A study was designed to compare the perceived importance of selected competencies expected of bachelor's level and master's level health educators by practice settings. Subjects were 136 health educators who rated the importance of 135 competencies in the areas of administration, general health knowledge, communication, and evaluation. Results of the study indicated significant differences between health educators practicing in community and public health, schools, higher education, and others in their ratings of bachelor's level competencies in the areas of administration, communication, and evaluation, and no significant differences in the area of bachelor's level general health knowledge, as well as all master's level competencies. Generally, the master's level ratings were significantly higher than the bachelor's level ratings, except for general health knowledge. (Author/JD)
PERCEIVED IMPORTANCE OF HEALTH EDUCATOR COMPETENCIES

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Abstract

This study was designed to compare the perceived importance of selected competencies expected of bachelor's level and master's level health educators by practice settings. Results of the study indicated significant differences between health educators practicing in community and public health, schools, higher education, and others in their ratings of bachelor's level competencies in the areas of administration, communication, and evaluation, and no significant differences in the area of bachelor's level general health knowledge, as well as all master's level competencies. Generally, the master's level ratings were significantly higher than the bachelor's level ratings, except for general health knowledge.
Introduction

Health educators as a profession have been discussing, identifying and verifying the competencies of entry level health educators for several years. The final Role Delineation project report, identified the specific importance of various competencies by practice settings of schools, medical care, and community. However, the identified competencies were general in nature and not task specific. This study was designed to identify the specific importance of selected competencies expected of Florida bachelor’s level and master’s level health educators by setting of practice. Hypothesized was a variance in competency importance by degrees and practice settings.

Method

The initial project phase involved the identification of specific competencies or skills for both bachelor’s level and master’s level health educators. Examined were AAHPER, A.S.H.A. and S.O.P.H.E. competencies or guidelines for preparation and practice, various higher education professional preparation competency programs, and unpublished materials related to the Role Delineation Project.

From these materials, and data analysis obtained from a bachelor’s level community health educators competency study, 135 competencies were identified in the broad areas of administration, general health knowledge, communication, and evaluation. Space was provided for the inclusion of additional
competencies not listed in the original instrument. Potential respondents were requested to rate both the bachelor's level and master's level for each of the competency items as follows:

"1" Would indicate no importance
"2" Would indicate little importance
"3" Would indicate some importance
"4" Would indicate considerable importance
"5" Would indicate great importance

The developed instrument was reviewed by a jury of health education experts, with appropriate proportional jury members of practicing in the settings of community/public health agencies, medical care settings, schools, and higher education. The jury did not delete any of the identified competencies, but added the competency of common sense. Later, the survey instrument was field tested, utilizing a non-Florida health education population.

Respondents

This study was designed to measure the perceptions of bachelor's level and master's level health educator competencies in Florida. Individual health educators residing in Florida holding membership in the Society for Public Health Educators, Inc.; American Public Health Association, School Health Section and Public Health Section; Association for the Advancement of Health Education; American School Health Association; Florida Association for Health, Physical Education, Recreation, and
Dance; Florida Public Health Association; and Florida Professional Health Educators Association were identified, as well as health educators working for various state and federal governmental or community organizations. All 615 identified health educators were mailed the survey instrument. Due to the length of the instrument and unavailability of return postage funding only 202 respondents returned the instrument with a 32.85 per cent response rate. Only 136 instruments were found usable for the study due to missing data.

Results

A priori region of rejection for this analysis was set at $p < .05$. Four one-way analyses of variance (ANOVA) tests were performed on mean score ratings of perceived importance of four health education competency areas for bachelor's and master's level health educators. These competency areas are administration, general health knowledge, communication, and evaluation. Each competency was rated on a five-point Likert scale format for both bachelor's level and master's level health educators. The lowest and highest possible scores were 1 and 5, respectively. Mean scores were obtained for each of 135 items in five settings of practice. These settings included community health agencies, public health departments, school districts, higher education, and other, e.g., retired.

Settings of practice mean perceived importance scores and standard deviation of bachelor's and master's level health
Educators for administrative competencies are presented in Table 1. In general, there were higher mean perceived importance ratings for master's level health educators by respondents in all settings of practice.

An analysis of the data using the $F_{\text{max}}$ test was performed to measure the validity of the homogeneity of variance assumption. The $F_{\text{max}} = 2.46$ in the first analysis was not significant, $F_{\text{max}} (.05,5,30) = 2.78$. Thus, the assumption of homogeneity of variance is not rejected. There was then no differential variability in performance among subjects. Although the assumption of homogeneity of variance was rejected for bachelor's level administrative competencies, it is important to look at the significance of the ANOVA ($p < .001$) because the $F$ test is robust. Obviously, there was more variability among people in rating the bachelor's level competencies, but the strength of the significance suggests that there was a differential effect on average perceived importance for this competency. However, these results must be interpreted with caution, and a further analysis appears appropriate to test the hypotheses.

A one-way ANOVA on mean administrative competency perceived importance scores revealed significant differences among the five settings for bachelor's level health educators ($F (4,138) = 5.51$, $p < .001$). No significant differences were found for master's
level health educators, $F(4,138) = .68$. Tables 2 and 3 include the ANOVA summaries for these analyses. Thus, there was a differential effect on mean perceived importance scores on bachelor's level administrative competencies. The main effect of settings of practice accounted for 14 per cent of the variance, for scores on administrative competencies for bachelor's level health educators. For master's level, the per cent of variance accounted for was 2 per cent.

Post hoc analysis using $t$-tests to compare mean scores for settings of practice indicated significant differences between bachelor's and master's level administrative competencies for community health and public health agencies, school districts, higher education, and other settings (see Table 1). That is, master's level administrative competencies received significantly higher mean perceived importance ratings than did bachelor's level competencies.

Different settings of practice mean perceived importance scores and standard deviations for bachelor's and master's level general knowledge competencies are presented in Table 4. In general, there also were higher mean perceived importance scores for master's level health educators.

An analysis of the data using the $F$ max test was performed to test the validity of the homogeneity of variance assumption. The
F max = 2.38 in the bachelor's level analysis, as well as the master's level analysis (F max = 2.00) were not significant. F max (0.05,5,30) = 2.78. Thus, the assumption of homogeneity of variance was not rejected. There was then no variability in performance among subjects. Again, a further analysis seemed appropriate.

A one-way ANOVA on mean general knowledge competency perceived importance scores revealed no significant differences among the five agencies for bachelor's and master's level health educators, F(4,138) = .902 and .125, respectively. Tables 5 and 6 include the ANOVA summaries for these analyses. Thus, there were no differential effects on mean perceived importance scores on bachelor's and master's level general knowledge competencies.

Further, the main effect of settings of practice only accounted for 3 per cent of the variance, for scores on bachelor's level general knowledge competencies. For master's level, the per cent of variance accounted for was .4 per cent which is quite low.

Although there were no significant differences indicated in the ANOVA, a post hoc analysis using t-tests to compare mean scores for each settings of practice revealed significant differences between bachelor's and master's level general knowledge competencies for public health agencies (see Table 4). This result, however, should be interpreted with caution due to the non-significant findings in the ANOVA. The significant t-test
may be a result of inflated alpha error rates because of the multiple comparisons performed on the data.

Different settings of practice mean perceived importance scores and standard deviations for bachelor’s and master’s level communication competencies are presented in Table 7. In general, there were higher mean perceived importance scores for master’s level health educators.

An analysis of the data using the F max test was performed to test the validity of the homogeneity of variance assumption. The F max = 2.44 in the bachelor’s level analysis, as well as the master’s level analysis (F max = 2.75) were not significant, F max (.05,5,30) = 2.78. Thus, the assumption of homogeneity of variance was not rejected. There was, then, no differential variability in performance among subjects. Again, a further analysis seemed appropriate.

A one-way ANOVA on mean communication competency perceived importance scores revealed significant differences among the practice settings for bachelor’s level health educators, F(4,138) = 9.838, p < .001. No significant differences were found for master’s level health educators, F(4,138) = 0.386. Tables 8 and 9 include the ANOVA summaries for these analyses. Thus, there was a differential effect on mean perceived importance scores on bachelor’s level communication competencies. The main effect of
settings of practice accounted for 22 per cent of the variance for scores on bachelor's level communication competencies. For master's level, the percent of variance accounted for was 4 per cent.

A post hoc analysis using t-tests to compare mean scores for each setting of practice indicated significant differences between bachelor's and master's level communication competencies (see Table 7). That is, master's level communication competencies received significantly higher mean perceived importance scores than did bachelor's level competencies.

The five settings of practice mean perceived importance scores and standard deviations for bachelor's and master's level evaluation competencies are presented in Table 10. In general, there were higher mean perceived importance scores for master's level health educators.

An analysis of the data using the F max test was again performed to test the validity of the homogeneity of variance assumption. The F max = 3.86 for both the bachelor's and master's level on analyses were significant, F max (.05,5,30) = 2.78. Thus, the assumption of homogeneity of variance is rejected. There seems to be a differential variability in performance among subjects in this analysis.

Although the assumption of homogeneity of variance was rejected for both levels of evaluation competencies, it is
important to look at the significance of the bachelor's level ANOVA ($F = 3.683, p < .007$) because the F test is robust. One must, of course, proceed with caution in interpreting these results due to the slightly elevated alpha error rate. Obviously, there was more variability among people in scoring the bachelor's level competencies, but the strength of the significance suggests that there was a differential effect on average perceived importance for these competencies. Table 11 summarizes the one-

TABLES 11 AND 12 here

way ANOVA on mean evaluation scores. This analysis revealed significant differences among the five agencies for bachelor's level health educators, $F(4,138) = 3.683, p < .007$. No significant differences were found for master's level health educators, $F(4,138) = .108$. Table 12 includes the ANOVA summary for this analysis. Thus, there seems to be a differential effect on mean perceived importance scores on bachelor's level evaluation competencies. However, the main effect of settings of practice accounted for 10 per cent of the variance, for bachelor's level evaluation competencies. For master's level, the per cent of variance accounted for was .3 per cent which is low.

A post hoc analysis using t-tests to compare mean scores for each setting of practice indicated significant differences between bachelor's and master's level evaluation competencies (see Table 10). That is, master's level evaluation competencies received significantly higher mean perceived importance scores than did
In summary, the results indicate that there was generally a differential effect on mean perceived importance ratings on the bachelor's level competencies across the five agencies examined in this study as opposed to master's level competencies. Furthermore, comparisons of mean ratings for settings of practice generally indicated that each of the competencies were perceived as more important for master's level health educators than they were for bachelor's level health educators.

Discussion

An important aspect of this study was to examine how individual differences in different practice settings receive bachelor's level competencies in the areas of administration, general knowledge, communication, and evaluation. The results of this study indicate that there were significant differences between personnel in community and public health agencies, school districts, higher education, and other (e.g., retired) in how they rated administrative, communicative, and evaluative competencies for bachelor's level health educators. There was, however, no significant differences in how they rated the general health knowledge competency. The analyses of master's level competencies showed no significant differences in ratings between respondents in any of the five settings of practice.

Follow-up tests contrasting these competencies for bachelor's and master's level health educators indicated that across all
settings of practice master's level ratings were significantly higher than those for the bachelor's level, except for general health knowledge. In this case, only public health agency personnel rated general health knowledge as more important for master's level health educators than for bachelor's level health educators. As was previously mentioned, this result must be interpreted with caution.

Generalizations based upon this limited data can therefore be made regarding the academic preparation of Florida bachelor's and master's level health educators. As the results suggest, it would seem that administrative, communication, and evaluative competencies are considered more relevant for advanced degrees in health education (i.e., the master's degree). The general consensus for bachelor's level health educators is that they should receive a good foundation in general health knowledge, such as mental health and nutrition. Thus, except for the public health settings of practice, there is general consensus among different settings of practice of what is perceived as the most important competencies for bachelor's and master's level health educators in Florida.
References


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