 17% were currently involved, and 11% expected to be involved in research. The last three groups were significantly more likely to think research and research literacy were important and to read research articles than chaplains who were never involved in research. Given chaplains' interest in research, actions should be undertaken to facilitate further research engagement.

Keywords: Chaplain, research, international, survey, attitudes.

INTRODUCTION

Health care across the world is evolving from a disease centered, problem-based model towards a much more person-centered approach that optimizes the attributes of the individual in need (Kelly, 2013; Tan, Wilson, Olver, & Barton, 2011). Optimizing individual attributes is at the heart of chaplain activity, so chaplains are in an ideal position not just to engage in the zeitgeist but to lead it (Hemming, Teague, Crowe, & Levine, 2016). However, in order to turn this ideal into reality they need to be able to demonstrate their worth in a robust, valid and practical manner (Galek, Flannelly, Jankowski, & Handzo, 2011; Jankowski, Handzo, & Flannelly, 2011).

Even as interest in spirituality was surging in healthcare research in the 1990's (Weaver, Pargament, Flannelly & Oppenheimer 2006), there was strong empirical evidence that chaplaincy was not part of the conversation about spirituality and health in the published research (VandeCreek 1999; Weaver, Flannelly and Oppenheimer 2003). While the pastoral care and chaplaincy researcher Larry VandeCreek recognized that this was a major concern for professional chaplaincy (VandeCreek, 1999), it is unclear how widely his call for chaplains to do research was embraced. Some chaplains strongly believed that chaplaincy research was important for the profession, whereas others expressed some reservations about it (Fitchett et al. 2012; VandeCreek, 2002; see also *JHCC* Vol. 12, No. 1/2).

Although the call for chaplains to engage in research (Fitchett 2011; Pesut et al. 2016; Weaver, Flannelly, and Liu 2008) has continued, we still do not know what chaplains throughout the world think about the importance of research for professional chaplaincy, or how many of them are engaged in research. In order to develop strategies to support future engagement it is important to understand current attitudes and activity levels. The aim of this study was, therefore, to obtain a snapshot of research engagement and attitudes about research within the international chaplain community. To achieve this aim, a short online

survey was sent to chaplains across the world. The authors hypothesized that involvement in research would be associated with more positive attitudes about research.

METHODS

Questionnaire Development

An initial questionnaire was developed by the authors as part of an international project to promote research literacy in professional chaplaincy. The initial survey, which consisted of six items measuring interest and attitudes about research and self-rated research literacy was tested at a spiritual care conference in Scotland in 2015 in order to assess the face and content validity of the questions. Thirty chaplains completed the survey and gave feedback on face and content validity. Cross-tabulations and correlations were performed on the individual items to remove repetitive items and to help develop new items.

Final Questionnaire

The final questionnaire collected data on age, gender, highest level of education, time served as a chaplain, type of work setting, and country, and asked five questions about research. The five research questions asked participants: (1) if they have been or expect to be involved in research related to chaplaincy; (2) how important research is for professional chaplaincy; (3) how important it is for chaplains to be research literate; (4) how frequently they read research articles; and (5) to rate their own research literacy, Research literacy was defined as: *“the ability to read and understand a research article, and if applicable, apply the results to clinical practice.”* The response categories for the questions are shown in Table 2.

Procedure

The questionnaire was placed on line and the participating organizations¹ emailed their members explaining the purpose of the survey and how to access it. In total, email invitations were sent to approximately 15,000 members. A total of 2092 chaplains responded to the survey, for a response rate of approximately 14%. The majority was female (55.3%).

Statistical Analyses

Age, which was measured in years, was divided into thirds and grouped for analysis as 23-53, 54-61, and 62-91 years. Education was also grouped into three categories for analysis: a bachelor degree or less (12.1%); a masters degree (72.4%), and a doctorate degree (15.5%).

Descriptive statistics were calculated for all the variables, and correlations were conducted among the importance of research, the importance of research literacy, frequency of reading research articles (each scored 1-3), and self-rated research literacy. These four variables were designated as dependent variables in statistical analyses to test the degree to which they varied in relation to research involvement (the independent variable).

Self-reported research literacy was treated as a ratio variable,ⁱⁱ and analyzed by analysis of covariance (ANCOVA), with categories of research involvement as the independent variable and education and age as covariates. Subsequent paired-comparisons were conducted using the Bonferroni adjustment for multiple comparisons (Cabin & Mitchell, 2000).

The importance of research, the importance of research literacy, and the frequency of reading research articles were treated as ordinal variables (see (Flannelly, Flannelly, & Jankowski, 2014)) and analyzed accordingly. Each of the three variables was initially analyzed using the Kruskal-Wallis test to determine if they differed across the four categories of research involvement.ⁱⁱⁱ Next, ordinal logistic regression was performed on each variable to assess the net effects of each category of research involvement (relative to the lowest level of involvement: never involved), controlling for education and age. All the analyses were performed with SPSS (Version 12.0).

Ethics

Ethics approval to undertake the study was granted by Edinburgh Napier University. No identifiable data was requested and all results were anonymous. The first item in the online survey explained the survey's purpose and provided the information needed to make an informed decision to participate in the survey. Only respondents who gave their informed consent were included in the analyses (nine people did not consent to participate).

RESULTS

Sample Characteristics

The mean age of the sample was 56.4 years ($SD = 10.79$) and the median was 58 years. The respondents lived 23 countries, with the majority of respondents lived in the U.S.(68.2%), followed by the U.K. (8.1%), Canada (7.8%), The Netherlands (7.4%), Australia (5.5%), and New Zealand (1.6%). Nearly three-quarters had a masters degree (72.4%), 15.5% had a doctorate degree, and 12.1% had a bachelors degree or a lower level of education. The numbers of years as a paid chaplain ranged from zero to 51 years with mean of 12.4 years ($SD = 9.2$) and a median of 10 years.

Correlations among the Research Questions

Table 1 shows the Spearman correlations (ρ) between the four dependent variables, all of which were positive and statistically significant. As seen in the table, the highest correlation was between participants' rating of the importance of research for chaplaincy and the importance of chaplains being research literate, whereas the lowest correlation was between the importance of research for chaplaincy and self-reported research literacy.

--- Insert Table 1 here about ---

Effects of Research Involvement on the Four Dependent Variables

The mean self-reported rating of research literacy for the entire sample was 6.47 ($SD = 2.02$) and the median was 7. ANCOVA found a significant effect of research involvement

($p < .001$) on research literacy. Planned-comparisons revealed that survey participants who “Have never been involved” in research had significantly lower research literacy ($M = 5.72$, $SD = 2.24$) than all the other groups of participants (p 's $< .001$), whereas participants who were “Currently involved” in research had significantly higher research literacy ($M = 7.54$, $SD = 1.48$) than all the other groups (p 's $< .001$). No significant difference was found between participants who said they “Will be involved” in research ($M = 6.78$, $SD = 1.79$) and those who said they “Have been involved, but are not involved now” ($M = 6.61$, $SD = 1.67$). Higher levels of education were significantly related to higher research literacy ($p < .001$), whereas older age was significantly related to lower research literacy ($p < .05$).

Table 2 shows that participants' ratings of the importance of research and research literacy, and their frequency of reading research articles were fairly high, regardless of their involvement in research. The median ratings of all three dependent variables were 2 or 3 for all four levels of research involvement. Nevertheless, the Kruskal-Wallis test found that all three measures varied significantly across the four levels of research involvement (all p 's $< .001$).

--- **Insert Table 2** about here ---

Ordinal regression found that participants who had been involved in research were 2.1 times more likely and those currently involved in research were 3.9 times more likely than participants who were never involved in research to believe research was important. They also were 1.5 to 3.2 times more likely than chaplains who were never involved in research to believe research literacy was important. Somewhat surprisingly, chaplains who expected to be involved in research were over 4 times as likely to believe research and research literacy were important compared to chaplains who were never involved in research (all p 's $< .001$). These three groups of chaplains were also significantly more likely to read research more often than chaplains who were never involved in research (all p 's $< .001$): had been (OR =

2.1); currently are (OR = 8.1); will be (OR = 5.2)^{iv}. All the analyses controlled for age and education.

Chaplains with a masters degree (OR = 2.0) and those with a doctorate (OR = 2.4) were more likely to believe research literacy was important than other chaplains did, and they were to more likely to read research articles: masters (OR = 1.5); doctorate (OR = 2.2) (all p 's < .01). Chaplains who were 62 years-old or older were significantly less likely to think research was important than younger chaplains thought it was (age 23-53) (OR = .61, p < .001).

DISCUSSION

These results bode well for the future of chaplaincy research. There is a high level of agreement, consistent across most predictors examined here that respondents in this survey believed in the importance of research for the profession (70% importance of research literacy; 81% important for the profession). In other words, the majority of individuals felt they should be personally research literate and so should their colleagues. These sentiments were stronger in younger chaplains, again suggesting the future for research literacy in chaplains in bright.

As expected, education level was associated with importance of research literacy, such that those with higher levels of education valued research literacy more highly. However, consistent with a recent literature review examining the relationship between education and research engagement (Elken & Wollscheid, 2016), research *activity* was the most important element in this relationship. This is not to say that those who have not yet engaged with research think it unimportant. On the contrary, 71% of survey respondents who have never been involved in research believe that research is definitely important and an additional 26.5% say it may be important – a total of 97.8%.

These results suggest that the most salient action to facilitate further research engagement would be to systematically involve as many chaplains as possible in research education, regardless of country of origin, age, or level of education. This involvement should be consistent with the level of current experience of the chaplain. For example, chaplains with no direct experience of research should be encouraged to become involved in (for instance) journal clubs or critical discussions led by more experienced researchers. This previously has been shown to be a successful strategy (Murphy & Fitchett, 2010). Problem-based interdisciplinary learning also has been shown to improve engagement in research (Bastiaens & Nijhuis, 2012) by maintaining clear links to practice. Interestingly though, it has been shown that research-based learning in practice, per se, was not associated with students' interest in research; rather, research interest was associated with research the *number* of research activities in which they engaged. Of particular relevance to this paper is the finding that this relationship held whether the research activities were reading research articles, developing proposals, or undertaking empirical research (Deicke, Gess & Ruess 2014).

Having a large sample of 2092 chaplains with participants from 23 countries is encouraging. However, the generalizability of the results is limited because the response rate was 14%. Further, it is clear that the majority of the respondents to this survey were very positive on the whole about research. This could simply be an artifact of response bias (McGrath, Mitchell, Kim, & Hough, 2010). However, it should be noted that chaplain attitudes about research have been shown to be very positive in studies with high response rates (Fitchett et al. 2014); thus, it is reasonable to suggest that these positive responses are in fact representative.

As far as we know, this is the first worldwide survey of chaplains to ascertain their attitudes and practices related to research. The results show a positive outlook towards research from chaplains in all participating countries and at all levels of education. This

outlook is particularly positive in younger chaplains. The pedagogic literature shows that the best way to further encourage participation in research is to create opportunities to engage in it on a level consistent with the current experience of the individual. It also shows there is benefit in engaging in a wide number of activities. What this paper adds evidence to suggest that chaplains now appear ready for a research agenda.

Table 1

Inter-correlations among the Four Dependent Variables^a

	A	B	C	D
A. Research Importance	1.00	.42**	.26**	.18**
B. Literacy Importance		1.00	.32**	.31**
C. Frequency of Reading			1.00	.39**
D. Self-reported Literacy				1.00

^a The table shows the correlation of each variable with every other variable and itself.

The correlation of a variable with itself = 1. ** $p < .01$

Table 2

Percent of Participants Reporting Attitudes and Behaviors Regarding Research, by Category of Research Involvement

<i>Dependent Variable</i>	Categories of Research Involvement				
	Never Involved (n = 716)	Had been Involved ^a (n = 747)	Currently Involved (n = 355)	Will be Involved (n = 226)	Total ^b (N = 2044)
<i>Importance of research</i>					
Not important	2.2	2.1	2.3	0.0	1.9
May be important	26.5	14.3	9.0	7.9	17.9
Definitely important	71.3	83.6	88.7	92.1	81.1
<i>Importance of research literacy</i>					
Do not need to be literate	6.0	3.7	1.7	0.4	3.8
Probably should be literate	34.6	27.8	14.9	13.7	26.4
Definitely should be literate	59.4	68.5	83.4	85.8	69.8
<i>Frequency of reading research</i>					
Never read articles	5.0	0.4	0.8	0.0	2.1
Occasionally read articles	72.7	62.3	28.5	40.5	57.7
Regularly read articles	22.3	37.3	70.7	59.5	40.3

^a Have been involved, but not involved now

^b The table excludes those that did not click the consent box in the survey and surveys with missing data on these questions.

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Footnotes

ⁱThe organizations were: Association for Clinical Pastoral Education (USA); Association of Professional Chaplains (USA); Canadian Association for Spiritual Care; College of Health Care Chaplains (UK); Dutch Association of Spiritual Caregivers in Care Settings; Health Care Chaplaincy Network (USA); National Association of Catholic Chaplains (USA); Neshama: Association of Jewish Chaplains (USA); New Zealand Healthcare Chaplains Association; Pediatric Chaplains' Network (USA); Professional Chaplaincy Advisors England; Spiritual Care Australia; and Chaplains associated with the former Scottish Association of Chaplains in Health Care.

ⁱⁱ Some psychometricians might argue that psychological scales do not have a true zero point, which is necessary for a scale to be a ratio scale. However, even if this is so, the research literacy measure is at least an interval scale, which can be analyzed by ANOVA or ANCOVA.

ⁱⁱⁱ The full name of the Kruskal-Wallis test is the Kruskal-Wallis One-Way Analysis of Variance by Ranks, which is a nonparametric equivalent of one-way analysis of variance.

^{iv}Odds Ratios (OR) define the ratio of the odds of an event occurring in one group compared to another group. Odds are the probability of an event occurring divided by the probability of an event not occurring. An odds ratio of 1, therefore, indicates the odds are equal in both groups. An odds ratio of 4 indicates the event is four times more likely to occur in one group than another.