Introducing GENIE

Learning Objectives

1) Explain the process used in developing and validating the Guide for Effective Nutrition Interventions and Education (GENIE).

2) Develop skills to utilize the online GENIE checklist and become familiar with GENIE’s resources.

3) Apply GENIE’s criteria to benefit your professional practice.

Outline

1) Why was GENIE created

2) How was GENIE created
   - Reliability and validity testing

3) Introduction to the GENIE checklist and scoring

4) GENIE’s online resources

5) How GENIE can be used

Why was GENIE created?

Nutrition education is important

What does ‘good’ look like?
Academy Fellowships
Provides opportunities:
• Work solely on one project
• Mentorship by Academy staff
• Meet experts in the area
• Publish and present results of work
Goal is a mutually beneficial experience
Fellow is selected by Academy staff based on application and interview

GENIE fellowship
• First time this model has been used
• Received 28 applications
• Has resulted in 3 accepted conference sessions, 2 pending manuscript submissions, and 1 pending abstract submission
• Provided proof of concept for the fellowship model
• Unique opportunity for collaboration between Foundation and Research team

Background
What is GENIE?
• A simple-to-use online checklist
• A rigorously validated tool for designing, modifying or comparing nutrition education programs
• A tool kit of resources for program planners

Who should use GENIE?
• Nutrition education program planners
• Program reviewers and funders

How was GENIE created?
3 Step Process
• Criteria development and expert panel
• Reviewer testing
• Systematic literature review

Study Flow Chart
1. Establish Face and Content Validity
• Identify thought leaders to participate in testing (n=10)
• Identify proposals to be reviewed (n=16)
• Proposals sent to thought leaders for review and evaluation without knowledge of the new tool.
• Expert Panel Meeting
  • Day One: Expert panel to come to consensus on quality of each proposal (criterion establishment)
  • Day Two: Expert panel to determine essentiality and clarity of each element of GENIE (Face and Content validity).
Study Flow Chart

2. Criterion Validity and Inter-rater Reliability

- Develop data collection tool and procedures for evaluating proposals, based on thought leader group input.
- Recruit 13 reviewers from Academy’s Dietetics Practice Based Research Network (DPBRN)
- Training in person at Academy Headquarters; completion of three calibration proposals
- Assessment of 12 proposals completed by 13 reviewers

Results

Reviewers agreed with experts
- Strong relationship between expert and reviewer score groups

Reviewers agreed with each other
- Good agreement between reviewers across proposals and across categories

Reviewer characteristics had no influence
- Differences among reviewers accounted for a low proportion of differences in proposal scores

Conclusions

GENIE performs well across reviewers and across various proposals - can be applied to a variety of programs

Trained reviewer GENIE scores agreed with expert panel assessments - high degree of validity

Trained reviewers agreed with each other - high degree of reliability

GENIE Format

GENIE Categories
1) PROGRAM DESCRIPTION AND IMPORTANCE
2) PROGRAM GOAL
3) PROGRAM FRAMEWORK
4) PROGRAM SETTING, RECRUITMENT AND RETENTION PLAN
5) INSTRUCTIONAL METHODS
6) PROGRAM CONTENT
7) PROGRAM MATERIALS
8) EVALUATION
9) SUSTAINABILITY

The GENIE Checklist

sm.eatright.org/GENIE
GENIE Criteria

1. PROGRAM DESCRIPTION AND IMPORTANCE

1.1 The proposed program provides evidence of feasibility.
   - Yes
   - No

1.2 The proposed program describes why it is well-timed and/or novel.
   - Yes
   - No

1.3 The proposed program defines the target group and need (think about)
   - Yes
   - No

GENIE checklist, con’t.

Checklist Features

1. PROGRAM DESCRIPTION AND IMPORTANCE

1.1 The proposed program provides evidence of feasibility.
   - Yes
   - No

FEASIBLE - capable of being done; reasonable

1.2 The proposed program describes why it is well-timed and/or novel.
   - Yes
   - No

1.3 The proposed program defines the target group and need (think about)
   - Yes
   - No

GENIE checklist, con’t.

GENIE checklist, con’t.

GENIE checklist, con’t.

GENIE checklist, con’t.

5. INSTRUCTIONAL METHODS

6. PROGRAM CONTENT

7. PROGRAM MATERIALS

The proposed program includes measurement tools that address program goals.

The proposed program includes outcome evaluation measures for program goals.

The proposed program evaluates outcomes at multiple time points.

The proposed program contains an appropriate analysis plan.
GENIE checklist, con’t.

9. SUSTAINABILITY
- 9.1. The proposed program addresses the potential for the program to continue.
  - Yes
  - No
- 9.2. The proposed program is supported by evidence of prior program success.
  - Yes
  - No
- 9.3. The proposed program describes shared roles and duties of program partners.
  - Yes
  - No
- 9.4. The proposed program implies potential for broader reach, replication and growth.
  - Yes
  - No
- 9.5. The proposed program addresses the collective program impact within the community and/or among program partners.
  - Yes
  - No

Checklist Features
- 6.2 The proposed program is supported by evidence of prior program success.
  - Yes
  - No
- 6.3 The proposed program describes shared roles and duties of program partners.
  - Yes
  - No
- 6.4 The proposed program implies potential for broader reach, replication and growth.
  - Yes
  - No
- 6.5 The proposed program addresses the collective program impact within the community and/or among program partners.
  - Yes
  - No

GENIE Score Page
1. PROGRAM DESCRIPTION AND IMPORTANCE
   - 1.1.1 The proposed program provides evidence of feasibility.
     - Yes
     - No
   - 1.1.2 The proposed program describes why it is well-timed and/or needed.
     - Yes
     - No
   - 1.1.3 The proposed program defines the target group and need (think about health inequalities).
     - Yes
     - No

GENIE Score Page
3. 1.3 The proposed program defines the target group and need (think about health inequalities).
   - Yes
   - No

GENIE Score Page
6. 1.4 The proposed program justifies that the target group will benefit from the program or intervention, based on related research, best practice examples, or a needs assessment.
   - Yes
   - No

This seems like a lot of work...
3. PROGRAM FRAMEWORK
3.1 The proposed program uses research or best practice examples to show how a model or framework integrates with the program goal.

6. PROGRAM CONTENT
6.2 The proposed program content is based on best practice examples or related research with citations from relevant research or government/health society guidance.

In one POS intervention, which factor was a better predictor of people using the information?

A) Participants needed to **like** the information

B) Participants needed to **understand** the information

“...information characteristics (e.g. display size, color scheme), which are key determinants of consumers’ attention to nutrition information and liking of the information, may offer a window of opportunity to improve the effectiveness of nutrition information in terms of targeted dietary change.”


What can we learn from effective advertising models, such as AIDA (Attention, Interest, Desire, Action)?

What can we learn from behavior change models, such as the Transtheoretical Model?

How can we apply evaluations from other interventions into your design?

What can we learn from other types of POS interventions?

7. PROGRAM MATERIALS
7.1 The program cites and explains that the materials have social and cultural relevance including language, reading level, food likes/dislikes, household status, food/diet needs, interests, age/development stage matched, learning style and/or format.

EVALUATION
8.3 The proposed program’s evaluation method is cited, based on related research, best practice or includes pilot testing to support its use.
The Effectiveness of Interventions to Increase Physical Activity: A Systematic Review

Signs were effective for both obese and non-obese people, but greater for those who were obese; Among obese people, linking stair use to the potential for weight loss was more effective than signs for general health benefits; Effects on African Americans was mixed; This type of intervention is effective, when adapting the messages for the population.

First Draft- Page 2

1. Robin's first attempt at writing a proposal.
2. Program Overview and Population
3. The Town of Franklin is a place I have often to call home. I am a Registered Dietitian at Franklin School, a 4. local long term care facility, and my son attends Franklin Elementary School. Our town is a great place to work, play, and learn, but I wish Franklin were a healthier place for my family. I think that the people of Franklin need to eat healthier foods. Other parents I’ve talked to say that they wish they could provide 5. healthier meals for their families, but feel they don’t have the time or knowledge to do so. Instead, 6. many rely on fast food restaurants or take-out options like pizza or Chinese food. As a mother, I know 7. caring for my family is important and I have also struggled to find a balance between my busy schedule 8. and a healthy lifestyle. From my experience, I have learned that preparing healthy meals is not hard, 9. but does take a little planning and practice. I would like to share my experiences and knowledge with 10. setting of workshops. As part of the established Franklin Adult Education program, I think these workshops will provide my community with the skills they need to 11. prepare fast, healthy meals at home. Funding from ABC would allow us to reduce the cost to 12. participants attending the workshops.
How GENIE can be used

Your hospital wants to start a nutrition outreach program in the local middle school. It doesn’t make sense for you to design a program from scratch, so you decide to select an existing curriculum to implement.
How GENIE can be used

You counsel clients at three locally owned fitness facilities. For the past year, you’ve been paid on commission, but you’ve built up a large clientele and now the facility is considering adding you as a salaried employee with benefits. They’ve given you the next year to show that your work helps clients and creates revenue.

How GENIE can be used

Twice a year, you are asked to provide a training to a group of afterschool care providers. The group already uses an established nutrition education program, but has some autonomy in deciding how the program is implemented. The providers look to you for guidance on how the program should be implemented.

Acknowledgements

Thank you to the individuals and organizations who shared their proposals for the purposes of this study.

**Expert panelists:**
Maria Ali, Amanda Birnbaum, Karen Chapman-Novakofski, Sarah Colby, Phyllis Crowley, Amy Knoblock-Hahn, Donna McDuffie, Megan Nechanicky, Sandy Proctor, Margie Tate

**DPBRN reviewers:**
Sara Beckwith, Elsa Ramirez Brisson, Frances Catinella, Mary Ellen DiPaolo, Sari Edelstein, Beth Gillham, Heather Heefner, Kate Hoy, Jill Kennedy, Kate Machado, Robin Nwankwo, Susan Parks, Kathy Tigue

The Guide for Effective Nutrition Interventions and Education

[sm.eatright.org/GENIE](sm.eatright.org/GENIE)

GENIE was supported through an educational grant from the ConAgra Foods Foundation.