## Learning Activity:

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<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<td>The learner will be able to describe the consequences of toxic stress in childhood,</td>
<td>• Conceptual taxonomy of stress in childhood (positive stress, tolerable stress, toxic stress) will be reviewed (Shonkoff et al., 2012). • The ecobiodevelopmental model of toxic stress will be presented (Shonkoff et al., 2012). • Short-term and long-term outcomes associated with toxic stress will be described (Garner 2013). • Relationships among toxic stress and health disparities related to income and race/ethnicity will be discussed. • Implications for nursing research, clinical practice, and policy will be described.</td>
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<td>including physiological, health, and behavioral outcomes.</td>
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<td>The learner will be able to assess indicators of exposure to chronic stress in childhood, particularly noninvasive biomarkers of chronic stress.</td>
<td>• Physiological, health, and behavioral indicators of chronic stress in childhood will be described. • Methods of noninvasive biomarker collection and analysis will be discussed. • Limitations of physiological, health, and behavioral indicators will be described.</td>
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<td>The learner will be able to discuss maternal factors that may protect against exposure to toxic stress in young children.</td>
<td>• Animal and human research studies that provide evidence for the protective role of caregiving will be reviewed (Champagne, Francis, Mar, &amp; Meaney, 2003; Danese &amp; McEwen, 2012; De Bellis, 2005; Hostinar, Sullivan, &amp; Gunnar, 2014). • Gaps in current knowledge will be discussed. • Current studies provide evidence for physiological disruptions associated with a lack of supportive caregiving in early childhood, but the positive caregiving patterns that promote a protective relationship in humans remain largely unexplored. • Research on caregiving and physiological stress has been primarily conducted with very young children in low-risk homogenous samples (Asok, Bernard, Roth, Rosen, &amp; Dozier, 2013; Badanes, Dmitrieva, &amp; Watamura, 2012; Hibel, Granger, Blair, &amp; Cox, 2011; Hill-Soderlund et al., 2008; Laurent, Ablow, &amp; Measelle, 2012). • Relationships among experiences of discrimination, racial socialization parenting behaviors, and biomarkers of chronic stress in children have not been previously explored (Yasui, 2015). • Preliminary findings of the current study will be presented, with a specific focus on relationships among maternal protective factors and indicators of exposure to chronic stress in children.</td>
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