Health risk appraisals (HRAs) may be useful in the classroom. Potential benefits include: increasing awareness of potential risk, decreasing feelings of overestimated risks, providing feedback, obtaining group data, and increasing motivation to make positive behavior changes. The HRA process involves three components: administering questionnaires to gather personal information, making risk estimations based on questionnaire data, and providing feedback. Before using an HRA in class, the teacher must consider the course's learning objective to see if the HRA is appropriate. HRAs should be used in conjunction with an ongoing comprehensive school health education curriculum. If the HRA is appropriate, the teacher must explain the purpose and procedure for its administration to the students, discussing how the results will be used. The HRA has limitations. For example, its feedback is not a diagnosis of disease, and its information is not a predictor of an individual's medical future (but rather an estimate of risk or exposure to a certain disease or condition). The feedback generated may serve as a starting point for counseling. The use of HRA instruments may provide a good jump start to lessons on risk reduction. In review, before using HRAs in class, teachers must determine lesson objectives, examine whether the HRA would help address the objectives, and decide whether they are comfortable administering the instrument and discussing feedback. (Contains 8 references.) (SM)
Health Risk Appraisal (HRA) Use in the Classroom
Cynthia J. Petri, PhD

BACKGROUND

Health risk appraisals (HRAs) have been in existence for many years in many formats. Their original and most common use have been that of estimating the odds that a person, with certain characteristics, will die of selected causes within a given time span. Another common application is that of estimating the odds that a person will contract a given condition or disease. The calculations used may include: the probability of mortality or morbidity or a stratification of risk level. Health risk appraisal instruments can be acquired from private vendors, health education textbooks and on the internet. Some of these tools are more properly called Health Assessments and are not HRAs in the true, original format. They can serve the same purpose by helping individuals analyze their risks and identify areas needing change. Before deciding to use an HRA in the classroom, the various types should be reviewed to ascertain which type one may be comfortable in using. There is also information available regarding cost, previous use, and occasionally, validity and reliability on many HRA instruments. If the use of an HRA is going to become routine, it may be wise to check some credible sources of HRA reviews. This article provides a summary of appropriate HRA use in the classroom.

HRA USE IN THE CLASSROOM

Potential benefits. The use of HRA instruments in the classroom can have several potential benefits. They can be useful in increasing awareness of potential risk and decreasing
feelings of overestimated risk. The feedback the user receives from HRAs provides a systematic way of organizing preventive health information along with emphasizing modifiable risk factors and behavior. Additionally, a classroom teacher can obtain group data (available with the use of some HRAs). Most importantly, HRA use may increase motivation to make positive behavior changes.

Process. The HRA process usually involves three basic components. A questionnaire is completed to gather pertinent personal information. These questionnaires can range in complexity from self-scored single-page paper and pencil type formats to multi-page computerized formats. A risk estimation is then made, based on information provided by the user. The third component is the feedback. The feedback component can be received by the user in a variety of formats. The self-scored format will provide an immediate summary of risk estimation. Other types of feedback may require that responses be coded on a specially prepared answer form and sent to a central location for scoring. Still others, which may be computerized or found on the internet, may provide immediate summaries as well as suggestions and links to find further information. Most of the feedback components provide prevention messages along with the estimated risk of disease.

CONTEXT OF USE

Appropriate HRA use. Before utilizing an HRA in the classroom setting, the learning objectives of the course must first be considered. Though an HRA may seem like a different, unique approach to some subjects, the classroom teacher must first review his/her course objectives and identify where, or if, the use of an HRA is appropriate. The most sophisticated
HRA instrument will serve little purpose if not presented in the right context. Health risk appraisals are not meant to serve as "stand alone" techniques and definitely do not constitute total health education on any particular topic. Their use should be in conjunction with an ongoing comprehensive health education curriculum. Confidentiality should be preserved. Upon receiving the summaries of their responses, individual counseling as to the meaning of the results is best. When this is not possible, group counseling will serve as a reasonable alternative. A teacher can review with the students as a group, the meaning of the results. This review and interpretation will vary, depending upon the type of tool that is being utilized. This brings up another very important point. A class room teacher needs to understand the meaning of the HRA summaries and feel comfortable interpreting and reviewing these with students. If one is not comfortable doing this, it is better not to use the HRA at all.

Once it has been decided that the use of an HRA will be useful, the purpose and procedure for its administration should be explained to the students. Students also need to be told how the results of the HRA will be used. In order to ensure that students are honest with their responses and therefore themselves, they need to be assured that individual responses will not be seen by anyone but themselves. If the teacher is going to review aggregate data, which can be produced by some HRA software, this should be explained to students. Additionally, without giving so much information as to influence their responses, students should be made aware of the benefits of honestly responding to such instruments.

**Limitations of HRA.** It should be recognized that the feedback provided by HRA instruments is not a diagnosis of disease. Most do not gather a complete medical history and most certainly are not meant as a substitute for a medical exam. Therefore they are not a
predictor of an individual's medical future, but do provide an estimate of risk or exposure to a certain disease or condition.\(^1\) Health risk assessments cannot provide an assessment of social or environmental factors associated with certain diseases or conditions.\(^1\) Also, it cannot be emphasized enough that the use of an HRA instrument does not constitute a health education program in and of itself.

CLASSROOM USE VARIATIONS

The health risk appraisal is primarily used to provide estimation of risk for a disease or condition in individuals who are generally healthy.\(^1\) The feedback generated from such instruments may serve as a starting point for a counseling session. For example, if heart disease is being discussed, the administration of an HRA and subsequent discussion of its feedback can provide the opportunity for discussion of specifics related to that individual or group of individuals. Another learning opportunity could be provided by creating different profiles and subsequent discussion of the varying feedback that is received. This will help students see how various behaviors and health history can influence the feedback received. In general, the use of HRA instruments may provide a good "jump start" to lessons on risk reduction.
SUMMARY

There are many types of HRA instruments available. Before utilizing such a teaching technique in the classroom, several issues need consideration. Questions to answer include: What are the objectives of the lesson? Would an HRA instrument assist in addressing those objectives? and Am I comfortable administering the instrument and discussing the feedback? If the answer to all of these questions is "yes," then an HRA may add to the activities of your lesson.
References


Reproduction Release
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: The Use of Health Risk Appraisal (HRA) in the Classroom
Author(s): Cynthia J. Petrilli
Corporate Source: The University of Alabama at Birmingham
Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.
The sample sticker shown below will be affixed to all Level 1 documents

**PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY**

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

**Sample**

---

**Level 1**

- Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

documents will be processed as indicated provided reproduction quality permits.

If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

---

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

**Signature:**

Cynthia J. Petri, Assistant Professor

**Printed Name/Position/Title:**

Cynthia J. Petri, Assistant Professor

**Organization/Address:**

The University of Alabama at Birmingham
School of Education
901 13th St., South
Birmingham, AL 35204-1250

**Telephone:**

205-934-8342

**E-mail Address:**

Cpetri@uab.edu

**Fax:**

205-975-8040

**Date:**

6/8/98

---

**III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):**

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)
IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598
Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

EFF-088 (Rev. 9/97)