

Using the responsibilities of the health educator to rate journals in the field

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Abstract

Little is known about the coverage of health education responsibilities in peer-reviewed literature. Abstracts (n = 17,391) from one hundred health education related journals were reviewed and compared to the entry and graduate level responsibilities of health educators. Journals were ranked by percent of abstracts addressing at least one responsibility. The Journal of Nutrition Education and Health Education and Behavior received the highest ratings with over 90% of their abstracts pertaining to health education. A large number of abstracts addressed Responsibility I (needs assessment), but there was limited coverage of most other responsibilities. These findings have implications for professional development.

Article:

Health education is unique in that it incorporates a particularly broad variety of health related literature to enhance theory and practice. Thus, when Sechrist and Governali (1990) produced a listing of journals and other serials useful for health educators, it contained over 400 publications. This over-abundance of resources exceeds the capabilities of most library budgets and creates confusion within the profession (Price & Robinson, 1999). Many academic disciplines have defined key journals in their field, but health education has failed to do so. There is currently no widely accepted, concise, definitive list of key health education journals. However, in recent years a number of researchers have attempted to define and refine listings of health education journals for a variety of research purposes, to include publication issues, indexing, and serial holdings.

The extensive listing of health journals and newsletters created by Sechrist and Governali (1990) included some publications that were only tangentially related to health education. Price and Robinson (1999) winnowed this comprehensive listing to 61 journals by eliminating publications they perceived to be either clinically oriented or newsletters. These researchers used this more manageable list to conduct a mail survey of chairpersons and faculty members from health education doctoral programs. Participants were asked to rate the journals using a 5-point scale on the basis of a) acceptance rate, b) influence on the field, c) frequency of citations, d) timely and provocative content, and e) likelihood of causing others to act. Respondents were given the option of indicating they were unfamiliar with or uncertain about the quality of a journal.

Latin, Horowitz, and Nims (1999) published a manuscript to facilitate the publication process for health education researchers. The purpose of their guide was to assist authors in the selection of the appropriate journal for manuscript submission. They built upon earlier work conducted by Ogletree, Glover, and Hu (1997) in which the characteristics of 16 health education or health education related journals were described. The rationale for the Ogletree et al. study was to assist professionals in the development of a publication plan. Characteristics of interest were related to manuscript submission such as number of readers, acceptance rate, peer review policy, weeks required for decision, months required for publication, and required style. In addition to collecting data on these variables, Latin et al. also considered indexes in which the journals were cited,

number of issues, average pages per issue, articles per issue, Continuing Education Units (CEUs), and categorical journal descriptions from a significantly greater range of health education journals (n=86). Latin et al. (1999) developed their list of 86 health education journals using the Delphi technique to obtain information from health education leaders and scholars (n=8) about journal content areas, prestigious journals and basic journal characteristics. The study participants identified the following nine primary journal content areas: Stress, Human Sexuality, Drug Use and Abuse, Nutrition, Physical Activity/ Fitness, Environmental Health and Safety, Health Behavior/Health Education, Community Health, and Children and Adolescents. The category with the smallest number of journals was Nutrition with 5, and the largest number of journals was 18 in the category of Health Behavior/Health Education.

Horowitz, Latin and Nims (1999) published a study using a slightly modified version of the data set mentioned above. The researchers sought to highlight the importance of indexing in health education and provide information on where journals were indexed. They eliminated two journals that were not indexed whose editors declined to participate in the Latin et al. (1999) study. This resulted in a listing of 84 health education journals that they used to identify the top indexes for dissemination of health education research and provide guidance on index use for literature reviews.

Latin, Horowitz, Nims and Morrell (2000) used the original Latin et al. (1999) list of 86 journals to survey librarians about the holdings at 367 colleges or universities that offered degrees in health education. The researchers were motivated by the belief that health educators need on-site access to relevant, published research in order to build a coherent knowledge base. The American Journal of Public Health was the publication to which the most libraries subscribed (95.9%). As resources continue to diminish, libraries will increase journal deselection. If circulation is considered to be a proxy measure of quality and impact, size of the readership must be combined with institutional subscriptions to obtain a more meaningful measure of journal distribution.

This study sought to reverse the paradigm by identifying which journals are publishing health education manuscripts through review of the abstracts of health education journals in relation to the responsibilities of the entry and graduate level health educator around which the practice of health education revolves. The current document, published by the National Commission for Health Education, Inc., (NCHEC), which defines the entry-level responsibilities is A Competency-Based Framework for Professional Development of Certified Health Education Specialists or the Framework (1996). The primary intent of the Framework initially was to provide assistance in developing a health education curriculum (Cleary; 1995). The Framework, which is the basis for the Certified Health Education Specialist (CHES) national examination (visit <http://www.nchec.org> for details), serves as a self-study instrument for individuals preparing for the CHES examination, planning on becoming health educators or interested in hiring one (Pollock & Carlyon, 1996). In 1996, the Framework was expanded to incorporate graduate-level responsibilities and competencies. The changes included three new graduate areas of responsibility with corresponding competencies and two new graduate competencies within the existing seven entry-level areas of responsibility (Capwell, 1997). While the CHES examination continues to address the entry-level Framework only, NCHEC, the Society for Public Health Education (SOPHE) and the American Association of Health Education (AAHE) jointly published A Competency-Based Framework for Graduate-Level Health Educators in 1999.

Clark, Ogletree, Chamness, Atkinson, and McKenzie (2000) noted the lack of research investigating the extent to which the entry-level responsibilities and competencies were addressed in health education journals. Thus, they conducted a study of the entry-level responsibilities and competencies discussed in a stratified random sample of manuscripts (n=131) published during 1997-1998 in five health education journals. This study seeks to expand their study by increasing the number of health education journals reviewed, including the graduate-level responsibilities in the analysis, and expanding the number of years reviewed.

METHODS

Upon review of the methodology used by Horowitz et al. (1999) to create a list of 84 health education journals and Price and Robinson (1999) to establish a listing that included 61 journals, the researchers decided to combine the two lists to create a comprehensive, yet manageable, listing of health education journals. Initially the combined list had 115 journals. However, for inclusion in this study the journals had to meet the following criteria: (a) published for at least 5 years as of December 2000, (b) currently published as of January 2002, (c) at least 30% of the articles in the journal must have abstracts, (d) abstracts must be of adequate length and substance for the researchers to determine if a responsibility was addressed, and (e) must emphasize the health and well-being of humans. These requirements resulted in the elimination of 15 journals (see Table 1). Of the 100 remaining journals, a review of all abstracts from four issues per year (if four or more were published) for a five-year period during 1995-2000 was conducted. A random numbers selection process was used to determine which 4 issues would be reviewed for those journals published more often than quarterly. Thus, for all journals in the study published at least quarterly, the abstracts in 20 issues were reviewed.

Each abstract was reviewed to determine whether or not it was a "health education" abstract. For the purposes of this study, a health education abstract is one that addresses one or more of the Health Education responsibilities. If the reviewer determined the abstract addressed health education, he or she would then identify the primary responsibility addressed.

There was a pool of 14 independent reviewers from various academic institutions who reviewed the abstracts. Reviewers had either obtained their doctoral degree in health education or were students in the joint University of Alabama/University of Alabama at Birmingham Ph.D. program. The Ph.D. students received on-site training using an issue of *Journal of School Health* and *American Journal of Health Behavior*. Two reviewers independently coded each abstract for every journal using the 10 responsibilities of health educators. The two reviewers then met to compare ratings. Whenever there was a discrepancy between the two codes assigned, the reviewers discussed their rationale for the rating. If they are unable to agree after discussion of the basis for the decision, the abstract was referred to a third party for a final determination.

Interrater reliability was determined to be 96.8% for health education manuscripts and 88.7% for individual responsibilities. The time consuming meetings in which the independent reviewers met to discuss the reason for each specific rating was an approach described by Trochim (2001) to improve the reliability between raters. Upon completion of the rating and review process, each journal was entered into a Microsoft Access 2000 file and then imported into SAS version 8.2 for statistical analysis.

RESULTS AND DISCUSSION

The number of abstracts addressing each responsibility ranged from 18 for Responsibility IX: Administering Health Education Programs to 1,885 for Responsibility I: Assessing Individual and Community Needs for Health Education. The frequency of each responsibility is found in Table 2. All 10 areas of responsibility were addressed as a primary responsibility in at least 18 abstracts. However, the coverage was extremely uneven. Almost half of the health education abstracts addressed Responsibility I. Responsibility IV: Evaluating Effectiveness of Health Education Programs was determined to be the second most common responsibility in the literature. Health educators familiar with the literature of the field should not be surprised by these findings.

However, the under representation of the remaining responsibilities is striking. If needs assessment and evaluation account for almost 75% of the abstracted literature published in the field, it seems to imply that the other responsibilities are of relatively little importance. The low number of abstracts identified as pertaining to Responsibility IX: Administering Health Education Programs, may be partially related to its status as one of the newer, graduate-level responsibilities. However, Responsibility VI: Acting as a Resource Person in Health Education was represented in only 50 abstracts, while Responsibility V: Coordinating Provision of Health Education Services was addressed in 55 abstracts. These are core entry-level responsibilities that are found on the CHES examination.

An alphabetical listing of the 100 journals reviewed in this study with the number and percent of health education abstracts in each is found in Table 3. The Journal of Nutrition Education, official publication of the Society for Nutrition Education, was determined to have the greatest relevance to the responsibilities of health educators, followed closely by Health Education and Behavior, a SOPHE publication. The Health Educator was ranked third but only 9 issues of this last publication were reviewed, as it is published twice a year, and one issue during the study period had no abstracts. Thus, while there was a high percentage of health education abstracts in this journal, the total number was relatively small (n=44) compared to other journals that ranked slightly lower, such as Health Education Research (n=176) and American Journal of Health Education (n=97). In addition, as Eta Sigma Gamma, National Professional Health Education Honorary, publishes the Health Educator, it may be difficult for some health educators to access.

There were a total of 22 publications that contained fewer than 10 health education abstracts over the 5- year period included in the study. Five publications actually had no health education abstracts. While they may be useful for specific content information, This implies they do not have a significant impact on the field. The abstracts in 20 different journals addressed a health education responsibility at least 50% of the time (see Table 4). The 2,372 abstracts in these 20 journals were approximately 14% of the total sample, yet they accounted for over 43% of the total health education abstracts. Thus, these journals would appear to be excellent candidates for status as a "core" journal within the field.

The most notable absence from the ranks of the relevant health education publications is the American Journal of Public Health. This publication enjoys an elite status. It is the official journal of the American Public Health Association and is the most heavily indexed health education publication (Laflin et al., 1999) with the most library subscriptions (Laflin et al., 2000). The American Journal of Public Health received the highest ranking in the Price and Robinson (1999) study and addressed the most health education competencies in the study by Clark et al. (2000). This last finding is perhaps the most striking as the current study found only slightly more than 19% of the American Journal of Public Health abstracts reviewed addressed a health education responsibility. However, the methodology used in the Clark et al. study did vary significantly from this study.

Their study investigated the extent to which the entry-level Framework responsibilities and competencies were addressed in American Journal of Public Health, Journal of Health Education, Journal of School Health, Health Education and Behavior, and the Health Educator only. The researchers limited their review to a random stratified sample (n=131) of articles published during 1997-1998. They counted every responsibility and competency addressed within each article. Clark and colleagues suggest, "One might be able to argue that most research-based articles with a literature review meet Responsibility I," (p. 285). The current study did not interpret needs assessment in that same manner. In order to be coded as Responsibility I, an abstract had to specifically address needs for health education. Thus, an abstract that was epidemiological in nature, without explicit implications for health education, was not rated as Responsibility I.

It is interesting to note that although the results obtained for the American Journal of Public Health were very different in the two studies, Health Education and Behavior, which received the second highest ranking in the current study, was also ranked second by Clark et al. (2000) in number of competencies addressed. In addition, it was rated second in perceived quality in the Price and Robinson (1999) study.

There were two potential limitations to this study. The most important limitation was the use of the manuscript abstract rather than the full manuscript to determine the responsibility addressed. It was impractical to attempt a careful review of each full manuscript in detail. Abstracts are frequently used in literature searches as indicators of a manuscript's relevance. Therefore, it was assumed that the manuscript abstract would provide enough information for the reviewers to determine if the manuscript was a health education article. However, the researchers sometimes wondered if an abstract truly reflected the nature of the article, especially when there seemed to be a disconnect between the article title and the abstract. Abstract length varied by journal. Longer abstracts, such as the highly rated American Journal of Health Promotion provided greater detail for making a determination that the shorter ones required by American Journal of Health Behavior, which was ranked slightly

lower. To overcome this inequity, it is probably most useful for the health educator to think in terms of "tiers" with the top 5 or 10 journals perceived to be of greatest relevance regardless of individual rank.

Another study limitation was subjective element of the coding process. The reviewers used the exact wording found in A Competency-Based Framework for Graduate-Level Health Educators (1999) but there was still a degree of interpretation required. While the study design attempted to minimize this impact by using two independent raters for each abstract and requiring a mutually agreed upon review of the rationale for each rating, inconsistencies may have occurred over the course of the study.

CONCLUSIONS

Health educators have a wide variety of publications from which to choose their professional reading. Given the overwhelming volume of information, this study provides some guidance for health educators seeking to update and maintain their abilities. It may also assist individuals involved in credentials review of health educators to understand the nature of the manuscripts being published.

The most striking result of this study is the relative dearth of information pertaining to responsibilities other than needs assessment or evaluation. An interest survey by Birch and Pearson (1995) on CHES continuing education found respondents were interested in a wide range of entry-level competencies. While evaluation was of the greatest interest, health educators desired information pertaining to planning, implementation, coordination and communication, as well as needs assessment. It appears the professional literature may be failing to meet the needs and desires of the field by focusing so intensively on needs assessment and evaluation.

HEALTH EDUCATION RESPONSIBILITY AND COMPETENCY ADDRESSED

Responsibility VIII: Apply Appropriate Research Principles and Methods in Health Education Competency A: Conduct thorough reviews of literature.

Subcompetency 5: Synthesize key information from the literature.

Table 1. Journals Excluded from the Study

| Journal Title | Reason (s) |
|--|------------|
| ACSM Health and Fitness Journals | a, c |
| American Health and Fitness Journal | c |
| AWHP Worksite Health | b, c |
| Childhood Education | c |
| Counselor Education and Supervision | d |
| Employee Health and Fitness | b |
| Epidemiology | c |
| Journal of Addictions and Offender Counseling | d |
| Journal of Black Studies | c |
| Journal of Nutrition | e |
| Journal of Physical Education, Recreation, & Dance | c |
| Occupational Health and Safety | c |
| Professional School Counseling | c |
| Promotion and Education | c |
| Young Children | c |

(a) published for at least 5 years as of December 2000

(b) currently published as of January 2002

(c) at least 30% of the articles in the journal must have abstracts

- (d) abstracts must be of adequate length and substance for the researchers to determine if a responsibility was addressed
- (e) must emphasize the health and well-being of humans

Table 2. Health Education Responsibilities Addressed in Abstracts

| <i>Area of Responsibility</i> | <i>Number of Abstracts</i> | <i>Percentage of Sample</i> |
|---|----------------------------|-----------------------------|
| I. Assessing Individual & Community Needs for Health Education | 1,885 | 47.7 |
| IV. Evaluating Effectiveness of Health Education Programs | 1,039 | 26.3 |
| VIII. Apply Appropriate Research Principles & Methods in Health Education | 239 | 6.1 |
| VII. Communicating Health and Health Education Needs, Concerns, & Resources | 236 | 6.0 |
| II. Planning Effective Health Education Programs | 190 | 4.8 |
| III. Implementing Health Education Programs | 131 | 3.3 |
| X. Advancing the Profession of Health Education | 106 | 2.7 |
| V. Coordinating Provision of Health Education Services | 55 | 1.4 |
| VI. Acting as a Resource Person in Health Education | 50 | 1.3 |
| IX. Administering Health Education Programs | 18 | 0.5 |

Note. Graduate Level responsibilities are italicized.

Table 3. Health Education Related Journals included in the Study

| <i>Journal Title</i> | <i>Number of Health Education Abstracts</i> | <i>Percent of Health Education Abstracts</i> |
|---|---|--|
| Academic Medicine | 16 | 6.2 |
| Accident Analysis & Prevention | 28 | 10.1 |
| Addiction | 28 | 15.1 |
| Addictive Behaviors | 27 | 9.9 |
| Adolescence | 180 | 49.9 |
| AIDS Education & Prevention | 102 | 74.5 |
| American JRNL of Drug & Alcohol Abuse | 17 | 8.0 |
| American Journal of Epidemiology | 0 | 0.0 |
| American Journal of Health Behavior (formerly Health Values) | 105 | 76.1 |
| American Journal of Health Education (formerly Journal of Health Education) | 97 | 78.9 |
| American Journal of Health Promotion | 69 | 88.5 |
| American Journal of Health Studies (formerly Journal of Wellness Perspectives) | 96 | 77.4 |

| | | |
|---|-----|------|
| American Journal of Preventive Medicine | 65 | 29.7 |
| American Journal of Public Health | 79 | 19.2 |
| American Journal of Sports Medicine | 16 | 4.6 |
| Archives of Sexual Behavior | 11 | 10.6 |
| Behavioral Medicine | 60 | 69.0 |
| Canadian Journal of Public Health | 46 | 20.6 |
| Child: Care, Health and Development | 31 | 27.7 |
| Child Development | 14 | 3.3 |
| Child Welfare | 3 | 2.2 |
| Community Mental Health Journal | 3 | 2.3 |
| Diabetes Educator | 53 | 59.6 |
| Death Studies | 13 | 15.1 |
| Developmental Psychology | 6 | 1.7 |
| Early Childhood Education | 8 | 8.5 |
| Environmental Health Perspective | 20 | 7.9 |
| Family and Community Health | 59 | 45.4 |
| Family and Consumer Science Research Jrnl (formerly Home Economics Research Jrnl) | 18 | 20.0 |
| Family Planning Perspectives | 25 | 21.9 |
| Health Education and Behavior (formerly Health Education Quarterly) | 141 | 94.0 |
| Health Education Research (formerly Health Education Research: Theory and practice) | 176 | 81.1 |
| Health Educator | 44 | 89.8 |
| Health Promotion International | 111 | 72.6 |
| Health Psychology | 66 | 31.3 |
| Health Services Research | 19 | 10.1 |
| Human Communication Research | 6 | 5.2 |
| International Journal of Eating Disorders | 11 | 5.7 |
| International Journal of Epidemiology | 54 | 10.0 |
| International Journal of Health Services | 19 | 8.8 |
| Intl Qrtly of Community Health Education | 73 | 59.4 |
| Journal of Adolescent Health | 62 | 50.0 |
| Journal of Adolescent Research | 6 | 5.9 |
| Journal of Alcohol and Drug Education | 48 | 48.0 |
| Journal of American College Health | 45 | 48.9 |
| Journal of Behavioral Medicine | 32 | 27.1 |
| Journal of Cancer Education | 82 | 53.3 |
| Jrnl of Child and Adolescent Substance Abuse | 30 | 33.3 |
| Journal of Community Health | 42 | 38.2 |
| Jrnl of Consulting and Clinical Psychology | 28 | 6.85 |
| Journal of Counseling and Development | 3 | 1.2 |
| Journal of Counseling Psychology | 2 | 0.9 |
| Journal of Drug Education | 86 | 66.7 |
| Journal of Drug Issues | 25 | 10.5 |
| Journal of Early Intervention | 3 | 3.0 |
| Journal of Environmental Education | 6 | 6.3 |
| Journal of Environmental Health | 1 | 1.8 |
| Journal of Environmental Science and Health | 0 | 0.0 |
| Jrnl of Epidemiology and Community Health | 75 | 31.1 |
| Journal of Family and Consumer Sciences | 30 | 14.8 |

| | | |
|--|-----|------|
| Journal of Family Issues | 3 | 66.7 |
| Journal of Health and Social Behavior | 17 | 12.3 |
| Journal of Health Communication | 57 | 68.7 |
| Journal of Health Politics, Policy and Law | 15 | 15.0 |
| Journal of Marital and Family Therapy | 0 | 0.0 |
| Journal of Nutrition Education | 108 | 94.7 |
| Jrnl of Occupational & Environmental Medicine | 22 | 12.1 |
| Journal of Primary Prevention | 59 | 65.6 |
| Journal of Psychology and Human Sexuality | 18 | 21.4 |
| Journal of Public Health Policy | 31 | 33.0 |
| Jrnl of Research and Development in Education | 2 | 1.6 |
| Journal of Safety Research | 21 | 18.3 |
| Journal of School Health | 66 | 68.8 |
| Journal of Sex and Marital Therapy | 12 | 8.7 |
| Journal of Sex Education and Therapy | 13 | 8.6 |
| Journal of Sex Research | 30 | 17.8 |
| Journal of Sport and Exercise Psychology | 27 | 27.3 |
| Journal of Studies on Alcohol | 53 | 19.2 |
| Journal of Substance Abuse | 59 | 39.1 |
| Journal of the American Dietetic Association | 17 | 11.6 |
| Journal of the American Medical Association | 7 | 6.1 |
| Journal of Youth and Adolescence | 17 | 12.0 |
| Medicine and Science in Sports and Exercise | 12 | 2.9 |
| New England Journal of Medicine | 5 | 6.7 |
| Omega-Journal of Death and Dying | 0 | 0.0 |
| Patient Education and Counseling | 41 | 22.3 |
| Pediatrics | 113 | 16.5 |
| Personality and Social Psychology Bulletin | 2 | 1.1 |
| Physician and Sports Medicine | 5 | 5.0 |
| Preventive Medicine | 122 | 37.7 |
| Psychology and Health | 42 | 18.8 |
| Public Health Reports | 24 | 16.6 |
| Quest | 17 | 14.8 |
| Research Quarterly for Exercise and Sport | 32 | 23.2 |
| Social Science and Medicine | 42 | 15.3 |
| Substance Use and Misuse (formerly Int'l Journal of the Addictions) | 45 | 26.8 |
| Teachers College Record | 0 | 0.0 |
| Tobacco Control | 69 | 41.6 |
| Women and Health | 69 | 60.5 |
| Youth and Society | 34 | 34.3 |

Table 4. Journals with > 50% of Abstracts related to Health Education Responsibilities.

| <i>Journal Titles</i> | <i>Number of Health Education Abstracts</i> | <i>Percent of Health Education Abstracts</i> | <i>Rank</i> |
|--------------------------------|---|--|-------------|
| Journal of Nutrition Education | 108 | 94.7 | 1 |
| Health Education and Behavior | 141 | 94.0 | 2 |
| Health Educator | 44 | 89.8 | 3 |

| | | | |
|---|-----|------|----|
| Am Journal of Health Promotion | 69 | 88.5 | 4 |
| Health Education Research | 176 | 81.1 | 5 |
| Am Journal of Health Education | 97 | 78.9 | 6 |
| Am Journal of Health Studies | 96 | 77.4 | 7 |
| Am Journal of Health Behavior | 105 | 76.1 | 8 |
| AIDS Education and Prevention | 102 | 74.5 | 9 |
| Health Promotion International | 111 | 72.6 | 10 |
| Behavioral Medicine | 60 | 69.0 | 11 |
| Journal of School Health | 66 | 68.8 | 12 |
| Journal of Health Communication | 57 | 68.7 | 13 |
| Journal of Drug Education | 86 | 66.7 | 14 |
| Journal of Primary Prevention | 59 | 65.6 | 15 |
| Women and Health | 69 | 60.5 | 16 |
| Diabetes Educator | 53 | 59.6 | 17 |
| Int'l Qrtly of Community Health Education | 73 | 59.4 | 18 |
| Journal of Cancer Education | 82 | 53.3 | 19 |
| Journal of Adolescent Health | 61 | 50.0 | 20 |

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