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Many Americans face critical barriers to living a healthy lifestyle because of their status as members of marginalized social groups (Gill, 2007; Harrison & Clark, 2016; Robert Wood Johnson Foundation, 2018). Factors such as race/ethnicity and income affect educational attainment, which can negatively influence health outcomes for people from underserved groups, and ultimately contribute to health inequities (Egerter, Braveman, Sadegh-Nobari, Grossman-Kahn, & Dekker, 2011). Blacks and Latinos between the ages of 18 and 24 are less likely than Whites to go to college (Musu-Gillette et al., 2016) and are more likely than Whites to first enroll in community colleges rather than 4-year colleges (Ma & Baum, 2016). Over twice as many students with yearly family incomes less than $20,000 attend community colleges compared with students with family incomes over $50,000 (Radwin, Wine, Siegal, & Bryan, 2013). People from marginalized groups and those living in poverty are less likely to enroll in and complete higher education, and the degrees they do attain tend to be lower, which negatively affects many health outcomes.

Culturally responsive pedagogy (CRP) is a theoretical framework for teaching based on the recognition that if students from marginalized groups are to have better lives, they must (a) learn academic content (academic success), (b) understand and appreciate their own cultural beliefs and values (cultural competence), and (c) be able to see and evaluate how social conditions affect their positions in society (sociopolitical consciousness; Ladson-Billings, 2006). The purpose of this study was to design and evaluate an online personal health course that incorporates CRP to provide students with health information that was personally applicable and engaging.

Using principles from the CRP literature, an online personal health course was designed to meet the health and learning needs of diverse community college students at a community college in the United States. The course was evaluated using open-ended faculty interviews, Likert-type open-ended questions of students, and narrative reviews of the course provided by experts in online teaching and learning and CRP. Quantitative data were analyzed using frequencies. Qualitative data were analyzed using an iterative process of quotation identification, sorting quotes into related topics, and interpreting the meaning of topics related to the study objectives.

Students, faculty, and experts generally agreed that the course was designed to be personally meaningful and engaging for diverse students and promoted academic success. Opportunities for cultural competence exist in the course but need to be more clearly articulated. In line with the literature, sociopolitical consciousness was the aspect of CRP that needs the most development in the future. Suggestions are included for improving the design and cultural responsiveness of the course, thereby increasing its value for student learning.

CREATING A CULTURALLY RESPONSIVE ONLINE PERSONAL HEALTH COURSE

by

Erika W. Bonadio

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TABLE OF CONTENTS

Page

CHAPTER

CHAPTER I

PROJECT OVERVIEW

Many Americans face critical barriers to living a healthy lifestyle because they are members of marginalized social groups (Gill, 2007; Harrison & Clark, 2016; Robert Wood Johnson Foundation, 2018). Factors such as income and education strongly influence important health outcomes. This study was conducted at a community college in the southeastern United States. Over 55% of the students received need-based Federal Pell Grants, and many students identified with groups that experience pervasive racial, ethnic, and socioeconomic health disparities (Meyer et al., 2013). The original online Personal Health (PH) course emphasized reading and testing and failed to integrate teaching and learning strategies that could reduce disparities in learning outcomes between marginalized and majority students. In contrast, culturally responsive pedagogy (CRP) is a framework for teaching based on the recognition that if students from marginalized groups are to have better lives, they must (a) learn academic content, (b) understand and appreciate their own cultural beliefs and values, and (c) be able to see and evaluate how social settings affect their positions in society (Ladson-Billings, 2006). An optimized online PH course that incorporates CRP could provide students with health information that is personally applicable and engaging. By combining education and social action, the effects of a PH course designed in this framework are expected to positively impact students who take the course, and the communities in which those students live.

Literature Review

Social Factors and Health Disparities

Social factors affect educational achievement, which can negatively affect health outcomes for marginalized people, and ultimately contribute to health inequities (Egerter, Braveman, Sadegh-Nobari, Grossman-Kahn, & Dekker, 2011). Patterns of college enrollment vary by income and race/ethnicity. Over twice as many students with yearly family incomes less than $20,000 attend community colleges compared to students with family incomes over $50,000 (Radwin, Wine, Siegal, & Bryan, 2013). Whites are more likely than Blacks and Latinos to enroll in college (Musu-Gillette et al., 2016) and to start at 4-year institutions rather than community colleges (Ma & Baum, 2016). People from marginalized groups and those living in poverty are less likely to enroll in and complete higher education, and the degrees they do attain tend to be lower, which negatively affects many health outcomes (see Appendix A).

Smoking, physical inactivity, and poor diet caused approximately one-third of all deaths in 2000 (Mokdad, Marks, Stroup, & Gerberding, 2004), and tobacco use and physical activity habits differ by educational attainment. For example, in 2017, 7% of college graduates smoked cigarettes compared to almost 22% of high school graduates (HealthyPeople.gov, 2019a) and less than 43% of high school graduates met the Healthy People 2020 aerobic exercise goal, compared to 55% of people with associate degrees and approximately 64% of people with bachelor's degrees (HealthyPeople.gov, 2019b). As education level increases, 5-year mortality rate and risk of major diseases decreases (Cutler & Lleras-Muney, 2007; Mokdad et al., 2004). Education is one path to improved health outcomes via better employment, greater psychological and social resources, and increased health knowledge and coping skills (Egerter et al., 2011).

Because social inequality affects higher education achievement and higher education achievement impacts health, it is essential that community college students receive health education that meets their needs. Since community college students tend to be racially and ethnically diverse, come from lower-income families, and are among the first in their families to attend college, they are likely to be members of social groups that have less access to health resources and experience poorer health outcomes (Centers for Disease Control and Prevention [CDC], 2013; Cutler & Lleras-Muney, 2007). Yet, of students who entered community college in 2010, almost 44% of White students completed their studies within 6 years, compared to only 33% of Latino students and less than 26% of Black students (Shapiro et al., 2017), suggesting that students from marginalized groups have unmet educational needs.

Culturally Responsive Pedagogy (CRP)

One potential source of support for students from marginalized groups is culturally responsive pedagogy. CRP is a way of thinking about teaching, learning, and society that recognizes the unequal distribution of resources in society and proposes that the way to a better life for poor and historically marginalized people is through learning and critical thinking (Gay, 2015; Ladson-Billings, 2006). It is characterized by teaching that centers on academic success (learning scholarly content), cultural competence (appreciating and respecting the beliefs and customs of one's own culture while gaining access to the broader culture), and sociopolitical consciousness (understanding and critically examining one's social status and the circumstances surrounding it; Ladson-Billings, 2006, 2014, Gay, 2015; see Appendix A).

Whiteness and White privilege are related to sociopolitical consciousness. "Whiteness" is a socially constructed "ideology, epistemology, emotionality, and psychology that often produces concrete systemic racism by normalizing these elements as invisible" (Matias, 2013, p. 73).

Essentially, White people see the way they live their lives as the way life should be, anything outside the White realm is deviant, and Whites' ability and power to label deviance in others creates and perpetuates racism. Likewise, White privilege refers to the advantages that people who are seen as being "White" enjoy (Manglitz, 2003). Critical race theorists and critical Whiteness scholars argue that problematizing Whiteness is necessary for teaching to be culturally responsive (Matias, 2013), but not all CRP experts and practitioners agree. In this study, CRP is intentionally defined according to Ladson-Billings's and Gay's descriptions, as outlined above. According to Gay (2010), "Culturally responsive teachers validate every student's culture" (p. 38). At a school where approximately 40% of the students are White yet often experience minoritizing intersectionalities (e.g., gender, sexual orientation, socioeconomic status), validating every student's culture was prioritized over problematizing Whiteness to emphasize health rather than race, because any White student can experience "White fragility" – an inability to endure racial tension due to a lifetime of racial security and living in an environment that protects Whites from recognizing that they have a racial identity (DiAngelo, 2011).

Educational institutions can play a role in improving population-wide health (Spring et al., 2013), but they need to use messages that make sense to the students they serve. CRP is one way to do so. Teacher behaviors associated with high expectations in physical classrooms (Morrison, Robbins, & Rose, 2008) that could transfer to the online environment include modeling and scaffolding, starting learning tasks with students' strengths, holding themselves accountable for student achievement, and creating socially and emotionally safe classrooms. Similarly, classroom decisions that increase cultural competence (Morrison et al., 2008) that could be implemented in online settings are reforming the existing curriculum to include material from students' own cultures and using students' life experiences as foundations for learning new

material. Incorporating critical literacy methods, involving students in social action, making clear how power works in mainstream society, and "sharing power in the classroom" (Morrison et al., 2008, p. 443) can be applied in online learning to building students' critical consciousness. See Appendix B for examples of how CRP can be designed into an online PH course.

Many community colleges offer online courses so that students can access education while meeting other responsibilities (Goral, 2016); however, students in online classes often drop out at rates higher than do students in traditional classes (Lokken, 2017). Students are more likely to persist in online courses that apply to their interests, life circumstances, and aims (Park & Choi, 2009), so course designers should plan instruction to meet those objectives. CRP holds exciting potential to promote learning among students from marginalized groups, but there are few examples of how to adapt CRP to online learning within a health context; therefore, there is a critical need for research on adapting CRP to online community college health education.

Health and wellness courses should adapt to students' needs (McCormack Brown & McDermott, 2001; Strand, Egeberg, & Mozumdar, 2010), particularly at community colleges, where diversity is the norm (Ma & Baum, 2016). The majority of students at the community college where this study was conducted identify as members of groups that experience pervasive racial, ethnic, and socioeconomic health disparities (Meyer et al., 2013; U.S. Department of Education, 2018). Yet, the online PH course required that students read 15 textbook chapters and timed, multiple-choice quizzes determined the bulk of students' grades. Recognizing different aptitudes and learning styles is best practice in online education (Dreon, 2013; Revere & Kovach, 2011) and requires broader learning activities than reading and test taking.

Purpose and Aims

The purpose of this study was to design an online Personal Health (PH) class for diverse students based on the principles of CRP. This study had three aims. First was to design the course and prepare prototype course content and learning assessments. Second was to obtain and analyze feedback from students, faculty, and experts to guide further course revisions and to meet aim three. The third aim was to develop recommendations for other practitioners who want to create online health and fitness courses in line with CRP at their own institutions.

Methods

The objective of this study was to create a culturally responsive online Personal Health course (PH) for Southeast Community College (SCC) students (Southeast Community College is a pseudonym). Southeast Community College serves over 10,000 students. At the time of the study, the four largest racial/ethnic groups at SCC were White (over 40%), Black (over 35%), Hispanic (almost 10%), and Asian (5%); 60% of students received need-based Federal Pell Grants (U.S. Department of Education, 2017).

This single-case, holistic study occurred over a one-year period (Yin, 2011). The unit of analysis is the online PH course (Yin, 2011). Methods included designing the course; interviewing course faculty; and obtaining feedback from students and experts in both online teaching and learning (OTL) and CRP.

Participants

Participants included SCC students enrolled in the online PH class (n=132), SCC faculty (n=4) who taught the online PH course, and two faculty members from outside of SCC who had related expertise. Participation was voluntary and no incentives for participation were provided.

Students. Adult students enrolled in the fully online PH course in fall of 2018 participated in the study. Of the 132 students who completed the online PH course, 28 provided feedback on the nutrition module and 32 completed the end of course evaluation. Student demographic data were not collected. Of the students who completed the end of course evaluation, expected grades were 56% "A," 19% "B," 19% "C," 3% "Satisfactory," and 3% "D," suggesting that students who provided feedback generally did well in the course. Faculty teaching the course was not aware of which students participated in surveys and which did not.

Faculty. Including the primary researcher, four SCC faculty who taught the fully online PH course previously participated in interviews. Except for the primary researcher, all faculty names are pseudonyms.

Luke. Luke is the health and physical education program director at SCC. He holds an MS in exercise physiology and has taught at SCC for 28 years, including 5 years of PH online. Luke is 48 years old and identifies as White and politically conservative.

Annette. Annette is a full-time faculty member at SCC. She currently teaches PH and physical education courses. Annette earned an MS in Exercise Science. She has taught at SCC for 13 years and is starting her second year of teaching PH, which she has taught fully online and as a hybrid course to early- and middle-college students. Annette is 48 years old. She is the only African American who teaches in the program and identifies as a Christian and politically liberal.

Coach. Coach is retired from SCC and is currently an adjunct faculty member there. She earned an MA ED. Coach has taught health and physical education for 44 years, including 15 years teaching PH, with 10 of those years online. She created the previous online PH course. Coach is 65 years old and identifies as a White, Christian pickleball player.

Researcher. The researcher was an adjunct faculty member at SCC for 12 years and taught online PH during two of them. She holds an MS in sport science with a concentration in sport and exercise psychology and an MA in anthropology. She is completing her EdD in kinesiology online, is 47 years old and identifies as White and politically and socially liberal.

Experts. One expert each in online teaching and learning and CRP evaluated and provided feedback on the overall course structure and two of its modules.

Online teaching and learning expert. The OTL expert has a PhD in an unrelated field and an MS in information science. She worked with OTL for 22 years and consulted for the first online programs at different universities across the country.

Culturally responsive pedagogy expert. The CRP expert is an assistant professor of physical education and health education and has co-authored multiple articles in peer-reviewed journals about social justice and multicultural issues in physical education.

Materials

Materials include the current course description and a narrative Word document in which the researcher tracked design decisions. The course materials are physical artifacts with which students interacted and on which students and experts provided feedback. An interview protocol (Appendix C) based on the course description and principles of CRP guided faculty interviews. Examples of interview questions include, "What does learning look like in an online PH class? (i.e., How do you know that students in an online PH course are learning the material?) Can you provide an example?" A student review of the module questionnaire was designed for this study (Appendix D. Sample questions include, "The learning expectations in this module were high," "This module started with something I already knew or was good at," and "The learning materials in this module were relevant to me." Students also had the opportunity to complete SCC's

standard end of course evaluation (Appendix E). The OTL expert provided narrative feedback during a meeting and in Google docs. The CRP expert wrote a letter with her feedback.

Procedures

Preliminary work. The primary investigator redesigned Lifetime Fitness (LF) at SCC in the fall of 2017, beginning with interviews of faculty who taught LF and informal conversations with students enrolled in LF to determine content and assessments that needed to be included. The LF redesign bred goodwill for and initiated the online PH redesign.

Design phase. The design phase began with an analysis of the Personal Health course description; then the program director and primary investigator co-wrote course-level student learning outcomes. Using the CRP literature, the primary investigator wrote course development guidelines to direct content, activity, and assessment decisions (Appendix B), and then created a pilot course (Appendix F) with input from Annette. Personal Health and LF course topics overlap, so findings from the LF redesign were incorporated into the online PH pilot course.

Pilot testing. The redesigned course was piloted in spring, 2018. Large assignments were divided into smaller parts; students examined course material using autobiographical information, created a Wiki, and were given options in completing some assessments. Students received prompt, personalized feedback. The primary investigator made minor changes to piloted course assignments based on student questions. The program director and Coach then taught the redesigned course during the summer 2018 term. The program director requested revisions, such as changing some journaling assignments to questionnaires and replacing the Wiki with a discussion. Students completed multiple assignments related to a single topic over time and submitted them at the end of the module rather than throughout.

Data collection. The Institutional Review Boards at the University of North Carolina at Greensboro (UNCG) and SCC approved this study. Participation in the study was voluntary and informed consent was obtained. During fall 2018, currently enrolled students and experts gave feedback about the redesigned online PH course. Students enrolled in the online PH course were able to answer a questionnaire after the nutrition module, the stress management module, and the overall course. The CRP expert reviewed the nutrition and stress management assignments but was unable to access the course due to technological issues. The OTL expert reviewed the nutrition and stress management modules, and the overall course. Three online PH faculty completed interviews in the fall of 2018. The primary investigator, the fourth faculty member, answered the interview questions using reflective journaling. Interviews were audio-recorded.

Data analysis. Qualitative data from faculty interviews, expert feedback, and open-ended student surveys were analyzed using the data analysis spiral (Creswell & Poth, 2018). To manage and organize interview data (Creswell & Poth, 2018), each interview was transcribed using voice transcription software, then corrected for accuracy. Good quality audio recordings and accurate interview transcriptions contribute to the study's trustworthiness (Creswell & Poth, 2018). The analytic strategy used to read and document developing ideas (Creswell & Poth, 2018) was "sort and sift: think and shift"—an iterative process of reading qualitative data, identifying powerful participant quotes, and describing why those quotes stand out to the researcher (Maietta, 2006). The researcher linked related data within and across documents (Maietta, 2006) to label and organize codes into themes and then relate them to the CRP literature (Creswell & Poth, 2018).

The researcher strove toward trustworthiness through numerous strategies. Whenever possible, data from at least three sources were triangulated to support a claim (Creswell & Poth, 2018; Yin, 2011). Negative cases that called into question how successfully the researcher met

her goal to create a course grounded in the principles of CRP are included (Creswell & Poth, 2018; Yin, 2011). Detailed information and meaningful participant quotes provide "*rich, thick descriptions*" so that the reader can make his or her own decision about the validity of the study (Creswell & Poth, 2018, p. 259). Finally, the research process underwent peer debriefing (Creswell & Poth, 2018). These four strategies exceed the minimum number of trustworthiness strategies recommended by Creswell and Poth (2018). Quantitative data were obtained from student reviews of the nutrition module and SCC's end of course evaluation. Students' reviews of the stress management module were lost because of technological problems. Due to the small number of responses, Likert data were analyzed using frequencies (Sullivan & Artino, 2013).

Results and Discussion

Designing and evaluating an online health course grounded in CRP resulted in the following suggestions for enacting academic success, cultural competence, and sociopolitical consciousness: (a) define academic success throughout the course; (b) connect the dots of cultural competence; and (c) focus on sociopolitical consciousness. Data and discussion follow.

Define Academic Success Throughout the Course

According to CRP, academic success is student learning, yet in the online PH course faculty and students were not always clear about what that meant. Faculty and students' evaluations of learning expectations and outcomes varied based on their own experiences. In contrast, the experts identified high learning expectations in the course from their own expertise.

Luke's evaluation of academic success in the online PH course stemmed from reservations about the online learning environment. He noted that at community colleges across the state, "We have seen an exponential growth in our online classes, just by the nature of education, and in turn, have seen a major loss of our physical education or physical activity

classes, you know, over the past 10 years." So, students are taking more classes where they are (presumably) sedentary and faculty are teaching about the importance of physical activity; yet, students are not participating in the physical activity classes that could improve their health. Without seeing students exercise, it is not possible to know they are doing so. Luke questions whether cognitive learning transfers to behavior change:

> We can say they're learning stuff because of how they interact, but with this particular topic of personal health and wellness, at some point, you have to have a vested interest. . . . In physical education, it's see one, do one, teach one. With online learning, you see one, and you teach one. They may not ever do one.

The redesigned course focuses on health skills and decision making more than on gaining conceptual knowledge, so Luke's point that faculty in an online setting are better able to assess cognitive learning than behavior change suggests that developers of online courses who attempt to influence values and behaviors need to be clear about what learning objectives are and how students will demonstrate they have met those objectives.

In contrast to Luke's statement that faculty can gauge student learning of concept knowledge through their interactions, Coach was less certain:

> without the typical textbook and the typical quizzes and where you feel like, okay, do they have this knowledge, we can truly prove it because of this particular multi-question quiz, true/false, whatever it is, you know, that's a very comfortable way of, to look at a course. And sometimes online, you can't judge that as easily what they know or don't know based on their discussions, and their values, and their thoughts, and their stories, cause everybody's so unique and different that it's harder for you to have one big group to say, "Oh, they all know this exact, you know, topic."

Coach may find reassurance that more than half of the student responses to the end of course evaluation question, "What are the strengths of this course?" related the course being informative or about how much they learned. Examples include, "I learned a lot that I did not know before";

"The incredible amount of information that will be used long after the class"; "Relevant information for day-to-day life"; and "it taught me a lot about my self [*sic*]." It is likely Coach recognizes that students are learning, because she described the course as "new, innovative," and "open" (see Appendix A). By constantly defining academic success (i.e., student learning) throughout the course, faculty will have a constant reminder of learning goals. In contrast to Coach, who had to redefine for herself the meaning of learning from factual knowledge to behavior change, Annette already focused on student behavior.

Annette emphasized behavior over content knowledge as academic success when she stated that "ultimately what we want them [students] to do is to be aware of them, themselves personally, their bodies and things that they're doing that they don't normally think about that could be habit-forming." Implicit in this statement is that as students think about their behavior, they also possess knowledge that will help them create healthy habits. Annette also addressed how she recognized learning across students, and their depth of learning:

> according to some of the feedback that I've gotten so far about certain assignments, like the physical activity, and like the nutrition, whereas you know, just getting one person respond back, saying that, "I feel so much better now that I'm walking." That makes a big difference, so I know that it's helping.

Annette's statement suggests a positive correlation between the number of students who tell her the effect assignments have on their behavior and student learning and extends her evaluation to depth of learning. Students are transferring the knowledge that movement is important for health to actually walking more, which leads to improved personal wellbeing, which they then recognize and share with Annette. Annette's expectations for student learning allow her to analyze student feedback to notice when behavior change, and therefore learning, occur.

Like faculty, students also seemed unclear about what academic success looks like in an online health course grounded in CRP. Of the 28 students who responded to the statement, "the learning expectations in this [nutrition] module were high," responses ranged from "strongly disagree" (4%) to "strongly agree" (18%), with most answering "agree" (54%) and "neither agree nor disagree" (21%). Yet, when the same students responded to the statement, "I learned a lot in this [nutrition] module, only one student (4%) neither agreed nor disagreed, 43% strongly agreed, and 54% agreed. The variation in responses suggests that some students may not have known what they were expected to gain from the module, and that academic success needs to be defined for each learning experience. In the words of the OTL expert, "it's absolutely important to lay out, in this course, exactly what's expected. And to make it reasonable."

In contrast to faculty and students, the OTL expert identified academic success within the course. She noted that in any PH course, it is important to ask, "'What is the real purpose of this course? How much is content and how much is skills?' And that's a very fundamental issue." Neither approach is wrong, but it does need to be clear. Whereas Coach expressed discomfort with the shift from content to skills and the reduced importance of quizzes, the OTL expert noted that "good learning is very nuanced, and takes time, and takes time to evaluate." Student learning may be gradual and require that faculty need to devote extra time and attention to assessing it. The OTL expert suggested, "You could analyze the progression across the semester of student learning, but also writing, self-efficacy." While Luke expressed a valid doubt about faculty's ability to measure behavior change online as an indicator of learning, measuring changes in students' self-efficacy may be a good proxy (see Appendix A).

Like the OTL expert, the CRP expert also identified areas of academic success. The CRP expert "found the assignments within the curriculum to be comprehensive and engaging,

particularly in how self-awareness and reflection was promoted." As noted previously, students care about academic work when they can connect it to their own lives, so providing reflection opportunities is important. Also, when students care about the course content, they are more likely to engage with it—giving time and resources to learning.

Connect the Dots of Cultural Competence

Cultural competence is appreciation and respect for the beliefs and customs of one's own and others' cultures. Students from marginalized groups are able to value their own cultures while interacting in the dominant culture, and student members of the dominant culture learn about and see the value in other students' beliefs and customs. Features of cultural competence were included in the redesigned course (e.g., redesigning the curriculum and basing learning on what students know; Morrison et al., 2008; see Appendix A). However, relationships between the new content and the value of diverse students' cultures need to be explicitly stated.

Cultural competence was most evident in grounding learning in students' existing knowledge. Of the 31 students who replied to the end of course survey question, 87% agreed or strongly agreed (26% vs. 61%, respectively) that "In this course, I was able to recall, describe, or apply my past experiences so that I could connect it with what I was supposed to learn." This positive response suggests that the course bases learning on what students know. Students from different cultures also provided diverse perspectives in the redesigned course.

Students' roles in the online course and the course structure are both important to student learning. One of the few students who provided qualitative feedback through an optional course assignment volunteered, "I actually enjoy the fact that we are learning through Moodle our books and from our peers . . . It's very helpful when you can relate what your [*sic*] learning to your everyday life," suggesting that the student sees value in both reflecting on their own lives and

reading about other students' experiences. The OTL expert spoke of the need for student contributions to be intentionally organized in online teaching and learning generally.

> Students have a lot of life experience, that if they just put on the table within a certain, careful structure, that lightbulbs will go off in the heads of other people around them, and that will bring both misconceptions as well as broadening of information. And just, there's more out there than any single teacher could ever, ever, ever deal with.

According to the OTL expert, students bring a great range of experiential knowledge, and when they can share that knowledge, others in the course learn from them. Also, if the course is well-designed, by allowing students to contribute faculty can identify and correct misunderstandings about course content. Likewise, Coach spoke of how the redesigned course rewards students for contributing diverse perspectives through graded assignments and increased self-esteem.

> The course is allowing the student to be. . . themselves and to be diverse and be able to not only express that, but that's part of their assignment is to bring that to the table. You know, that's who they are. And that makes them feel special in the sense that, "This is why I look this way," or "This is why, you know, this is why I feel this way, because this is how I was raised, or this is the culture I grew up in . . ." We're just providing them a vehicle to bring it all in and then, to give them the information and sharing with them, creative ways by discussions, by assignments, by reading material, to look at their world and how they can make it better in a wellness world right now for them.

Despite the positive emphasis on students' backgrounds, Coach's last comment above suggests that the redesigned course still falls short from a CRP standpoint by placing the responsibility for health on students rather than sharing it with society as a whole.

Annette and the CRP expert evaluated the cultural competence aspect of the course more negatively. Annette identified the importance of drawing connections clearly between students' lives and course materials. She stated that diverse examples and perspectives were included in the course, but questioned, "Could we have done more to bring out specific diverse, diversity issues?

Yes, and that could be something that we could probably add in the future." If faculty who understand the importance of bringing diverse perspectives to health conversations see that more "could" be done to attend to issues of diversity, then more should be done to bridge understanding and make those topics stand out. Connections between students' cultures, diverse perspectives, and course content should be explicitly designed into the online course. Furthermore, since students' narratives and discussion posts provided many of the diverse perspectives in the course, faculty teaching the course need to provide feedback related to student contributions that reinforces cultural competence. The CRP expert directed attention to the concept of marginalization more forcefully. The two modules the CRP expert reviewed made her question, "How does this course present students with information that is both meaningful and relevant to their lives beyond Whiteness?" To prioritize cultural competence and draw connections between students' lives and course content, cultural issues need to be made explicit.

Focus on Sociopolitical Consciousness

Sociopolitical consciousness is the aspect of CRP that is most often overlooked by people who claim to adopt CRP; this was no different in the online PH course. In conversations with my dissertation committee and the SCC program director, we agreed that the course needed to cover the content and assignments that are typically included in Personal Health. Coach unwittingly summarized the sentiment that guided the course design as, "Where we've got to keep our focus on is making sure it's still the personal health . . . and maybe, leaving some of the community, social issues, to the community health course." By focusing on the scientific aspect of the course material, I delayed incorporating ways to involve students in social action and to make clear how power works in mainstream society, which resulted in not including them.

When asked how well the course promotes awareness of how social structures affect students' place in society, both Luke and Annette stated that the content is in the course but is not effectively managed. Luke commented that the course "identifies some of those things" hinting that the course stops short of engaging students with the content. Annette supports this, stating, "we have information in there that they [students] can read. Do they read everything in there? Probably not." She continued to explain that if faculty expect students to have sociopolitical consciousness, "it would be our job to pull out some of those areas and have them highlighted a little bit better." Luke agreed, saying, "Areas of growth can take place here . . . but I also think it's probably going to take the most, probably, time and attention, to building within the course." A sociopolitical consciousness foundation was laid but not developed.

Luke's comment about the time and attention needed to incorporate sociopolitical consciousness into the course prompted me to question if SCC faculty are prepared to teach about social justice and health. Both Annette and Luke agreed that faculty development is essential. Annette explained, "Before teaching this class, you know, some things have crossed my mind, but I haven't put a whole lot of thought into it," and Luke described social justice issues as "things that I probably either took for granted or didn't even think of." Annette asserted that participating in this study raised her sociopolitical consciousness, that "this class is causing me to think more about different areas, and different aspects of people's social, economic status and their background." Luke framed his former lack of attention to sociopolitical consciousness within a larger problem: "if you pick up five or 10 most common textbooks, I think you would be hard-pressed to probably find much of this in there." In part, the lack of health information about the diverse students SCC prompted my interest in redesigning this course.

Despite the weakness in course design and faculty's discomfort with their ability to teach about health inequities, students' evaluations of sociopolitical consciousness in the Nutrition module were generally positive. Of the 28 students who responded to the statement, "The learning materials and activities in this module pushed me to think critically about the world around me, rather than to accept the world as it is," 89% agreed (50%) or strongly agreed (39%). Furthermore, of the 28 students who responded to the statement "The learning experiences in this module helped me see how other people's health experiences may be different than mine" 92% strongly agreed (46%) or agreed (46%). The area of sociopolitical consciousness that students identified as needing the most improvement was community engagement. In response to the statement "The learning materials and activities in this module got me involved in my community," 11% disagreed, 46% neither agreed nor disagreed, and 43% agreed (36%) or strongly agreed (7%). More needs to be done to move learning from thinking to social action.

Sociopolitical consciousness was also the most challenging aspect of CRP to incorporate. Traditional content that faculty expect in the course requires time and attention both for course development and for student learning, which could lead to devaluing sociopolitical content. Also, faculty in this study needed more sociopolitical consciousness to be able to raise students' awareness. Finally, open education and creative commons resources for teaching health for social justice require time and effort to find. These challenges underscore the importance of focusing on sociopolitical consciousness when developing a personal health course using principles of CRP. Despite the challenges highlighted here, sociopolitical consciousness is "the key" that the CRP expert identified "to developing a course that is culturally responsive is to make visible that which textbooks and dominant discourses often ignore—the vast inequality that is both located

and perpetuated within the realm of health in the United States." Challenges to developing a course that raises sociopolitical consciousness came from my own Whiteness and privilege.

When designing the course, I favored traditional content over sociopolitical consciousness. I planned to add social justice components to the first piloted course but was asked not to because the course revisions already increased faculty workload. More importantly, I opted against including culturally responsive content or activities if I thought faculty would not be willing to teach it. This is White privilege, because as a White teacher, I chose to omit culturally responsive material that I thought might upset my predominantly White coworkers. Taking the option to keep existing (i.e., acceptably "White") content rather than making space for an activity to promote political consciousness is White privilege. This is perhaps the most shameful (and privileged) admission I have about this project, but it is not the only one.

I also questioned if CRP was the best paradigm for designing an online PH course for classes of diverse students. Students' diverse backgrounds made it difficult to adopt a specific pedagogy appropriate for all students. Using a variety of content and engaging learning activities where students reflected on and shared their own experiences often seemed more appropriate. However, changing the theoretical underpinning is not necessary or even desirable if I am using SCC's White students of low socioeconomic status, and experience structural inequalities as an excuse to walk away from the discomfort I feel by admitting to the shortcomings of the redesigned course. Exploring that discomfort is necessary for improving the course.

Whiteness and White privilege can feel threatening to White people for numerous reasons. White students of low socioeconomic status may feel as though they are being told that since they have White privilege and are still poor, their poverty is their fault. In fact, blaming individuals for their social position is part of Whiteness. The American dream that anyone can

"pull themselves up by their bootstraps" if they just work hard enough is both a physical impossibility and a myth. Also, White students who experience poverty may not actually see the benefits Whiteness bestows, particularly if they see their position as lower than many people of color. Furthermore, all White students, regardless of socioeconomic status, may feel that for society to be more equitable, they must give something up. However, it is impossible to deny the effects of structural inequalities on marginalized students' health. Social justice needs to be part of diverse students' health education. Reflecting on, discussing, and asking for help in overcoming Whiteness and White privilege must be part of White faculty's process of developing courses grounded in CRP if we are to do the necessary work of focusing on sociopolitical consciousness when designing an online person health course using principles of CRP.

Conclusion

Developing, teaching, and evaluating an online personal health course using principles of culturally responsive pedagogy is a challenging and rewarding endeavor. Whether I was successful in doing so may be questioned; however, the process was a phenomenal learning experience. This project provides a base for several suggestions for others who plan to design an online PH course using CRP.

Designing and evaluating an online PH using principles of CRP needs to be a community endeavor. I did much of the early design and development on my own, and all errors are mine; however, faculty, student, and expert input were invaluable in the development process. Content, activities, and assessments need to be assembled, created, and shared to extend this work beyond one institution. Transparency in how we conduct our research and practice is important for developing courses grounded in CRP, even as it shines a light on our flaws.

CHAPTER II

DISSEMINATION

When I started designing the online personal health course using culturally responsive pedagogy (CRP), I did not find any compilations of resources for health and kinesiology professionals. After perusing textbooks on multicultural health and scouring the Internet, I discovered isolated examples of content and activities that could be incorporated into an online personal health course. However, this material is time consuming to locate and is often copyrighted. Faculty will be more likely to teach health and kinesiology courses grounded in CRP if they have ready access to open education resources (OER) rather than having to create the course from scratch or purchase materials from numerous sources. The website proposed here is a place for educators to network, share teaching methods grounded in CRP, and provide open education resources that they develop or source to promote academic success, cultural competence, and sociopolitical consciousness for diverse students.

Health and Kinesiology Grounded in CRP OER Website

Home Page

Welcome! We are a community of professionals dedicated to providing diverse students with health and kinesiology education that meets their learning needs using principles of culturally responsive pedagogy. To learn more about CRP, visit the CRP page of this site.

When I decided to design and evaluate an online personal health course for college students using culturally responsive pedagogy (CRP), a search for age-appropriate content and activities that were packaged for teaching, embraced diverse perspectives, promoted

understanding of how health inequities are rooted in social structures, and was freely available, nothing came to light. Few items met even two criteria. This website is the result of that search and my doctoral dissertation, Creating a culturally responsive online personal health course. [link to My Research page]

One of my key research findings was that despite my intentions, immersion in the literature, and a background in both anthropology and kinesiology, I didn't "do" the cultural competence and sociopolitical consciousness aspects of CRP well. This may be unsurprising, given my position as a White, heterosexual, middle class woman who has never faced much discrimination. Others may find themselves in the same situation, so I revised some of the resources [link to Resources page] based on the feedback of students, colleagues, and experts. I invite you use this material in your own courses, and also to contribute college-level health and kinesiology content, activities, and assessments that are grounded in the principles of CRP. Please recognize when using this site that each educator may interpret the meaning and purpose of culturally responsive pedagogy differently.

CRP Page

Culturally responsive pedagogy (CRP) is a theoretical framework for teaching described similarly by Gloria Ladson-Billings and Geneva Gay that recognizes that if students from marginalized groups are to have better lives, they must

- learn academic content (academic success)
- understand and appreciate their own and other people's cultural beliefs and values (cultural competence), and
- be able to see and evaluate how social conditions affect their positions in society (sociopolitical consciousness).

Because CRP is a way of thinking about teaching, learning, and society rather than a specific set of teaching practices, there are probably as many versions of CRP as there are educators who use it. If you want to read more about CRP or similar approaches (also called culturally relevant or sustaining teaching or practices), check out the references (Gay, 2015; Howard & Rodriguez-Minkoff, 2017; Ladson-Billings, 2006).

My Research Page

Social inequality can make it difficult for many people living in the United States to live healthy lives (Gill, 2007; Harrison & Clark, 2016). People with lower levels of education typically have poorer health outcomes (Egerter, Braveman, Sadegh-Nobari, Grossman-Kahn, & Dekker, 2011). People from marginalized racial and ethnic groups (Ma & Baum, 2016) and people who experience poverty (Radwin, Wine, Siegal, & Bryan, 2013) are less likely to enroll in and complete higher education. Furthermore, whereas traditional-aged Black and Latino students more often enter community colleges first, White college students are more likely to start at 4-year colleges (Ma & Baum, 2016). The combination of these different opportunities results in people from historically marginalized groups disproportionately completing less education and experiencing greater health inequities.

Culturally responsive pedagogy (CRP) is a theoretical framework for teaching based on the belief that the path to a better life for students from marginalized groups is education centered on

- quality learning (academic success),
- students understanding and appreciating their own and others' cultural beliefs and values (cultural competence), and

- bringing to light the effect of social conditions on people's positions in society (sociopolitical consciousness; Ladson-Billings, 2006).

The purpose of this study was to design and evaluate an online personal health course using CRP to provide diverse community college students with health information that was personally applicable and engaging. The online course was designed, piloted, and taught at a community college in the southeast United States, then evaluated using

- Open-ended faculty interviews,
- Likert and open-ended questions of students, and
- Narrative reviews of the course provided by experts in online teaching and learning and CRP.

Data analysis showed that

- Students, faculty, and experts generally agreed that the course would be personally meaningful and engaging for diverse students.
- The course promoted academic success.
- Students were provided with opportunities for cultural competence, but those opportunities needed to be more fully and clearly explained.
- Sociopolitical consciousness needed to be further developed.

Reflecting on the development and evaluation process, I saw that I allowed my position of White (middle class, educated) privilege to interfere with fully enacting CRP. I chose to avoid difficult conversations with my predominantly White colleagues about removing "traditional" health content to create space for culturally responsive content, which is White privilege. Also, I do not personally know what many students who are members of underrepresented groups experience. The few times I felt like racism was directed toward me, I was able to reposition

myself in a White world, which is White privilege. The evaluation and reflection process gave me important feedback for starting to revise the redesigned course. I decided to create this website so that health and kinesiology educators can share course content, activities, and assessments grounded in the principles of CRP.

Resources Page

Resources shared here may be used for educational purposes. They may be modified to meet the learning needs of students at your institution. Respectful feedback and criticism aimed toward improving students' learning experiences are welcome. Because the meaning and use of culturally responsive pedagogy varies among educators, resources provided may need to be modified to meet the learning goals you have for your students and their learning needs. For links to individual resource items, see Appendices F and G for sample Body Composition Module.

CHAPTER III

ACTION PLAN

As previously noted, many researchers call upon practitioners to use culturally responsive teaching practices in kinesiology, yet few published examples exist. Similarly, some authors advocate for online courses to be more culturally responsive. It is likely that practitioners have responded locally to the appeals; however, we need to share challenges and successes so we can teach our diverse students more effectively. In response to the shortage of such published studies, this study is unique because it entailed:

- Creating an online Personal Health course (PH) based on principles of culturally responsive pedagogy (CRP). The researcher attempted to apply CRP in diverse health classes that could be composed of African American, Asian, Hispanic, and White students in their teens to their 50s.
- Critiques of the course by students, faculty, a CRP expert, and an online learning expert.

The course redesign and evaluation has already impacted professional practice at the personal and local levels.

Completing this dissertation has impacted my professional practice. Since redesigning the course, I have taught a variety of kinesiology courses in traditional (face-to-face) and hybrid (combination of traditional and online) classrooms. I have incorporated content on diversity issues (e.g., ethnic and racial cultural competence, human sexual diversity and sexual orientation education) in most courses I teach and am exploring ways to do so in the others. Students always

have the option to advocate for inclusive spaces as part of their course work, and I often require that they do so. Students also write in every course to develop the skills to be successful at work or in graduate school. I also take steps to explain my teaching philosophy and higher education's hidden curriculum so first-generation college students are better able to navigate their experiences and enjoy greater academic success. This study impacted my own practice, and the practice of my former colleagues.

The course redesign and evaluation impacted professional practice at the community college where the study took place. Before this study began, students obtained most of the online PH content through reading a textbook and websites recommended in the textbook. Timed, multiple-choice and true-false tests results made up most of students' grades. In the redesigned course, students watch and discuss videos, engage in active learning opportunities, and journal about their own experiences. One of the findings from the study showed that faculty need more training to be able to teach for social justice. Providing faculty development in societal causes of health inequities is another option for influencing professional practice.

Even before receiving expert feedback, teaching the redesigned course and participating in the faculty interviews changed the way faculty think about the online PH content, their teaching methods, and the students they teach. Faculty are contemplating issues that they previously took for granted, which means they can now present those issues to their students. Because the redesigned course starts with students sharing personal information, faculty now see students as complex, culturally influenced individuals rather than as test scores. When they get to know students personally, faculty take a more caring approach. Incorporating expert recommendations and faculty ideas for relevant local topics will continue to impact practice at the local level.

One of the most important things I noticed during the research process is related to an aspect of CRP that I did not discuss at length. The foundation of CRP is care for other human beings. The primary researcher received faculty support for this study through and because of human relationships that developed over more than a decade of interactions. Faculty participants who may not have been inclined to learn about or implement culturally responsive approaches did so because of open and honest communication that occurred in an environment of trust. Many of the discussions about what CRP is and why it is necessary at colleges like SCC occurred through informal conversations beyond the boundaries of this study.

Findings from this study can impact professional practice beyond the local level. Through the EdD in Kinesiology Online at the University of North Carolina at Greensboro (UNCG), I have developed professional relationships with faculty and administrators at other community colleges who value CRP and this study. Likewise, at a recent SHAPE PETE/HETE conference, I met health and physical education faculty from 4-year colleges and universities who also "do CRP online." As outlined in Chapter II, a website where likeminded health and kinesiology educators can network and share open education resources that are based on the principles of CRP is in the planning stage. I am working with a developer to determine the best approach for managing the website. Faculty may teach more online health and kinesiology courses grounded in CRP if they have access to resources rather than having to create a course from scratch. More quality online health and kinesiology courses grounded in CRP would broadly impact professional practice.

This study generated large quantities of data that will be disseminated in academic and professional journals. Articles will address the initial aims of the study, highlight student learning in the new course, and discuss the redesign's impact on faculty's personal practice.

Given the complexities of the CRP framework and the importance of contextual details on implementing CRP, it is tempting to follow in the footsteps of CRP experts who claim an inability to tell others how to "do" CRP. However, after attending a recent SHAPE PETE/HETE conference panel discussion on CRP, it became clear that many practitioners feel overwhelmed by the idea of developing their own version of CRP from scratch and give up before they get started. An article titled "'Doing' CRP online" will provide an in-depth explanation of how the prototype course was designed and important issues faculty should consider before embarking on the professional and personal journey of designing an online PH course for their own students. Publishing in a journal such as *AJHE: American Journal of Health Education* would provide an ideal forum for influencing professional practice by showing practitioners not only that designing an online PH course based on CRP is possible, but how to do so. After providing an example of one way to design an online PH course grounded in CRP, the impact of the redesign on students and faculty will be detailed in additional articles.

Learning that occurred through the online PH course will be detailed in further articles. The ultimate goal of this study was to improve students' learning experiences, learning outcomes, and long-term health outcomes. This study was not designed to measure long-term health outcomes; however, data from student assessments support the claim that teaching online PH from a CRP perspective results in critical thinking and changes in short-term health behaviors. Examples of the impact the course had on student learning can influence practitioners to design online PH courses in line with CRP, or to incorporate elements of CRP into existing online PH courses to positively influence student learning. Furthermore, I learned as I reflected on the effects my Whiteness and White privilege had on the course design process. A discussion of Whiteness and White privilege, including a review of the literature on these topics, require and

deserve deep attention if White faculty are to contribute to course design grounded in principles of CRP. Likewise, teaching the redesigned online PH course and participating in the research study changed faculty online teaching practice—an unexpected and welcomed finding. *Change: The Magazine of Higher Learning* and the *Journal of Teaching in Physical Education* are potential spaces for conveying important messages about student-centered instruction, faculty reflection, and risk taking in the online classroom.

This project is the culmination of my EdD education at UNCG and the beginning of future research into teaching health and kinesiology grounded in principles of CRP. I am grateful for the EdD in kinesiology online faculty at UNCG who challenged me to the very end, and to the students and faculty at SCC who have supported my professional and personal growth.

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APPENDIX A

ADDED NOTES ON CRP FOR COMMUNITY COLLEGE STUDENTS

Social Factors and Health Disparities

In 2013, 42% of Whites between the ages of 18 and 24 years were enrolled in college, compared to only 34% of Blacks and Latinos (Musu-Gillette et al., 2016). White students are more likely to start college at 4-year institutions, while larger percentages of Black and Latino students enroll in community colleges (Ma & Baum, 2016).

Culturally Responsive Pedagogy (CRP)

The cultures of marginalized groups are valuable in their own right, yet students also need to be able to interact in the dominant culture to gain equality in the larger society, which provides them with more options and opportunities (Gay, 2015; Ladson-Billings, 2014). Therefore, courses need to draw connections between academic content and students' lived experiences using methods that students understand (Ladson-Billings, 2006). If they are to have access to better lives, students need the information available through education (Gay, 2015; Ladson-Billings, 2009). However, if course content and students' life experiences conflict, students will struggle to learn (Gay, 2015; Ladson-Billings, 2006). Likewise, if course pedagogies (e.g., lecture) do not align with marginalized students' learning norms (e.g., storytelling), then students again may not learn (Gay, 2015; Ladson-Billings, 2006). Courses need to be grounded in social, cultural, and historic foundations that resonate with the students who take them (Ladson-Billings, 2009).

Students taking culturally responsive courses care about what they learn because the connections between academic work and their own lives are clear (Ladson-Billings, 2014). When students care about what they learn, they are more engaged (Wlodkowski & Ginsberg, 1995), and

engagement is important because students learn more about a subject when they devote time and energy to it (Kuh, 2003). However, college health textbooks and courses like Personal Health (PH) at the community college where this study was conducted approach personal health and wellness as a series of choices individuals make without regard to social, political, and environmental forces that affect those decisions (McCormack Brown & McDermott, 2001). It is time to apply CRP to health education.

Define Academic Success Throughout the Course

Coach also noted her discomfort was related to having to learn "a new way of teaching . . . I'm trying to wrap myself around it where I feel comfortable and own it," not that the shift away from uniform factual knowledge per se was problematic. In fact, she recognized that moving the focus of the course toward "the student, and on their backgrounds, and on their cultures, and on all their diversity . . . [is] so that it works for everybody, that it's not a cookie-cutter course just for a certain type of student."

The potential for learning in the course is not limited to health concepts. The OTL expert also suggested that faculty "look at the quality of the writing, because they will have done a fair amount of writing." Writing was intentionally incorporated into the course because it is an academic skill that can provide students from traditionally marginalized groups with greater access to the dominant culture. If the online PH course is to be culturally responsive, writing is an essential skill that must be built into the curriculum, and reasons for including writing also need to be clarified for students and faculty.

Redesigning the curriculum involved reducing the number of topics to align with the course description, which emphasizes the health issues considered most important for the population (McCormack Brown & McDermott, 2001); switching from a commercial textbook to

an Open Education Resource to eliminate the impact of cost on accessibility; and increasing the number and variety of course materials to provide adequate resources for learning (Cho, Convertino, & Khourey-Bowers, 2015). The concept of health inequities is now part of the curriculum. Students supply course materials (McLoughlin, 2000; Morong & DesBiens, 2016) which both enriches the curriculum and starts student learning with what they already know, since they narrate stories and examine course material through autobiographical information (Ukpokodu, 2008). Students also share personal accounts, cultural beliefs, and imagery from their cultures (Cueva et al., 2017).

APPENDIX B

FRAMEWORK FOR DEVELOPING A CULTURALLY RESPONSIVE ONLINE HEALTH COURSE

Framework for developing a culturally responsive online personal health (PH) course based on Ladson-Billings's (2006) hallmarks of culturally responsive pedagogy (CRP; column 1), practices of culturally responsive teachers in classroom settings (Morrison et al., 2008), evidence-based practices in online teaching that align with principles of CRP (column 3), and an example of applying the CRP theme to a kinesiology concept in an online PH course.

1	2	3	4
Academic Success	Explain the course, demonstrate learning tasks and procedures, and scaffold activities	• Convey the amount of time and effort students need to apply to the course (Leeds et al., 2013) • Communicate learning goals. Provide detailed direction on how to reach goals and demonstrate achievement (Chyung, 2001) • Incorporate peer and general learning supports (McLoughlin, 2000) • Divide learning tasks into smaller pieces and describe how each task leads to the finished product (Ladson-Billings, 2006)	Physical activity recommendations. Deliver content in several ways: Textbook plus videos of people of different ages, ethnicities, and abilities describing how they meet the recommendations with various activities and intensities
	Begin learning tasks with students' strengths	• Conduct a student needs-analysis at the beginning of the course and address its findings throughout the course (Czerkawski & Lyman, 2016; Woodley, Hernandez, Parra, & Negash, 2017) • Deliver content in several ways and accommodate variation in learning goals, outcomes, and assessments (Chyung, 2001; McLoughlin, 2000)	
	Create socially and emotionally safe learning spaces	• Share examples of appropriate and inappropriate behaviors (Burgess, 2007; Chyung, 2001; Morong & DesBiens, 2016) • Incorporate student introduction activities (Woodley et al., 2017) • Use grades to reward desirable cognitive and affective behaviors and communication skills (Morong & DesBiens, 2016; Swan, 2003)	

1	2	3	4
		• Employ web-based apps that students already know how to use (e.g., Twitter, Skype, web-based content; Revere & Kovach, 2011)	
Cultural Competence	Revise the curriculum	• Emphasize local health issues, including those related to health inequities (McCormack Brown & McDermott, 2001) • Students supply course materials (McLoughlin, 2000; Morong & DesBiens, 2016) • Provide adequate resources for deep learning (Cho et al., 2015)	Emphasize local health issues: Conduct community physical activity and community walkability assessments and discuss how findings relate to social inequality
	Base learning on what students know	• Include photographs, local information, personal accounts, cultural beliefs and imagery from students' cultures (Cueva et al., 2017) • Assess students' technology knowledge and provide support in the course (Woodley et al., 2017) • Students narrate stories and examine course material through autobiographical information (Ukpokodu, 2008)	
Sociopolitical Consciousness	Incorporate critical literacy methods	• Use material that takes a critical view (Morrison et al., 2008) • Provide students with critical thinking questions before they analyze material (Morrison et al., 2008) • Debate social issues (Morrison et al., 2008; Woodley et al., 2017)	Assign a social action project where students write letters to a person of influence advocating for a specific change to address a health topic of their choice (e.g., walkability, access to parks)
	Involve students in social action	• Create assignments in which students examine their own and others' places in the world, how each arrived there, and ways to make positive changes (Guthrie & McCracken, 2010; Morong & DesBiens, 2016; Ukpokodu, 2008). • Include existing social justice projects (Woodley et al., 2017)	
	Make clear how power works in mainstream society	• Explain the historical circumstances that influence peoples' current experiences to prevent victim blaming, raise awareness of the diversity that within different ethnic groups to resist stereotyping, and teach students how to negotiate authority to grant them greater autonomy (National Aboriginal Health Organization, 2008)	
	Share power	• Options for course activities and assessments (Lee et al., 2015) • Students set their learning objectives (Woodley et al., 2017)	

APPENDIX C

INTERVIEW PROTOCOL—PERSONAL HEALTH FACULTY

The principal investigator will conduct the interviews and audio record them.

Informed consent: The principal investigator will distribute information sheets before conducting the interviews.

Interview discussion guide: Interviews will be guided by the following questions but may be changed depending on participant responses.

Introduction: As you know, Personal Health was re-designed to enhance student learning and engagement. I'd like to know your views on teaching PH online generally, then talk about the redesigned course - what aspects of the redesigned course worked well and were more effective in engaging and enhancing learning of our diverse students, and which aspects were less engaging and need further revision. Your responses are confidential.

First, let's talk about learning in an online PH course.

- What does learning look like in an online PH class? (How do you know that students in an online PH course are learning the material?) Can you provide an example?
- How do you know when students are engaged with the material? Can you provide an example?

Now, let's talk about how the course content/organization and delivery are related to student learning and engagement.

Which topics were learned best? And which areas were most difficult for students?

- What activities/teaching strategies/formats were most/least effective in enhancing learning?
- Which topics were most engaging for students; what teaching strategies/ activities/formats seemed to engage the students - and which didn't?
- What are the roles of the instructor, content, organization, delivery, and teaching strategies in promoting student learning and engagement? Can you provide an example?

As you know, the students who take PH at SCC are diverse in many ways. Now we're going to talk about how we can meet their learning needs when they take PH online. Although most of our students are Black or White, they also identify as being from other racial and ethnic groups. Some are immigrants. While every student is unique, students from similar backgrounds often take pride in their racial or ethnic heritage.

- Overall, how well did the course engage students of varied cultural backgrounds? Can you provide an example?
- How did the course intentionally incorporate diverse perspectives? Can you provide an example?
- Were some activities/approaches more effective than others at engaging diverse students? Which ones? What made them more engaging?

Now that we've talked about one of the most commonly discussed types of diversity, let's go broader and talk about how well the course engages students who are diverse in other ways. Can you think of any ways the course engages students of different socioeconomic status? Ages or life

stages? Abilities or disabilities? Sexual orientations or gender identities? Body sizes? Any other types of diversity?

- If so, how well did the course engage students of different (fill in the diversity)? How did the course intentionally incorporated diverse perspectives? Were some activities/ approaches more effective than others at engaging diverse students?
- What suggestions do you have for making the course more effective at engaging diverse students and enhancing learning?

I am working to make the PH course culturally responsive. That means three things. First, as the course designer and course faculty, we need to hold students to high learning standards and provide them the support they need to meet those standards. How well did the course supporting high standards? How could it do that better?

Second, as we introduce new material, we need to start with students' experiences and strengths they bring to the online classroom, and then build the academic knowledge they need off of those experiences and strengths. How well did the course build on student strengths/experiences? How could it do that better? What cultural strengths have you noticed that students from different backgrounds bring to learning?

Third, we need to promote awareness of how social structures affect students' place in society. In PH, this means we need to guide critical thinking about social and political issues that affect students' health and wellbeing. How well did the course promote awareness of how social structures affect people and behavior? What do students need to learn/know about how culture

and social structures affect their health and health behaviors? How does the course teach this—or, if it doesn't, how could it?

Follow-up Questions: Is there anything else you can add?

Thank you for participating!

APPENDIX D

STUDENT EVALUATION OF MODULE

Please answer questions 1-12 using the following 1-5 scale:

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

1. The learning expectations in this module were clearly explained.
2. The learning expectations in this module were high.
3. The learning tasks and procedures in this module were clearly demonstrated.
4. Later activities in this module built on earlier learning in the module or course.
5. This module started with something I already knew or was good at.
6. The interactions with the instructor and other students during this module felt safe to me.
7. The learning materials in this module were relevant to me.
8. The learning materials and activities in this module pushed me to think critically about the world around me, rather than to accept the world as it is.
9. The learning activities in this module got me involved in my community.
10. The learning experiences in this module helped me see how other people's health experiences may be different than mine.
11. This module allowed me freedom in deciding what I wanted to learn, how I learned material, or how I showed what I learned.
12. I learned a lot in this module.

13. How much time did you work on this module each week? (Include reading/watching videos, studying, completing assignments, etc.)
14. Do you have any suggestions for improving this module? If so, please share suggestions here.

APPENDIX E

SCC END OF COURSE EVALUATION

- Why did you enroll in this course?
    - This course was required for my program.
    - This course was a requirement for my general education core.
    - This course was an elective for me.
    - I'm really not sure why I enrolled in this course.
- What is your sex?
    - Male
    - Female
- What is your classification in school?
    - First year transfer non-transfer student
    - Second year non-transfer student
    - Third year non-transfer student
    - Transfer student
    - Adult High School/GED Student
    - Adult Basic Education/English for Speakers of Other Languages
    - Early middle college, middle college, career and college promise initiative
- What grade do you expect to receive in this course?
    - A
    - B
    - C
    - D

- F
- Satisfactory
- Unsatisfactory
- n/a (ABE, ABS, GED, ESOL only)

For the following, please rate how strongly you agree or disagree with each statement.

Strongly agree

Agree

Neither agree or disagree

Disagree

Strongly disagree

1. I engaged in experiences that subsequently helped me learn ideas of skills that were new and unfamiliar to me.
2. In this course, I was able to recall, describe, or apply my past experiences so that I could connect it with what I was expected to learn.
3. My instructor demonstrated, explained, or illustrated skills I was expected to learn in this course.
4. Media used in this course (texts, illustrations, graphics, audio, video, computers) were helpful in learning.
5. My instructor provided alternative ways of understanding the same ideas or skills.
6. My instructor detected and/or corrected errors I was making when solving problems, doing learning tasks, or completing assignments.
7. I had opportunities to practice or try out what I learned in this course.
8. My instructor gave me feedback or appropriate coaching on what I was trying to learn.

9. I see how I can apply what I learned in this course to real life situations.
10. I am able to demonstrate what I learned in this course.
11. In this course, I was able to reflect on, discuss with others, and/or defend what I learned.
12. I frequently did very good work on projects, assignments, problems and/or activities for this course.
13. I put a great deal of effort and time into this course.
14. Compared to what I knew before I took this course, I learned a lot.
15. I learned very little in this course.
16. I am very satisfied with how my instructor taught this class.
17. I am dissatisfied with this course.
18. Overall, I would rate this instructor as effective.
19. Overall, I would rate this course as meaningful to the college experience.
20. I would recommend this instructor to other students.
21. I would recommend this course to other students.

Comments

22. What are the strengths of this instructor?
23. What are the areas for improvement for this instructor?
24. What are the strengths of this course?
25. What are the areas for improvement for this course?
26. What are the strengths of this course?

APPENDIX F

CULTURALLY RESPONSIVE CHANGES TO ONLINE PERSONAL HEALTH COURSE

Old Course	New Course	CRP in New Course
	Overall course objective	
	At the end of the course, you should understand what scientists currently believe to be true about what healthy diet, exercise, and stress management look like, and how to do those things in your own life.	Teachers who use CRP set long-term goals, which they communicate to students, and then help students see how smaller tasks contribute to long-term goal attainment (Ladson-Billings, 2006)
	Scope and sequence	
Topics from 15 chapters, including social health, sexual health, reproductive options, major diseases, addiction, consumer health, environmental health, healthy aging, plus those in the new course	Six topics, focusing on areas required by community college system	Revise the curriculum; Constructivist nature of CRP is counter to transmissive methods of teaching, but to effectively engage students, time must be allocated to providing for student involvement in the curriculum (Morrison et al., 2008); No curriculum is complete from a diversity standpoint - adjusting the curriculum to foster cultural responsiveness does not mean the curriculum is less rigorous (Gay, 2013)
	Media choices	
Popular personal health and wellness textbook	Open Education Resource (OER) textbook available in course	Moving to a free, OER textbook, makes content available to all students (Morong & DesBiens, 2016)
Website selections recommended in textbook	Videos, infographics, and written sources that are not textbooks were selected to supplement or replace information in textbook	Revise the curriculum (Morrison et al., 2008); Adding course materials with a variety of cultural viewpoints and portrayals (e.g., Mental health: Faith & spirituality; Sharing hope: An African American guide to mental health; Healthy family guidebook; Gay, 2015; Morong & DesBiens, 2016)

Old Course	New Course	CRP in New Course
	Scheduling	
Cover one or two chapters per week (16-week semester), two or three chapters per week (eight-week condensed semester)	Time allotted for each unit determined by amount of material, difficulty of material, and practice required for mastery	See Scope and sequence, revise the curriculum (above)
	Establish purpose	
	Learning objective: Build connections between yourself and other course members (students and instructor); Getting to know you discussion; Instructor welcome letter; Instructor introduction video designed around a course concept (i.e., components of wellness)	Inclusive learning environments are based on respect and connections between teachers and students (Wlodkowski & Ginsberg, 1995); Create socially and emotionally safe learning spaces (Morrison et al., 2008) and incorporate student introduction activities (Woodley et al., 2017)
Learn info on nutrition, weight and fitness you can use in your daily life.	Assess your current diet; Determine if your current body composition is healthy or not; Compare your current physical activity levels to recommended levels	Draws connections between academic work and students' lives (Ladson-Billings, 2014)
Learn personal stress management skills and social health	Explore a variety of stress management techniques	
Learn healthy ways to improve your future and psychological/spiritual well-being.	Describe ways to maintain positive mental health	

Old Course	New Course	CRP in New Course
	Arouse interest	
	Most people know that exercise is important for health, but you may not realize that physical activity is more than just exercise. Exercise and physical activity both refer to the voluntary movements you do that burn calories. Exercise is a form of physical activity that is specifically planned, structured, and repetitive such as weight training, tai chi, or an aerobics class. Physical activity is anything that gets your body moving such as gardening, walking the dog, raking leaves, and taking the stairs instead of the elevator. Sitting still for long periods of time can harm your health, but choosing to be active throughout your day, not just during exercise, can improve your health and well-being.	Draws connections between academic work and students' lives (Ladson-Billings, 2014)
	Food—we all need it, but it plays a much larger role than just fuel for survival. When we think of the components of wellness, most of us can think of at least one role of food, nutrition, and eating in each component. For example, intellectual wellness can be influenced by what we eat. A recent study showed that eating one serving of leafy greens each day (think kale, collards, spinach, etc.) can slow cognitive decline by 11 years. Or, if we don't earn much money, our financial wellness can impact our ability to buy enough food, let alone nutritious food.	

Old Course	New Course	CRP in New Course
	Design: Elicit prior knowledge	
	All modules except Mental Health start with one or more activities that require students to think and write about some aspect of the module topic that relates to their own lives	Draws connections between academic work and students' lives (Ladson-Billings, 2014)
	Process information	
Read textbook; Textbook publisher PowerPoints; Websites students choose from list provided in textbook	Textbook; Moodle books written by the researcher for the course to limit material to most important concepts, student needs, and application; Videos; Infographics; Creative Commons materials	Various delivery methods (Gay, 2015; McLoughlin, 2000)
	Learning strategies	
Group discussions based on summarizing information found on websites	Group discussion based on students sharing what they learned from course material and how it affected them or someone close to them; how the knowledge they gained will influence future decisions and advice they would give others	Discussing life experiences that are relevant to course material increases the significance of course materials to students (Wlodkowski & Ginsberg, 1995); Cultural competence
	Journaling	Journaling is an "equity pedagogy" that allows alternative writing that doesn't favor typical college writing styles (Brown, 2013); Cultural competence
	Study guides for mental health and stress management quizzes including: Question and answer Fill in the blank Graphic organizer	Courses that are culturally responsive should teach students how to learn (Gay, 2015); Scaffolding for academic success (Morrison et al., 2008)

Old Course	New Course	CRP in New Course
	Transfer learning	
	Every module includes an assignment that requires students to apply knowledge gained through the course content back to their own lives, frequently building on the elicitation assignment from the start of the module	Academic success (Ladson-Billings, 2006)
	Assessment	
Limited number and types of assessments	Larger number and type of assessments, including:	Various assessment methods (Gay, 2015; McLoughlin, 2000)
Timed, multiple-choice and true/false quizzes (60% of course grade)	Timed, multiple-choice, true/false, and matching quizzes (20% of course grade)	Testing does not measure students' complexity of knowledge (Ladson-Billings, 2009); By reducing the number of quizzes and impact of them on students' grades, quizzes are just one of many assessment techniques
Group discussion (35% of course grade)	Group discussion (20% of course grade, includes Wiki)	See Learning strategies, discussions (above)
Make 8 differences - do eight nice things for people and journal about them (5% of course grade)	Journaling (40% of course grade)	See Learning strategies, journaling as equity pedagogy (above; Brown, 2013)
	Mental health Wiki	Students supply course materials (McLoughlin, 2000; Morong & DesBiens, 2016); Student-provided material supplements an assortment of cultural information provided by the instructor (Gay, 2015; McLoughlin, 2000); Shift in course dynamics from students as knowledge recipients to students as knowledge contributors (McLoughlin, 2000; Morong & DesBiens, 2016)
	Application: Module-level; Application: End of course (20% of course grade)	See "Transfer learning" (above)

APPENDIX G

BODY COMPOSITION MODULE

In this module, you will learn what scientists recommend for healthy body mass index (BMI), body fat percentage, and waist circumference, and why these measurements are important for your health. You will also explore cultural beliefs about the appearance of healthy bodies, so you can make informed decisions about your weight and body composition based on science and your beliefs, values, and goals.

Module Learning Objectives:

By the end of this module, you will be able to:

1. Recognize health risks associated with carrying too much body fat, especially in the abdomen
2. Determine if your current body composition is healthy or not
3. Critique cultural beliefs about what healthy bodies look like
4. Decide if you want to change health behaviors to influence your body weight and/or body composition

Special equipment needed in this module:

- A camera (cell phone is great) or full-length mirror
- Scale
- Either a tape measure or a piece of string long enough to go around your waist and a ruler.

Body Composition Learning Activity 1

The purpose of this activity is to

- Explore the feelings you have about your body

Directions:

1. Snap a few selfies. Take one full-body shot from the front, a second from the rear, and a third from the side. If you can't get a good picture or prefer not to take pictures, look in a full-length mirror.
2. With the help of your selfies or the mirror: Look at your whole body, top to bottom, front, side, and back. Try to take your feelings out of it. Just name and notice what you see. Be as accurate as you can. Use words to paint a picture of you, exactly as you see yourself. When you are finished, someone who has never met you but has read your description should be able to pick you out of a crowd.
3. Write a paragraph or two about how you feel about your body. Do you like your body exactly as it is, or do you want to change it? Maybe you like some parts, but not others. How does it feel to live in your body? Are there things you would like to change about your body that you can change? If so, what are they, and why do you want to change them?

Your work will be graded on the fullness and richness of your description of your body and how you feel about it. You are not being judged or graded on what your body looks like. The only person who will see this submission is your instructor. Submit your assignment as a Word document. It should be around a page in length, but you can write more if this topic is meaningful to you. Please note that if you experience upsetting feelings from doing this activity, many institutions have counseling available. Talk to your instructor to see what options are available.

Body Composition Learning Activity 2

The purpose of this activity is to

- Represent what healthy bodies look like
- Analyze how we develop our beliefs about healthy bodies

Directions:

Develop a digital poster, song, poem, or other creative work that produces an image in your audience's mind of what healthy bodies look like. Whatever method you use, make sure to provide rich, vivid description.

Then, write a paragraph or two explaining who or what influenced your beliefs about what healthy bodies look like and how they did so. Post your project and paragraph to the "Body composition discussion board" in the learning management system.

Review your peers' projects and read about how they learned what healthy bodies look like. Who has similar and different views about healthy bodies? Did their views about healthy bodies develop differently than yours? How does seeing your peers' perspectives influence your own perspective? Reply to at least two of your peers, describing what you learned from their projects.

Finally, write a reflection critiquing how we develop our beliefs about healthy bodies. Here is a list of guiding questions to support your critique:

- After completing "Body Composition Learning Activities 1 and 2," what themes did you notice about where people get their ideas about what healthy bodies look like?
- What are the pros and cons of forming our values and beliefs based on these sources?

- What revisions would you make to the values portrayed by these sources? Explain by describing who benefits and is harmed by these ideas.

Body Composition and Health Reading

Read a short summary of the current scientific information about body composition, body weight, and health, which can be found in the learning management system (Appendix H). You will use what you read to complete learning activity 3.

Body Composition Learning Activity 3

The purpose of this activity is to:

1. Use scientific guidelines to determine if your current body composition is healthy
2. Identify health risks associated with carrying too much body fat, especially in the abdomen
3. Decide if you want to change health behaviors to influence your body weight and/or body composition

Directions:

Answer the questions below. Then, review body composition learning activities one and two before completing the reflection.

I am male/female.

My BMI is _____ which is underweight/healthy/overweight/obese.

My waist circumference is _____, which puts me at less/more risk of obesity-related diseases.

Reflection

How does the way you feel about your body align with the interpretations of your BMI and waist circumference? What do they tell you about your body composition? If your

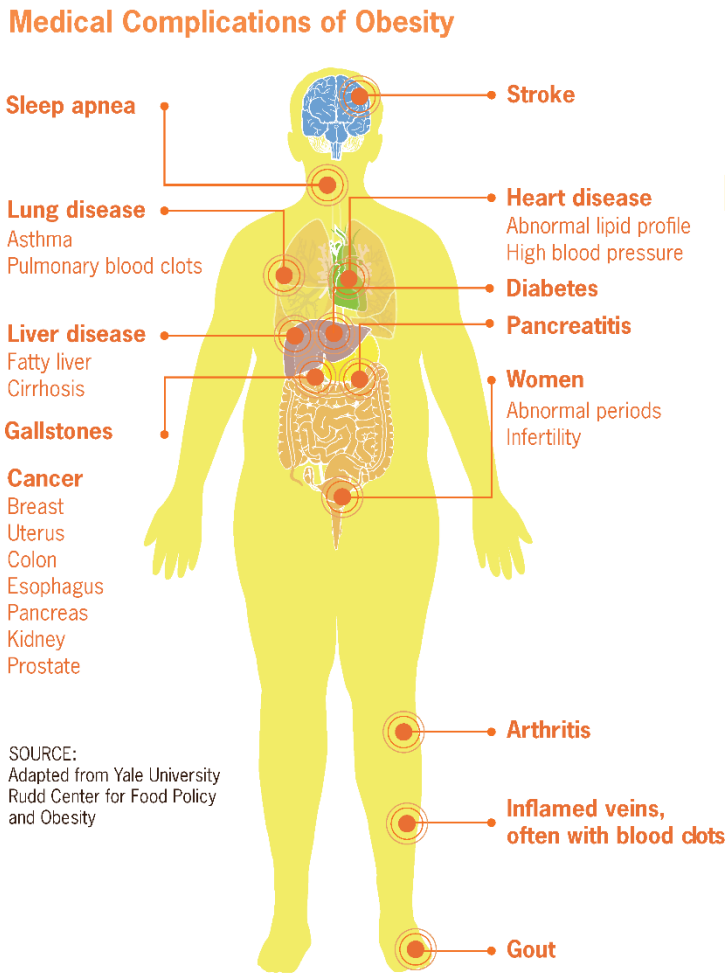
measurements suggest overweight or obesity, do you want to lose weight? Why or why not? If your measurements indicate normal/healthy, are your diet and exercise routines healthy, or could you improve them? For example, your BMI might be normal, but if you skip meals to keep your weight low, you may want to consider healthier ways to maintain your weight.

Think about the components of wellness. Body mass index, waist circumference, and body fat percentage are tools for evaluating physical health but do not consider other aspects of wellness. How do the other components of wellness interact with the physical health of your body composition? For example, if your partner doesn't want you to lose weight and you think losing weight would hurt your relationship (social wellness), you may choose to stay heavy even though doing so could harm your physical health.

Write a paragraph analyzing the results of your body composition measures. Your paragraph should (1) start with a topic sentence that summarizes the outcome of your measurements, (2) include one or more sentences relating how you feel about the outcome, (3) one or more sentences describing if and why you plan to act on the outcome or not, and (4) a concluding sentence that summarizes what you learned from this activity.

APPENDIX H

BODY COMPOSITION AND HEALTH



Source: https://upload.wikimedia.org/wikipedia/commons/c/cf/Medical_complications_of_obesity.png

Obesity and Health

Maintaining an appropriate body weight is important for health and wellness. Over time, if you eat and drink more calories than your body uses or "burns off," your body will store the

extra energy as fat, leading to weight gain. People who are overweight or obese have too much body fat, which poses a health risk.

Extra weight may increase your risk for:

- type 2 diabetes
- heart disease and stroke
- high blood cholesterol
- high blood pressure
- kidney disease
- non-alcoholic fatty liver disease (a fat buildup in the livers of people who drink little or no alcohol)
- certain cancers
    - breast
    - uterus
    - colon
    - esophagus
    - pancreas
    - kidney
    - prostate
- problems with pregnancy
    - gestational diabetes (high blood sugar during pregnancy
    - high blood pressure
    - increased risk for cesarean section (C-section)

Medical complications of obesity include stroke, sleep apnea, lung disease (asthma, pulmonary blood clots), heart disease (abnormal liver profile, high blood pressure), diabetes, liver disease (fatty liver, cirrhosis), pancreatitis, gallstones, abnormal periods and infertility in women, cancer (breast, uterus, colon, esophagus, pancreas, kidney, prostate), arthritis, inflamed veins (often with blood clots), and gout.

Body Mass Index (BMI)

How do you determine if your weight is healthy? Body mass index (BMI) is the most commonly used way to tell whether you are underweight, at a healthy weight, overweight, or obese. BMI compares your weight to your height. A BMI below 18.5 is underweight and BMI of 18.5 to 24.9 is in the healthy range. A person with a BMI of 25 to 29.9 is considered overweight, and someone with a BMI of 30 or greater is considered obese. As BMI increases, so does risk of disease.

Some people criticize BMI because it overestimates body fat in muscular athletes, so it is good to look at additional ways to evaluate weight status. Your school may have another method available to measure body fat—bioelectrical impedance analysis. If you would like to have your body fat percentage checked using bioelectrical impedance, please contact your course instructor.

Bioelectrical Impedance Analysis

Bioelectrical impedance analysis (BIA) starts with you standing on or holding a device that sends a small amount of electrical current through your body. The current travels from one sensor in the machine, through your body, to another sensor. The current moves faster through muscle, which is higher in water, than through fat. The BIA machine then uses mathematical equations based on how fast the current moved to estimate the percent of your body that is composed of fat.

Source: https://upload.wikimedia.org/wikipedia/commons/1/14/Soehnle_body_fat_scale.jpg

To interpret BIA body fat estimate, use the chart below. Essential fat is the minimum amount of fat necessary for life. Athletes in certain sports may keep their body fat low for improved performance rather than health benefits. Likewise, very fit individuals may have lower than average body fat. For health, aiming for a body fat percentage in the acceptable range is reasonable. Anything above acceptable is obesity and puts you at increased health risk. Note that at all levels, women can have more body fat than men and still be healthy.

American Council on Exercise
Percent Body Fat Norms for Men and Women

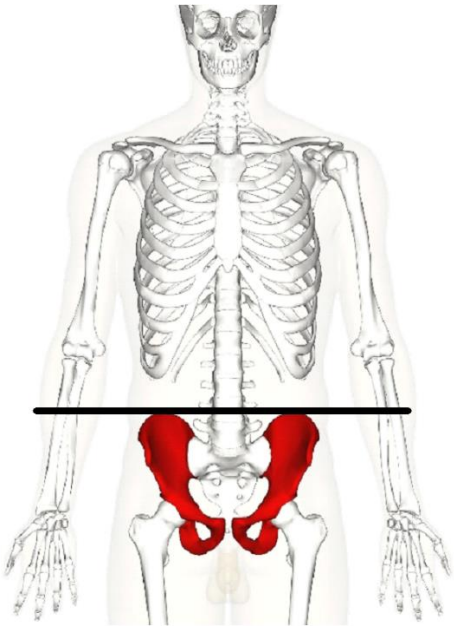
Description	Women	Men
Essential Fat	10-13%	2-5%
Athletes	14-20%	6-13%
Fitness	21-24%	14-17%
Acceptable	25-31%	18-24%
Obesity	>32%	>25%

Waist Circumference

Carrying a lot of fat around your abdominal organs can increase your risk of type 2 diabetes (sugar disease), cardiovascular (heart) disease, and some cancers even if your BMI or overall body fat percentage is not high.

If you are a man and your waist is more than 40 inches (102 cm), or if you are a woman and your waist is more than 35 inches (88 cm), you are at an increased risk for some diseases. If your waist size is close to those cut points, you may want to consider that the International Diabetes Federation recommends even smaller waist sizes for health - 37 inches (94 cm) for men of African, European, Eastern Mediterranean and Middle Eastern descent, 35.4 inches (90 cm) for men of Asian and ethnic South or Central American descent, and 31.5 inches (80 cm) for all women.

To measure waist circumference:



Source: https://upload.wikimedia.org/wikipedia/commons/thumb/5/55/Hip_bone_anterior_high-res.jpg/500px-Hip_bone_anterior_high-res.jpg

- Wear undergarments or no clothing
- Stand with the feet shoulder-width apart
- Place the measuring tape against the skin with the bottom of the measuring tape at the top of the hipbones.
- The measuring tape should be parallel to the floor and secure, but not dent the skin.
- Relax and exhale. Measure to the nearest 1/8 inch, or 0.1 cm.

Waist Circumference and Disease Risk—U.S. levels		
Women	**Men**	**Description**
≤34.65 inches (88 cm)	≤40 inches (102 cm)	Less risk for obesity-related diseases
>34.65 inches	>40 inches	More risk for obesity-related diseases

References

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