**Foundations: UNIT 4: Community Prep (messaging)**

**Homeland Sciences I: UNIT 3: Risk**

**Homeland Sciences II: UNIT 1 or 3: Sociology or Research**

**AJ I: UNIT 4: Social and Political Issues**

**AJ II: UNIT 5: Careers**

**Essential Question:** How does perception of risk impact emergency management? How does gender impact risk perception?

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| **Lesson Title** | **Gender and Risk Perception** |
| **Key Points** | * Studies show that gender impacts risk perception, leadership styles and followership. * Emergency managers are concerned with compliance to emergency preparedness messages. Risk perception impacts compliance with emergency directives. * Careers in the sciences, law enforcement and emergency management are more often pursued by men than women. Does risk perception play a role in this phenomena? |
| **Objective(s)** | After the session students will (be able to):   * Evaluate the survey method of data collection for validity and reliability. * Understand that conclusions based on research data may demonstrate correlation but not causation. * Discuss how awareness campaigns (messaging) might be impacted by the characteristics of the creator of a message as well as the receiver. |
| **Resources** | * Washington County Video of AJ students sparring in a gym. * *Plos One* online journal, “Risk Perception and Risk Taking Behaviour during Adolescence: The Influence of Personality and Gender” Renate LEP Reniers et al * Case Study: Madrid Earthquake Prediction   <https://training.fema.gov/hiedu/downloads/ijems/articles/gender%20differences%20in%20risk%20and%20communication%20behaviorresp.pdf>   * International Journal of Mass Emergencies and Disasters, March 1999, Vol. 17, No 1 pp 111-122 Professionalization and Gender in local Emergency Management Jennifer Wilson   <https://training.fema.gov/emiweb/downloads/ijems/articles/professionalization%20and%20gender%20in%20local%20emergency%20management.pdf> |

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| **Engagement (Time in min):** Opportunity to leverage prior learning or relate lesson to current events or issues relevant to students or issues. |
| **Warm-up:** (i.e.,Question, video, current event)   * Washington County Video of AJ students sparring in a gym.   Discussion about social conditioning  Under what circumstances do students face decisions about physical altercations and their consequences? Have students been conditioned to stand up for themselves or walk away as a general principle?  The pilot of the April 2018 Southwest Airlines engine failure, Tammie Jo Shults, attended an assembly in high school (1980s) for pilots. She was told by a speaker that she could stay but therewere no opportunities for women in military flight schools.She became a successful Navy fighter pilot before becoming a commercial pilot.  Why are people turned away for certain jobs because of their gender alone?  Teachers elicit theories about bias from students. Are girls seen as less capable in science or engineering? Why? Is it a true difference of ability or is it culture? How can we find out? |
| **Exploration ( min):** Facilitate transition to lesson objectives. Materials and text references. Questions to be ponder. |
| If it is true that one gender is better as a group at certain tasks, we should be able to measure this. We could measure the skills of a random group of people for whom we don’t know a gender and compare results on some kind of test with groups for which we do know the gender. What would we learn? (Teachers elicit understanding of bias and cognitive traps in evaluating information that does not support our conditioned beliefs)  Discuss the Abstract of the Journal articles:  Research methods rely on sample size and statistical analysis. How do these reports, for example *Risk Perception in Adolescents*, based on less than 200 students in the UK reflect the population at large?  What are the weaknesses of asking students how they feel about risk and consequences? Does it make a difference if they can answer anonymously? What about when the questions are asked at school? How reliable are self-reflections?  Are students familiar with Likert scales? What are the limitations? |
| **Explanation (min):** Teacher descriptions, definitions and guidance for students’ understanding of the lesson. |
| Teacher Notes:  Divide the class into 2 groups. Each group will create a 5 question sample test using a Likert scale about common fears. For example, heights, spiders or snakes, the dark….  Opposing groups will answer the questions posed by each other, tally the results anonymously for the class but participants will place their in a pile based on gender (student’s choice).  Do the result seem to reflect any gender bias? How different would two samples of results have to be to mean something?  (Teachers elicit a basic grasp of significant difference and sample size related to populations. How many women are in the world? How many should be tested to be able to make a guess about women as a group? What can a researcher do about test subjects who do not identify as one or the other most common genders?) |
| **Elaboration ( min):** Activity that either allows students to assimilate information or apply skills to a problem. Can be combined with an assignment for assessment/Evaluation. |
| The referenced study indicates that boys in middle school responding by self-reflection using Likert scales seemed more willing to take risks and less sensitive to consequences than girls from the same group.  Girls seemed to be more socially anxious and more sensitive to negative outcomes.  What does this mean to emergency managers?  How does this impact career choices?  (Teachers elicit understanding of correlation and causation. Are boys more likely to choose emergency management careers because they are more willing to take risks? Or are boys more willing to take risks because of some cultural influence? Would there be an advantage to risk takers in EM? What about an advantage to those who are risk averse? How would having both types of risk managers benefit a community facing a disaster?) |
| **Evaluation (10 min):** full range of options at teacher discretion from open ended reflective assignment to using text book review questions for grading. Consider self or peer review if elaboration activity is not graded. Consider Homework assignment. |
| **Assessment choice: Homework or Discussion**  **Closing:** Integrate lesson with prior and upcoming materials. Debrief.  Take a position on whether there is a difference in risk perception among your friends based on their gender. Defend you position. |