NUTR0211-01

Theories of Behavior Change and Their Application in Nutrition and Public Health Interventions

Syllabus and Course Readings

Tufts Friedman School of Nutrition Science and Policy
Fall Semester 2016
Instructor: Sara C. Folta, PhD
Mon. 9 AM-12 PM, Jaharis 118
NUTR211-01 Course Syllabus

Tufts Friedman School of Nutrition Science and Policy  Fall Semester 2016
Mon. 9 AM – 12 PM, Jaharis 118

Instructor: Sara C. Folta, PhD
Office Hours: by appointment, 75 Kneeland St., Room 848
Phone: 617-636-3423
E-mail: sara.folta@tufts.edu

Teaching Assistant: Namibia Lebron-Torres
Office Hours: By appointment
Email: namibia.lebron_torres@tufts.edu

Teaching Assistant: Micaela Young
Office Hours: By appointment
E-mail: micaela.young@tufts.edu

Credit: 1.0

Description and Goals
Welcome to this class exploring theories of behavior change. This course will be conducted in a workshop format rather than a lecture format, because theories are best learned by discussion and experience. We will generally be covering one theory per class session. The theories we will be covering are some of the most widely used in public health. You will be required to read about the theory and write a brief paper before each class. Class sessions will generally include a discussion of the readings and your thoughts about the theory as it applies to a particular research or clinical question. In that context, we will explore some of the strengths and limitations of each theory. We will also engage in activities, either as small groups or as a class, that are related to the theory. Examples of these activities include creating public service announcements or other messaging based on the theory; designing an intervention using constructs from the theory; or role-playing one-on-one counseling sessions using the theory’s tenets. The second to last class will include a discussion of the ethics of behavior change, and the final class will consist of student presentations based on a short paper describing your application of a theory or theories to a research project, program intervention, or clinical case, and how these theories might inform the design of your project.

The course itself is designed so that students preparing for work involving the study of and motivations for food intake and physical activity will be better able to compete for research grants, counsel clients, and design more effective program interventions. In the short-term, I hope what you learn contributes to your dissertation, a grant proposal, or to your getting a job. In the fields of nutrition, food intake and physical activity behavior, any attempts to design interventions aimed at changing individuals’ behavior need to be based on theory. Without such justification, any changes in behavior of individuals or populations will be difficult to explain, and therefore will not be easily generalized to other individuals and populations. In fact, in the research community, most granting agencies will not fund studies unless they are theory-driven. To design sound program interventions and behavioral research, students need to discover what behavior theories are available, what aspects of behavior each theory attempts to explain, and how to apply theory to inform their research and intervention designs. In understanding these theories, you will be well-served whether you enter the fields of academia, clinical dietetics, public relations or public health.
Course Learning Objectives

1) to describe the fundamental features of the major theories related to health behavior change;

2) to have a basic understanding of the issues around construct measurement, including reliability and validation;

3) to understand how to apply health-related behavior theory to the student’s own research, clinical cases, or evaluation-based program intervention of interest;

4) to challenge each theory and describe its strengths and limitations in relation to particular research and clinical contexts;

5) to be able to consider the ethical implications of using theory to change human behavior;

6) to continually question, in work and in general life, what drives people to do what they do.

Assignments and Grade Evaluation

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 weekly memos and in-class discussion of them</td>
<td>50%</td>
</tr>
<tr>
<td>Participation in discussions – thoughtful comments on other memos, follow-up to continue dialogue</td>
<td>35%</td>
</tr>
<tr>
<td>Final 1-2 page paper and presentation</td>
<td>15%</td>
</tr>
</tbody>
</table>

Class memos
I believe that learning is best undertaken as a continuous dialogue, not as a one-way flow of information. To begin that dialogue, you will be required to write a very short reflection paper, or memo, that helps you explore how the ideas covered in the readings influence your thinking about your own specific research project, program intervention, clinical situation, or health behavior that you believe you should change in your own life. (You do not need to have a behavior or situation ready for the first class; we will discuss this further then). For Week 2 through Week 12, you will submit the memo by the Saturday prior to class at 5 PM. (Memos may be submitted any time prior to this deadline). The reflection paper can be short— it should not be more than one page. It should be informal but thoughtful. These will be the primary writing assignments you will have for the entire course; there will be no lengthy papers and no exam. However, because of that, these weekly writings will be very important. Besides beginning the dialogue, they may also serve as a starting point for sections of a dissertation or a grant proposal.
Grading criteria:

<table>
<thead>
<tr>
<th>Components</th>
<th>Expected Level of Competence (“check-plus”)</th>
<th>Moving Towards Expected Level of Competence (“check”)</th>
<th>Below Expected Level of Competence (“check-minus”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timely submission of assignment</td>
<td>Complete memo on time each week.</td>
<td>Memo is submitted late.</td>
<td>Memo is not submitted.</td>
</tr>
<tr>
<td>Style guidelines</td>
<td>Writing is clear and succinct. Demonstrates care in writing, which may be informal, but thoughtful. The memo has a smooth flow of ideas and is well organized and logical.</td>
<td>Writing lacks clarity in some places. Flow of ideas could use some improvement.</td>
<td>Writing lacks clarity throughout. Flow of ideas is rough. Memo is not well organized.</td>
</tr>
<tr>
<td>Demonstrates careful reading &amp; inquiry into subject</td>
<td>Demonstrates serious contemplation of the readings. Shows original thought that goes beyond the obvious.</td>
<td>Demonstrates reading was completed, but relies primarily on summary rather than integration of information.</td>
<td>Reading assignment scanned, but not read carefully or gives little indication that readings were completed.</td>
</tr>
<tr>
<td>Application of theory to professional situation</td>
<td>Articulates strengths and limitations of theory’s application to professional context. Elaborates statements with accurate explanations, reasons, or evidence.</td>
<td>Provides general discussion of theory’s application but with little evidence or explanation. Examples to support points are not well integrated or not effective.</td>
<td>Missing or limited theory application. Little evidence used to support points or evidence is out of context.</td>
</tr>
</tbody>
</table>

Class attendance and participation

The class will be in a workshop format, with an emphasis on discussion and experiential learning activities. Because of this, a significant portion of your grade will be based on class attendance and participation.

Why is there so much emphasis on discussion and participation in this course?

- The discussion and activities are designed to help you gain a better understanding of the theories – I want you to come away with a living, breathing appreciation for them.
- You all engage in health behaviors (or sometimes don’t!), and have all experienced the joys and frustrations of others’ behavioral decisions, either professionally and/or with family and friends. Therefore you are all experts on behavior, and have a tremendous amount to learn from each other. Within the class there will be both commonalities and diverse perspectives – these will enrich your learning and understanding of behavioral theory. In interacting with others, you will learn to identify and confront your own assumptions.
- Many of the professional situations that you will encounter in your future work will not offer easy solutions. The class will afford you practice in exploring ambiguity and complexity in a “safe” situation, as you discuss your hypothetical professional situations.
- It helps you further develop your communications skills.

This may be worrying for some of you. However I want to stress how important it is to have your voice (and all voices) in the discussion. It doesn’t matter if you don’t have much professional experience, because you bring a lifetime of experience. It doesn’t matter if you are not entirely facile with English, because the insights you bring about these theories and culture is critical, it is gold. If you are an introvert and need to take time to think through your response, you can and should take it. Each of you has
something critical to offer in our collective learning. The goal of learning behavioral theory is for you to become change agents in public health, whether you are working at the individual, group, or population level. I know the difference you will make in part because alumni come back and talk about their work and the differences they have made. So my goal is for you to have your voice, learn what you need to learn, and learn in a way that will change and challenge how you think. That will not happen if I am a mere depositor of knowledge.

Grading criteria for attendance and participation:
- Arrived on-time to best of ability
- Attended all classes, barring exceptional unforeseen circumstances
- Contributed to discussion at least once per class, and/or actively participated in small groups
- Listened actively to others
- If disagreed, did so respectfully
- Did not dominate the discussion
- Asked all genuine questions, even if they seemed simple or obvious

Final paper and presentation
On the last day of the class, a final memo (1-2 pages, no more) is due, describing the theory or theories that you are considering applying to your research project, program intervention, or clinical case, and how these theories might inform the design of your project or case (complete with citations and references). In addition, in the last class each of you will spend 3-5 minutes summarizing the memo for the class.

Grading criteria:
- Was able to effectively defend choice of theory or theories
- Was able to synthesize what was learned over the semester
- Formally written with appropriate use of references

Course Policies

Participation Policy
A major part of your learning will take place within the classroom, and this is why class attendance is a significant part of your grade. You can still get full credit for up to two missed classes if you schedule a tutorial session with the TA. If you think it is likely that you will have to miss more than two class sessions, you would be much better off taking the course at another time.

Time extensions, make-up work, and a grade of Incomplete will only be given under the most extreme circumstances. Requests for these items must be made in advance, in writing, to the Academic Dean for Education and must have prior approval, in writing, of the academic advisor and the instructor.

Communication Policy
Students should try to seek out information for themselves before contacting the instructor. If you cannot find your answer, contact Dr. Folta, preferably via email, as soon as possible. Please do not wait until the last minute.

Policy for Late or Incomplete Assignments
Assignments must be completed on time – it is essential for the way this course is structured. Assignments turned in past the due date without notifying the instructor in advance will have 10% per day automatically deducted from the grade for the assignment.
Accommodation of Disabilities
Tufts University is committed to providing equal access and support to all students through the provision of reasonable accommodations so that each student may access their curricula and achieve their personal and academic potential. If you have a disability that requires reasonable accommodations, please contact the Friedman School Assistant Dean of Student Affairs at 617-636-6719 to make arrangements for determination of appropriate accommodations. Please be aware that accommodations cannot be enacted retroactively, making timeliness a critical aspect for their provision.

Academic Conduct
Academic integrity, including avoiding plagiarism, is critically important. Each student is responsible for being familiar with the standards and policies outlined in the Friedman School’s Policies and Procedures manual (http://nutrition.tufts.edu/student/documents). It is the responsibility of the student to be aware of, and comply with, these policies and standards. In accordance with Tufts University’s policy on academic misconduct, violations of standards of academic conduct will be sanctioned by penalties ranging from grade reduction or failure on an assignment; grade reduction or failure of a course; up to dismissal from the school, depending on the nature and context of any infraction (http://uss.tufts.edu/studentaffairs/judicialaffairs/Academic%20Integrity.pdf).
<table>
<thead>
<tr>
<th>SESSION</th>
<th>DATE</th>
<th>THEORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>12 Sept</td>
<td>What Is “Theory”? Why Do We Need It? Usefulness of Theory</td>
</tr>
<tr>
<td>2.</td>
<td>19 Sept</td>
<td>Health Belief Model</td>
</tr>
<tr>
<td>3.</td>
<td>26 Sept</td>
<td>Theory of Reasoned Action / Theory of Planned Behavior</td>
</tr>
<tr>
<td>4.</td>
<td>3 Oct</td>
<td>Self-Efficacy</td>
</tr>
<tr>
<td>5.</td>
<td>17 Oct</td>
<td>The Transtheoretical Model</td>
</tr>
<tr>
<td>6.</td>
<td>24 Oct</td>
<td>Self-Determination Theory, Motivational Interviewing</td>
</tr>
<tr>
<td>7.</td>
<td>31st Oct</td>
<td>Social Cognitive Theory</td>
</tr>
<tr>
<td>8.</td>
<td>7 Nov</td>
<td>Dual-Process Models</td>
</tr>
<tr>
<td>9.</td>
<td>14 Nov</td>
<td>Behavioral Economics</td>
</tr>
<tr>
<td>10.</td>
<td>21st Nov</td>
<td>Social Support/Social Networks, Diffusion of Innovations</td>
</tr>
<tr>
<td>11.</td>
<td>28 Nov</td>
<td>Eco-Social Models</td>
</tr>
<tr>
<td>12.</td>
<td>5 Dec</td>
<td>Ethics of Behavior Change</td>
</tr>
<tr>
<td>13.</td>
<td>12 Dec</td>
<td>Student Presentations – <strong>LAST CLASS</strong></td>
</tr>
</tbody>
</table>
Readings for Each Class Session

There is a fairly substantial reading load for each class. Often the readings include early articles describing the development of the theories, as well as more recent articles showing application of the theories to topics of interest. Other times, the readings describe conflicting opinions about the validity or usefulness of a theory, because there is no such thing as a theory that everyone believes in.

The main text for this course is Glanz, Rimer and Viswanath (2015) Health Behavior: Theory, Research and Practice, 5th Edition. It is strongly recommended that you purchase this book. There is also a copy on reserve at the Hirsh Health Sciences Library.

We will also be reading somewhat extensively from the following books, which you may also wish to purchase:


Journal articles are available in PDF format on the course website (on Trunk at https://trunk.tufts.edu). If you have any problems accessing the website at any point in the semester, please let me know.

Please note: each week, the readings are listed in a particular order for a reason, often to provide you with a general overview followed by application examples. My recommendation is to complete the readings in the order listed.
Introduction: What is “Theory”? Why do we need it?

Learning Objectives:
- Understand the concept of a behavioral theory and how theory can inform research and practice
- Understand what a construct is

Required Reading:


Session #2: 19 September 2016
Health Belief Model

Learning Objectives:
- Explain the concepts of perceived severity, perceived susceptibility, barriers, benefits
- Give examples of cues to action
- Discuss the strengths and weaknesses of the HBM
- Understand the issues of construct measurement and validation

Required Reading:


Session #3: 26 September 2016
Theory of Reasoned Action and the Theory of Planned Behavior

Learning Objectives:
- Understand what expectancy-value theory is
- Understand the TRA/TPB constructs and the relationships among them
- Understand how to apply TRA/TPB to clinical and research situations
- Discuss the limitations of the TRA/TPB
- Compare and contrast the TRA/TPB with the HBM

Required Reading:


Learning Objectives:
- Describe different methods for increasing self-efficacy
- Distinguish self-efficacy from self-esteem or self confidence
- Examine the confluence of outcome expectations and self-efficacy in predicting behavior

Required Reading:


Session #5: 17 October 2016  
The Transtheoretical Model

Learning Objectives:
- Describe the different stages of change
- Describe the processes of change
- Describe how identifying stages can be used for intervention targeting
- Explain the non-linear nature of progression through the stages

Required Readings:


Learning Objectives:
- Understand different levels of internalization of motivation and the influence of external rewards on behavior
- Understand the basic principles of motivational interviewing
- Describe the relationship between the SDT and MI

Required Readings:


Session #7: 31st October 2016
Social Cognitive Theory

Learning Objectives:

- Understand the basics of inter-personal behavioral theory and the influence of the immediate environment on behavior
- Apply the concepts of observational learning and reciprocal determinism
- Describe the place of self-efficacy in the SCT

Required Readings:


Optional Reading:


Additional Assignment Due:
Midterm evaluations
Session #8: 7 November 2016
Dual-Process Models

Learning Objectives:
- Explore the role of emotions and the unconscious in determining behavior
- Discuss the strength of habit in determining behavior and the benefits and drawbacks of habit replacement

Guest lecturer: Megan Halmo, ChildObesity180

Required Readings:


Recommended Activity:
Take an Implicit Association Test:
https://implicit.harvard.edu/implicit/demo/

Optional Reading:

Highly Recommended Reading for Nail Biters:
Session #9: 14 November 2016
Behavioral Economics

Learning Objectives:
- Understand basic tenets of behavioral economics
- Apply concepts within appropriate individual and group interventions
- Compare and contrast behavioral economics principles with concepts from other theories

Guest Lecturer: Sean B. Cash, PhD

Required Readings:


Optional Activity:
View TED talk by Keith Chen: Could your language affect your ability to save money?
(http://www.ted.com/talks/keith_chen_could_your_language_affect_your_ability_to_save_money.html)
Learning Objectives:

- Describe the attributes of an innovation that make it more likely to diffuse
- Explain the mechanisms through which social support may influence individual behavior

Required Readings:


Session #11: 28 November 2016  
Eco-Social Models

Learning Objectives:
- Distinguish between different levels of influence on individual behaviors
- Give examples of ways the community, political, social, and built environment can influence individual behavior
- Discuss potential methods of intervening at each of these levels to change health behavior

Guest Lecturer: Linda B. Hudson, ScD MSPH

Required Readings:


Session #12: 5 December 2016
Ethics of Behavior Change

Learning Objectives:
- Consider the ethical implications of behavior change in a wide range of settings

Required Readings:


Optional Reading:
This article is specifically about the ethics of strategies related to behavioral economics.

Learning Objectives:
- Synthesize what has been learned and choose the most applicable behavioral theory/ies for a particular public health intervention or research question, and describe how the concepts might be applied

Required Readings:

NO READINGS REQUIRED FOR SESSION #13.