

**Tufts University, Friedman School of Nutrition Science and Policy**

**NUTB 211 - THEORIES OF BEHAVIOR CHANGE  
SPRING 2021**

**Class Meetings:** On-line & Remote synchronous residency on February 5<sup>th</sup>, 2021 – February 7<sup>th</sup>, 2021, 8:00 AM – 12:15 PM EST

**Instructor:**

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**Teaching Assistant:**

TBD

**Credit:** 3.0 SHU

**Prerequisites:** Graduate standing or instructor consent.

**Course Description and Goals:**

The goal of this course is to explore some of the theories of behavior change most commonly used in nutrition and public health. This course will be conducted, to the greatest extent possible, in a workshop format rather than in lecture format because theories are best learned through discussion, application, and experience. Where appropriate, students will explore (through readings and discussion) various perspectives as they relate the theories to examples and case studies. We will generally cover one theory per class session, with a few exceptions. For each class, you will be required to read about the theory and complete an assignment where you apply the theory in various ways. Through the discussion of these assignments in the online discussion space, we will explore the strengths and limitations of each theory. The final class will include a discussion of the ethics of behavior change. The final assignment will be short presentations based on a brief final paper in which students will synthesize what they have learned over the semester by applying a theory or theories to a chosen research, intervention, or program and describing how these theories might inform the design of their 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, we 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 Objectives:**

By the end of the course, students will be able to:

- Describe the fundamental features of the major theories related to health behavior change.
- Have a basic understanding of the issues around construct measurement, including reliability and validation.
- Understand how to apply health-related behavior theory to the student’s own research or evaluation-based program intervention of interest.
- Challenge each theory and describe its strengths and limitations in relation to a variety of research and program delivery contexts.
- Be able to consider the ethical implications of using theory to change human behavior.
- Continually question, in both work and general life, what drives people to do what they do.

**Textbook: Required** - Glanz, Rimer and Viswanath (2015). *Health Behavior: Theory, Research and Practice, 5<sup>th</sup> Edition*.

**Academic Conduct:**

Each student is responsible for upholding the highest standards of academic integrity, as specified in the Friedman School’s Policies and Procedures manual (<http://nutrition.tufts.edu/student/documents>) and Tufts University policies (<http://students.tufts.edu/student-affairs/student-life-policies/academic-integrity-policy>). It is the responsibility of each student to understand and comply with these standards, as violations will be sanctioned by penalties ranging from failure on an assignment and the course to dismissal from the school.

**Assessment and Grading:**

12 weekly assignments and responses to comments on them	45%
Participation in discussions – thoughtful comments on discussion prompts, follow up to continue dialogue	40%
Final paper and presentation	15%

The following guidelines are used in evaluating course performance:

1. Assignments will be evaluated on the quality of thought, completeness, originality, adherence to guidelines, and ability to incorporate and communicate ideas and information effectively (see grading criteria for assignments below).
2. On-line discussions will be evaluated according to the discussion matrix (see the grading criteria for the discussion below).
3. Overall performance will be evaluated based on adherence to course guidelines, including completing all course readings and completing all other course activities by the deadlines.

**Readings & Discussions:**

For the most up to date information regarding assigned readings, instructions, and due dates please check your email and/or login to your course site.

There is a substantial reading load for each session of this course. Often the readings include early articles describing the development of the theories as well as more recent articles showing their application to topics of interest. *Please note* that 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. Readings for each class will be available on the course website.

The main text for this course is Glanz, Rimer and Viswanath (2015) Health Behavior: Theory, Research and Practice, 5<sup>th</sup> Edition.

**Weekly Assignments:**

It is my belief that the best learning occurs through a continuous dialogue, not the one-way transfer of information from an “expert” to a “student.” Weekly assignments offer opportunities to thoughtfully engage with the theory by applying it in various scenarios. The assignments aim to promote creative thinking that encourage you to consider how theory is used to better understand human behavior and how it can be applied to encourage behavior change. Assignments are also designed to “demystify” concepts such as latent constructs, data analysis, and research. All weekly assignments are completed and submitted individually, though there are several assignments that require participation in a group. The teaching team will help facilitate group formation as necessary.

Detailed instruction for each assignment will be posted on the course website.

Written assignments should be no longer than 2 pages (double or single-spaced). References are not required, but if you would like to refer to existing information (e.g., a website, a paper, a podcast), you can use footnotes or endnotes to do so. Whether you include references or not in weekly assignments will not impact the points you receive for that assignment.

For all weeks, you will submit the assignment on the course website by 10:00pm EST each Sunday. Please see the Course & Assignment Schedule below and the course website for the exact due date of each assignment.

These assignments will make up the bulk of the writing for this course. There will be no long papers, and in keeping with a dialogical approach to teaching, there will be no exam. However, because these weekly assignments form the bulk of the writing for the class, they will be very important. They may also eventually serve as a starting point for writing a grant or project proposal for your own work.

Grading criteria for the assignments:

<b>Components</b>	<b>Expected Level of Competence (Check-plus)</b>	<b>Moving Towards Expected Level of Competence (Check)</b>	<b>Below Expected Level of Competence (Check-minus)</b>
Timely submission of assignment	Complete assignment submitted on time.	Assignment is submitted within 24 hours of due date/time.	Assignment is submitted more than 24 hours from due date/time. (If not submitted at all, receives a “0”).
Style guidelines	Writing is clear and succinct. Demonstrates care in writing, which may be informal, but thoughtful. The assignment has a smooth flow of ideas and is well organized and logical.	Writing lacks clarity in some places. Flow of ideas could use some improvement.	Writing lacks clarity throughout. Flow of ideas is rough. Assignment is not well organized. Thoughts and/or sentences are not complete.
Demonstrates careful reading & inquiry into subject	Demonstrates serious contemplation of the readings. Shows original thought that goes beyond the obvious.	Demonstrates reading was completed, but relies primarily on summary rather than integration of information. Ideas and application rely on main text, and other readings not appropriately incorporated.	Reading assignment scanned, but not read carefully or gives little indication that readings were completed.
Application of theory	Articulates strengths and limitations of theory’s application. Elaborates statements with accurate explanations, reasons, or evidence.	Provides general discussion of theory’s application but with little evidence or explanation. Examples to support points are not well integrated or not effective.	Missing or limited theory application. Little evidence used to support points or evidence is out of context.

**Discussion Assignment Grading Criteria:**

Substantive discussion is a critical element contributing to understanding and integration of the concepts and topics covered in this course. Students are expected to contribute to the discussion by responding to the weekly discussion prompts and to the posts of other students with thoughtful questions, observations, or suggestions for enhancing their application of a theory. They are also expected to engage with other students in ongoing discussion of their own assignments. The weekly discussions start on Mondays and remain open until 11:59pm EST on Thursdays. *(Please note that the weekly discussions do not start until after the residency period).*

Below is a rubric that describes how your discussion performance is evaluated:

Components	Expected Level of Competence (Check-plus)	Moving Towards Expected Level of Competence (Check)	Below Expected Level of Competence (Check-minus)
Quantity and timeliness of contributions	Frequently reads the messages in the discussion area. Contributes with at least 4 constructive messages each week.	Reads messages in the discussion area a few times per week (e.g. two times per week). Contributes less than 4 constructive messages each week. Some posts are past the deadline.	Reads messages in the discussion area intermittently (e.g. once per week) and contributes to the discussion only sporadically. All posts are past the deadline. (Will receive a "0" for weeks where no contributions are made).
Quality and relevance of post	Messages are concise, clear, and thoughtful. Messages contribute something original or build upon what has been said; they are not repetitious.	Posts topics that are related to the discussion content, but messages only address peripheral issues. Messages dominated by opinion rather than analysis. Repetition of questions or points made by others.	Posts topics which do not relate to the discussion. Makes short, irrelevant remarks or responds with minimum effort (e.g. "I agree with Sally").
Interaction with others	Questions are raised to stimulate discussion. Encourages a variety of viewpoints. Responds to questions and comments from others. When disagreeing, does so respectfully. Comments are primarily student-to-student with comments and questions to the instructor as necessary.	Participation is evident, but posts do not involve others or encourage others to think critically.	Rarely raises questions to stimulate discussion and rarely responds to the questions and comments raised by others. Comments are predominantly student-to-instructor and are rarely student-to-student. Comments are unconstructive or non-courteous.

**Final Paper and Presentation:**

Now that you have "met" a semesters' worth of behavior change theories, your final assignment should describe the theory or constructs from multiple theories that you are considering applying to a research project or program intervention of your choice that targets a specific health behavior, and how these theories might inform the design of your project. Please submit a short description of your research project or program intervention three weeks before the final assignment is due so the teaching team can provide feedback on the idea. This assignment should be more formally written and include citations and references to class readings. The assignment should be 2-4 pages (double or single-spaced).

**Presentations:** In addition to submitting the final assignment, please post a 3-5-minute presentation summarizing your final assignment. Please do not submit presentations that are longer than 5 minutes. The presentation can be a video or voice recording of you summarizing your assignment (no slides), or you can submit a PowerPoint file with a voice recording narrating your slides (see instructions here: <https://support.office.com/en-us/article/record-a-slide-show-with-narration-and-slide-timings-0b9502c6-5f6c-40ae-b1e7-e47d8741161c>). Whether to use slides or not is totally up to you. You will be graded on your presentation content, not the format you choose. If you have any technical difficulty recording your presentations, please let me know as soon as possible so we can decide on alternative formats.

Please include the following sections in your final assignment:

- **Background:** Provided appropriate background to the behavioral issue, including some (brief) statistics to contextualize it
- **Rationale:** Provided a clear and compelling rationale for choice of theory or theories, and was able to effectively defend choice
- **Plan:** Provided examples of specific and appropriate strategies based on theories chosen, and was able to synthesize what was learned over the semester into an integrated plan
- **Evaluation:** How will you know if your plan is working as intended (or not). Provide a brief description of how you would evaluate your behavior change plan.

Your assignment should be formally written with appropriate use of references.

### **Assignments and Submission Instructions:**

Please see the Course Schedule below and the course website for a list of assignments and due dates. Late assignments and discussion posts will be penalized per the grading rubrics above. Students who are unable to complete an assignment or contribute to the discussion on time should notify the instructor by email prior to the deadline. Extensions will be granted only for exceptional circumstances.

### **Diversity Statement:**

We believe that the diversity of student experiences and perspectives is essential to the deepening of knowledge in this course. We consider it part of our responsibility as instructors to address the learning needs of all of the students in this course. We will present materials that are respectful of diversity: race, color, ethnicity, gender, age, disability, religious beliefs, political preference, sexual orientation, gender identity, socioeconomic status, citizenship, language, or national origin among other personal characteristics.

Assignments are due weekly. If this will present a conflict with your religious observances at any point, please let us know as soon as possible so that we can work together to make arrangements.

We welcome any suggestions that you have about other ways to include the value of diversity in NUTB 211.

### **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.

**Course & Assignment Schedule:**

This schedule is subject to modification at the instructor’s discretion. Please refer to the course website for the very latest information on readings and assignments.

<b>Week # - Topic</b>	<b>Dates</b>	<b>Assignments Due</b>
1 – What is theory?	18 – 24 January	<ul style="list-style-type: none"> <li>• Sign up for a 15-minute meeting with the professor</li> <li>• Introduce yourself to your classmates by posting a short (&lt;2 minute) video on the Discussion Forum</li> </ul>
2 – Health Belief Model	25 – 31 January	<ul style="list-style-type: none"> <li>• Assignment #1 DUE by Sunday 31 Jan at 10:00 PM EST</li> </ul>
3- RESIDENCY WEEK	5 February – 7 February	Attend synchronous class Friday, Saturday, and Sunday 8 AM – 12:15 PM each day
Recovery week		
4 - Theory of Planned Behavior/ Theory of Reasoned Action	15 – 21 February	<ul style="list-style-type: none"> <li>• Assignment #2 DUE by Sunday 21 Feb at 10:00 PM EST</li> </ul>
5 – Self-Efficacy	22 – 28 February	<ul style="list-style-type: none"> <li>• Assignment #3 DUE by Sunday 28 Feb at 10:00 PM EST</li> </ul>
6 – Trans Theoretical Model/Stages of Change	1 – 7 March	<ul style="list-style-type: none"> <li>• Assignment #4 DUE by Sunday 7 Mar at 10:00 PM EST</li> </ul>
7 – Self Determination Theory and Motivational Interviewing	8 - 14 March	<ul style="list-style-type: none"> <li>• Assignment #5 DUE by Sunday 14 Mar at 10:00 PM EST</li> <li>• Midterm assessment DUE Sunday 14 Mar at 10:00 PM EST</li> </ul>
8 – Social Cognitive Theory	15 - 21 March	<ul style="list-style-type: none"> <li>• Assignment #6 DUE by Sunday 21 Mar at 10:00 PM EST</li> </ul>
9 – Social Support/Social Networks, Diffusion of Innovations	22 - 28 March	<ul style="list-style-type: none"> <li>• Assignment #7 DUE by Sunday 28 Mar at 10:00 PM EST</li> </ul>
10 – Dual-Process Models	29 - 4 April	<ul style="list-style-type: none"> <li>• Assignment #8 DUE by Sunday 4 Apr at 10:00 PM EST</li> </ul>
11 – Behavioral Economics	5 - 11 April	<ul style="list-style-type: none"> <li>• Assignment #9 DUE by Sunday 11 Apr at 10:00 PM EST</li> </ul>
12 – Eco-Social Models	12 - 18 April	<ul style="list-style-type: none"> <li>• Assignment #10 DUE by Sunday 18 Apr at 10:00 PM EST</li> </ul>
13 – Patient and community engagement	19 - 25 April	<ul style="list-style-type: none"> <li>• Assignment #11 DUE by Sunday 25 Apr at 10:00 PM EST</li> </ul>
14 – Ethics	26 - 2 May	<ul style="list-style-type: none"> <li>• Assignment #12 DUE by Sunday 2 May at 10:00 PM EST</li> </ul>
Reading and Examination Period	10 May	<ul style="list-style-type: none"> <li>• Final paper DUE Monday 10 May at 5 PM EST (to Assignments)</li> <li>• Final presentation DUE Monday 10 May at 5 PM EST (to the Discussion Forum)</li> </ul>

**Technical Support for Online Courses and Programs @ Friedman:**

Online course support is provided by Friedman support staff. You can and should contact [friedmanonline@tufts.edu](mailto:friedmanonline@tufts.edu) for all technical issues, including Canvas, Tufts email, and systems access.

Please do not contact faculty or TAs for technical support (we will just re-direct you to technical support at Friedman).

You should anticipate at least a 6-hour wait (Monday-Friday, 9:00am-5:00pm EST) before hearing back regarding a technical support request, although emails are typically returned in significantly less time.\*

**Telephone:** 617.636.6904

**Email:** [friedmanonline@tufts.edu](mailto:friedmanonline@tufts.edu)

**Skype:** FriedmanOnline

**Hours:** 9:00am - 5:00pm Boston Time, Monday - Friday (FriedmanOnline will check for support tickets on the weekends, but typically will not respond until Monday morning unless it is an emergency).

\* When emailing a technical support problem, please include as much information as possible (operating system, browser and version, a detailed description of the problem) and please be specific so we can expedite the troubleshooting process for you. You should only use your Tufts email address when submitting support tickets. If you did not receive a Tufts email, then please use the email account that is associated with your Canvas account.

\*\* Many problems with Canvas are a result of using an unsupported browser. Please make sure you are using an up-to-date version of Firefox or Internet Explorer, especially when using communication and assessment tools within Canvas.

## Weekly Readings and Learning Objectives

### Week 1: What is Theory?

18 – 24 January

**Learning Objectives:** Upon completion of this class, students will be able to:

- Navigate the course site and syllabus
- Understand the concept of a behavioral theory and how theory can inform research and practice
- Articulate the difference between a “fixed mindset” and a “growth mindset”

### Required Readings:

Dweck CS (2007). *Mindset: The New Psychology of Success*. New York, NY: Ballantine Books. Chapter 2: Inside the Mindsets.

Glanz K, Rimer BK and Viswanath K (2015). *Health Behavior: Theory, Research and Practice* (5<sup>th</sup> edition). San Francisco: Jossey-Bass. Chapter 2.

D’Onofrio C (1992). Theory and the empowerment of health education practitioners. *Health Educ Q* 19(3):385-403.

### Assignments for this week:

- Sign up for 15-minute meeting with the course professor to get to know each other. Sign up form will be available on the course website.
- Introduce yourself to your classmates by posting a short (<2 minute) video on the “Class introductions” thread on the course website Discussion Forum

## **Week 2: Health Belief Model**

25 – 31 January

**Learning Objectives:** Upon completion of this class, students will be able to:

- Define what a rational actor model is
- Elaborate the concepts of perceived risk, barriers, benefits
- Give examples of cues to action

### **Required Readings:**

Glanz K, Rimer BK and Viswanath K, editors (2015). *Health Behavior: Theory, Research and Practice* (5<sup>th</sup> edition). San Francisco: Jossey-Bass. Chapter 5: The Health Belief Model.

Kim, K. K., Horan, M. L., Gendler, P., & Patel, M. K. (1991). Development and evaluation of the osteoporosis health belief scale. *Research in Nursing & Health*, 14(2), 155-163.

Jeong JY, Ham S. (2018) Application of the Health Belief Model to customers' use of menu labels in restaurants. *Appetite*. Apr 1;123:208-215.

### *Optional Reading(s) for More Depth:*

Champion VL (1984). Instrument development for health belief model constructs. *Adv Nurs Sci* 6(3):73-85.

Janz NK and Becker MH (1984). The health belief model: A decade later. *Health Educ Q* 11(1):1-47.

**Assignments for this week:** Assignment #1 – As with all the theories we will discuss, the HBM is more relevant for understanding behavior and informing behavior change strategies for some behaviors than behaviors. Identify one health behavior change target that you think HBM is a good theory to use to inform behavior change strategies and explain why, and another health behavior change target that you do not think the HBM would be valuable to inform behavior change strategies and explain why. Choose a very specific health behavior (e.g., “increase fruit and vegetable consumption” is sufficiently specific compared to “healthy eating,” or “engage in at least 90 minutes of moderate to vigorous physical activity per week” is sufficiently specific compared to “be more active”).

*For all weekly assignments, see the “Weekly Assignments” section beginning on page 3 of this syllabus for instructions about assignment length, style, and content.*

**Week 3: RESIDENCY WEEK**

5 February – 7 February

**Learning Objectives:**

- Gain an understanding of measurement issues related to theoretical constructs
- Understand how theory relates to personal behaviors and everyday life
- Gain a basic understanding of theory at the individual, organizational, community, and broader levels

**Assignments for this week:** Attend remote synchronous classes

## **Week 4: Theory of Planned Behavior/ Theory of Reasoned Action**

15 – 21 February

**Learning Objectives:** Upon completion of this class, students will be able to:

- Contrast the TRA/TPB with the HBM
- Explain the constructs of behavioral beliefs, normative beliefs, and control beliefs
- Discuss the relationship between intention to act and action

### **Required Readings:**

Glanz K, Rimer BK and Viswanath K (2015). Health Behavior: Theory, Research and Practice (5<sup>th</sup> edition). San Francisco: Jossey-Bass. Chapter 6: The Theory of Reasoned Action, Theory of Planned Behavior, and the Integrated Behavioral Model.

Duncan MJ, Eyre E, Bryant E, Clarke N, Birch S, Staples V and Sheffield D (2015). The impact of a school-based gardening intervention on intentions and behaviour related to fruit and vegetable consumption in children. *Journal of Health Psychology*, 20(6):765–773.

Park, H. S. (2000). Relationships among attitudes and subjective norms: Testing the theory of reasoned action across cultures. *Communication Studies*, 51(2), 162-175.

### *Optional Reading(s) for More Depth:*

Laramée, Catherine, et al. (2017). Evaluation of a Theory-Based Intervention Aimed at Reducing Intention to Use Restrictive Dietary Behaviors Among Adolescent Female Athletes. *Journal of Nutrition Education and Behavior* 49(6):497-504.

Branscum P and Fairchild G (2019). Differences in determinants of aerobic and muscle strengthening physical activity among college students: a reasoned action approach (Links to an external site.). *Journal of Sports Sciences*, 37(1):90-99.

**Assignments for this week:** Assignment #2 – Basic analysis of survey data. See instructions and files to download on the course website.

## Week 5: Self-Efficacy

22 – 28 February

**Learning Objectives:** Upon completion of this class, students will be able to:

- Describe different methods of 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 Readings:

Bandura A. (1992). Exercise of personal agency through the self-efficacy mechanism. In: Schwarzer R (ed). *Self-Efficacy: Thought Control of Action*. Washington, Hemisphere, pp 3-38.

Strecher VJ, DeVellis B, Becker MH, Rosenstock IM (1986). The role of self-efficacy in achieving health behavior change. *Health Education Quarterly*, 13(1):73-91.

McQueen, K. A., Dennis, C. L., Stremler, R., & Norman, C. D. (2011). A pilot randomized controlled trial of a breastfeeding self-efficacy intervention with primiparous mothers. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 40(1), 35-46.

Lorig, K. R., Ritter, P. L., & González, V. M. (2003). Hispanic chronic disease self-management: a randomized community-based outcome trial. *Nursing research*, 52(6), 361-369.

### Optional Reading(s) for More Depth:

Bandura A, Adams NE, Beyer J (1977). Cognitive processes mediating behavioral change. *Journal of Personality and Social Psychology*, 35:125-139.

Warner LM, Schüz B, Wolff JK, Parschau L, Wurm S, Schwarzer R. (2014). Sources of self-efficacy for physical activity. *Health Psychology*, 33(11):1298-1308.

Anderson ES, Winett RA and Wojcik JR (2000). Social-cognitive determinants of nutrition behavior among supermarket food shoppers: a structural equation analysis. *Health Psychology*, 19(5):479-86.

Wang Y and Willis E (2018). Supporting self-efficacy through interactive discussion in online communities of weight loss. *Journal of Health Psychology*, 23(10) 1309–1320.

**Assignments for this week:** Assignment #3 - Select from a menu of behavior change scenarios (available on the course website), or create your own (write a few sentences summarizing the behavior change scenario you created). As always, be very specific about what behavior you are targeting. Write a plan to increase self-efficacy for the target behavior change in your choose scenario.

## **Week 6: Transtheoretical Model/Stages of Change**

1 – 7 March

**Learning Objectives:** Upon completion of this class, students will be able to:

- 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:**

Glanz K, Rimer BK and Viswanath K, editors (2015). *Health Behavior: Theory, Research and Practice* (5<sup>th</sup> edition). San Francisco: Jossey-Bass. Chapter 7: The Transtheoretical Model and Stages of Change.

Prochaska JO and DiClemente CC (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research and Practice*, 19(3):276-288.

Kristal AR, Glanz K, Curry SJ, Patterson RE (1999). How can stages of change be best used in dietary interventions? *J Am Diet Assoc* 99(6):679-684.

### *Optional Reading(s) for More Depth:*

Prochaska JO, Velicer WF, DiClemente C, Fava J (1988). Measuring processes of change: Applications to the cessation of smoking. *J Consulting Clin Psychol*, 56(4):520-528.

**Assignments for this week:** Assignment #4 – You will have already created a poster as a small group activity targeting a population that is in a specific stage of behavior change. Your assignment for this week is to write an explanation of your poster, emphasizing how it targets a population in a particular stage. You are welcome to comment on modifications you would make to the poster now that you have read more about the theory and/or if your thinking differed from what your group came up with.

## **Week 7: Self Determination Theory and Motivational Interviewing**

8 - 14 March

**Learning Objectives:** Upon completion of this class, students will be able to:

- 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:**

Ryan RM and Deci EL (2000). Self-Determination Theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychologist* 55(1):68-78.

Miller WR and Rollnick S (2013). *Motivational Interviewing*. New York: Guildford Press. Chapters 1-3.

Kerner C and Goodyear VA. (2017). The motivational impact of wearable healthy lifestyle technologies: A self-determination perspective on Fitbits with adolescents. *American Journal of Health Education*

Silva, M. N., Markland, D., Minderico, C. S., Vieira, P. N., Castro, M. M., Coutinho, S. R., ... & Teixeira, P. J. (2008). A randomized controlled trial to evaluate self-determination theory for exercise adherence and weight control: rationale and intervention description. *BMC public health*, 8(1), 234.

### *Optional Reading(s) for More Depth:*

Vansteenkiste M and Shelton KM (2006). There's nothing more practical than a good theory: Integrating motivational interviewing and self-determination theory. *Br J Clin Psychol* 45:63-82.

Trief, PM. et al. (2017) Self-determination theory and weight loss in a Diabetes Prevention Program translation trial. *Journal of Behavioral Medicine* 40(3): 483-493.

**Assignments for this week:** Assignment #5 and midterm course evaluations - Write a short MI interview guide and then conduct the interview with a friend, family, classmate, or member of the teaching team. Write a reflection on the interview. The reflection could include what you liked or did not like about the MI approach, situations you think MI is most useful in, your own skill or comfort with the MI approach, and other observations from the interview. Include your interview guide at the end of your assignment (it does not count toward the 2-page limit).

Complete the midterm course evaluation provided as a Qualtrics survey link

## Week 8: Social Cognitive Theory

15 - 21 March

**Learning Objectives:** Upon completion of this class, students will be able to:

- 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:

Glanz K, Rimer BK and Viswanath K, editors (2015). *Health Behavior: Theory, Research and Practice* (5<sup>th</sup> edition). San Francisco: Jossey-Bass. Chapter 9: How Individuals, Environments, and Health Behaviors Interact: Social Cognitive Theory.

Linnell JD, Zidenberg-Cherr S, Briggs M, Scherr RE, Brian KM, Hillhouse C, Smith MH. (2016) Using a systematic approach and theoretical framework to design a curriculum for the Shaping Healthy Choices Program. *J Nutr Educ Behav* 48(1):60-69.

Morgan PJ, Scott HA, Young MD, Plotnikoff RC, Collins CE, Callister R (2014). Associations between program outcomes and adherence to social cognitive theory tasks: process evaluation of the SHED-IT community weight loss trial for men. *Int J Behav Nutr Phys Act* 11(1):89.

Folta, S. C., Lichtenstein, A. H., Seguin, R. A., Goldberg, J. P., Kuder, J. F., & Nelson, M. E. (2009). The StrongWomen–Healthy Hearts program: reducing cardiovascular disease risk factors in rural sedentary, overweight, and obese midlife and older women. *American Journal of Public Health*, 99(7), 1271-1277.

### Optional Reading(s) for More Depth:

Bandura A (1986). *Social Foundations of Thought and Action*. Englewood Cliffs, NJ: Prentice Hall. Chapters 1 (Human nature and causality, pp. 1-46) & 7 (Vicarious motivators, pp. 283-334).

Hales S, Turner-McGrievy GM, Wilcox S, Fahim A, Davis RE, Huhns M, Valafar H (2016). Social networks for improving healthy weight loss behaviors for overweight and obese adults: A randomized clinical trial of the social pounds off digitally (Social POD) mobile app. *International Journal of Medical Informatics* (94):81–90.

**Assignments for this week:** Assignment #6 – Social cognitive theory contains many constructs, but no set framework dictating how the constructs relate to each other (compare this to HBM, for example, which has specific constructs that are related to each other in a predetermined way). Select a specific behavior change target and create and explain your own framework using SCT (can use Mural, PPT, or another program). That is, select the SCT constructs you think are most relevant for informing behavior change strategies for your target behavior, and arrange them in a framework (i.e., organize constructs in some way that seems logical to you). Explain your framework. Your explanation should be a couple of paragraphs (no more than 1 page).

## **Week 9: Social Support/Social Networks, Diffusion of Innovations**

22 - 28 March

**Learning Objectives:** Upon completion of this class, students will be able to:

- Enumerate the attributes of an innovation that make it more likely to diffuse
- Explain the mechanisms through which social support may influence individual behavior
- Introduce the role of social network characteristics in determining social support, diffusion of behaviors and norms, and social capital

### **Required Readings:**

Glanz K, Rimer BK and Viswanath K, editors (2015). Health Behavior: Theory, Research and Practice (5<sup>th</sup> edition). San Francisco: Jossey-Bass. Chapter 10: Social Support and Health

Schroeder, K., Ratcliffe, S. J., Perez, A., Earley, D., Bowman, C., & Lipman, T. H. (2017). Dance for health: an intergenerational program to increase access to physical activity. *Journal of pediatric nursing*, 37, 29-34.

Rogers EM (2003). Diffusion of Innovations, 5<sup>th</sup> ed. New York: The Free Press. Chapter 1.

Valente, T. W. (2012). Network interventions. *Science*, 337(6090), 49-53.

### *Optional Reading(s) for More Depth:*

Gladwell, M (2002) The Tipping Point. New York: Little, Brown & Company. Chapter 6.

Hunter, R. F., de la Haye, K., Badham, J., Valente, T., Clarke, M., & Kee, F. (2017). Social network interventions for health behaviour change: a systematic review. *The Lancet*, 390, S47.

Christakis, N. A., & Fowler, J. H. (2007). The spread of obesity in a large social network over 32 years. *New England journal of medicine*, 357(4), 370-379.

Kelsey K, Earp JL, Kirkley BG (1997). Is social support beneficial for dietary change? A review of the literature. *Fam Community Health* 20(3):70-82.

**Assignments for this week:** Assignment #7 - Select from a menu of behavior change scenarios (available on the course website), or create your own (write a few sentences summarizing the behavior change scenario you created). Describe who you would enlist within the individual's social network to help support the behavior change and describe the types of social support they would provide. You do not need to involve everyone in a social network and you do not need to apply every type of social support.

**For fun:** Listen to this TED talk and do the activities suggested here: <https://www.npr.org/2020/06/26/882828756/suzanne-simard-how-do-trees-collaborate>

## **Week 10: Dual-Process Models**

29 March – 4 April

**Learning Objectives:** Upon completion of this class, students will be able to:

- 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

### **Required Readings:**

Heath C and Heath D (2010). *Switch: How to change things when change is hard*. New York: Broadway Books. Chapter 1: Three surprises about change.

Friese M, Hofmann W and Wiers RW (2011). On taming horses and strengthening riders: Recent developments in research on interventions to improve self-control in health behaviors. *Self and Identity* 10(3):336-351.

Cohen DA, Babey SH (2012). Contextual influences on eating behaviors: Heuristic processing and dietary choices. *Obes Rev* 13(9):766–779.

### *Optional Reading(s) for More Depth:*

Rothman AJ, Sheeran P, Wood W (2009). Reflective and automatic processing in the initiation and maintenance of dietary change. *Ann Behav Med* 38:S4-S17.

van't Riet J, Sijtsma SJ, Dagevos H, De Bruijn GJ (2011). The importance of habits in eating behavior. An overview and recommendations for future research. *Appetite* 57(3):585-596.

Porter L, Bailey-Jones C, Priudokaite G, Allen S, Wood K, Stiles K, Parvin O, Javaid M, Verbruggen MF, Lawrence NS (2017). From cookies to carrots; the effect of inhibitory control training on children's snack selections. *Appetite* <http://dx.doi.org/10.1016/j.appet.2017.05.010>

### *Highly Recommended Reading for Nail Biters:*

Duhigg C (2012). *The Power of Habit*. New York: Random House. Chapter 3: The Golden Rule of Habit Change, pp 74-77.

**Assignments for this week:** Assignment #8 - Select from a menu of behavior change scenarios (available on the course website), or create your own (write a few sentences summarizing the behavior change scenario you created). How might you enlist the “rider” and the “elephant” to guide behavior change?

### *Recommended Activity:*

Take an Implicit Association Test:

<https://implicit.harvard.edu/implicit/demo/>

## Week 11: Behavioral Economics

5 - 11 April

**Learning Objectives:** Upon completion of this class, students will be able to:

- 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

### Required Readings:

McGonigal K (2012). *The Willpower Instinct*. New York: Penguin Group (USA). Chapter Seven: Putting the Future on Sale: The Economics of Instant Gratification.

Lowenstein G, Brennan T, Volpp K. (2007) Asymmetric paternalism to improve health behaviors. *JAMA* 298(20):2415-2417

Hubbard KL, Bandini LG, Folta SC, Wansink B, Eliasziw M, Must A. (2015) Impact of a smarter lunchroom intervention on food selection and consumption among adolescents and young adults with intellectual and developmental disabilities in a residential school setting. *Public Health Nutrition* 18(2):261-371.

Bryan, C. J., Mazar, N., Jamison, J., Braithwaite, J., Dechausay, N., Fishbane, A., . . . Vakis, R. (2017). Overcoming behavioral obstacles to escaping poverty *Behavioral Science & Policy* 3(1), 81–91.

### *Optional Reading(s) for More Depth:*

Strohacker K, Galarraga O, Williams DM (2014). The impact of incentives on exercise behavior: A systematic review of randomized controlled trials. *Ann Behav Med* 48:92-99.

Washio Y, Humphreys M, Colchado E, Sierra-Ortiz M, Zhang Z, Collins BN, Kirby KC (2017). Incentive-based intervention to maintain breastfeeding among low-income Puerto Rican mothers. *Pediatrics*, e20163119.

**Assignments for this week:** Assignment #9 - You will have already re-designed a cafeteria as a small group activity. Use behavioral economics to justify the changes you made in the cafeteria (or would make, if your views differ from the group's).

### *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](http://www.ted.com/talks/keith_chen_could_your_language_affect_your_ability_to_save_money.html))

## **Week 12: Eco-Social Models**

12 - 18 April

**Learning Objectives:** Upon completion of this class, students will be able to:

- 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

### **Required Readings :**

Glanz K, Rimer BK and Viswanath K (2015). Health Behavior: Theory, Research, and Practice. San Francisco: Jossey-Bass. Chapter 3: Ecological Models of Health Behavior.

Glass, T. A., & McAtee, M. J. (2006). Behavioral science at the crossroads in public health: extending horizons, envisioning the future. *Social science & medicine*, 62(7), 1650-1671.

Story M, Kaphingst KM, Robinson-O'Brien R and Glanz K (2008). Creating Healthy Food and Eating Environments: Policy and Environmental Approaches. *Annual Review of Public Health* 29:253-272.

### *Optional Reading(s) for More Depth:*

Levins R and Lewontin R (1985). The dialectical biologist. Cambridge MA: Harvard University Press, pp. 267-288.

Smith MH (1998). Community-based epidemiology: community involvement in defining social risk. *J Health Soc Policy*, 9(4):51-65.

Shin A, Surkan PJ, Coutinho AJ, Suratkar SR, Campbell RK, Rowan M, Sharma S, Dennisuk LA, Karlsen M, Gass A and Gittelsohn J (2015). Impact of Baltimore Healthy Eating Zones: An Environmental Intervention to Improve Diet Among African American Youth. *Health Education & Behavior* 42(1S) 97S–105S.

**Assignments for this week:** Assignment #10 - Explain how opportunities and constraints within at least 2 levels of the SEM could influence a specific health behavior within a specified population. You can select the population; please include a sentence or two describing the population you selected.

### **Week 13: Patient and community engagement**

19 - 25 April

**Learning Objectives:** Upon completion of this class, students will be able to:

- Explain benefits of engaging patients or community members to inform programs, research, evaluation, and/or care delivery
- Identify scenarios when a community or patient-engaged approach may be particularly useful
- Discuss strategies for engaging communities or patients in their own work

#### **Required Readings:**

Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: assessing partnership approaches to improve public health. *Annual review of public health, 19*(1), 173-202.

Carman, K. L., Dardess, P., Maurer, M., Sofaer, S., Adams, K., Bechtel, C., & Sweeney, J. (2013). Patient and family engagement: a framework for understanding the elements and developing interventions and policies. *Health Affairs, 32*(2), 223-231.

Blue Bird Jernigan, V., Salvatore, A. L., Styne, D. M., & Winkleby, M. (2012). Addressing food insecurity in a Native American reservation using community-based participatory research. *Health Education Research, 27*(4), 645-655.

**Assignments for this week:** Assignment #11 - What does community or patient engagement mean to you? What might it look like in your work?

**Week 14: Ethics of Behavior Change**

26 April – 2 May

**Learning Objectives:**

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

**Required Readings:**

Buchanan DR (2000). *An Ethic for Health Promotion: Rethinking the Sources of Human Well-Being*. New York: Oxford University Press. Chapters 1, 6 and 8.

ten Have M, van der Heide A, Mackenback JP, de Beaufort ID (2013). An ethical framework for the prevention of overweight and obesity: A tool for thinking through a programme's ethical aspects. *Eur J Publ Health* 23(2):299-305.

Kniess J (2015). Obesity, paternalism and fairness. *J Med Ethics* 41:889–892.

*Optional Readings:*

*This article is specifically about the ethics of strategies related to behavioral economics:* Blumenthal-Barby JS, Burroughs H (2012). Seeking better health care outcomes: The ethics of using the “nudge”. *Am J Bioeth* 12(2):1-10.

Guttman N, Ressler WH (2001). On being responsible: Ethical issues in appeals to personal responsibility in health campaigns. *J Health Communication* 6:117-136.

**Assignments for this week:** Assignment #12 - Reflect on the readings and imagine you are in a role of promoting health, either to individuals or groups. Write your own set of ethics principles that you would apply to your work. Please include 3-10 principles (I provided a number range for flexibility – more is not necessarily better).

## **CONCLUSION**

3 May – 10 May

### **Learning Objectives:**

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

### **Required Readings:**

NO READINGS REQUIRED.

**Assignments for this week:** Final Assignment and Presentation – See the instructions for the final assignment and presentation starting on page 5 of this syllabus.