

# A Risk Factor Tool for United States Teenage Pregnancy: An Adaptation from the United Kingdom Using American Risk Factors



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## Introduction

With a population of 42 million, one out of every eight people living in the United States is an adolescent.<sup>1</sup> Data show that half of American adolescents today are engaging in sexual activity, and one in eight adolescent females will become pregnant before age 20.<sup>1</sup> The number of teenage pregnancies has declined over the past decade due to increased contraception and more efforts to educate adolescents on safe sex.<sup>1</sup> Although research shows that teen pregnancy may not be as detrimental to women's lives as once thought,<sup>2</sup> it is linked to an array of negative outcomes later in maternal life including higher rates of psychosocial disadvantage, prolonged welfare dependence, and maternal depression.<sup>3</sup> There is debate over if these are causes or effects of teen pregnancy (or both). To the best of our knowledge and research, there is no current risk assessment tool for teenage pregnancy in the United States. To address this gap, a pregnancy risk assessment tool from the United Kingdom was analyzed and used as a basis for a similar tool for use in the United States. This manuscript describes the Manchester Teenage Pregnancy Partnership (MTTP) Risk Assessment Tool, its use, and compares its enumerated risk factors to those described in the literature for teenage pregnancy in the United States. Based on this comparison, we offer recommendations to use the MTTP Risk Assessment Tool as a basis for a similar tool for use in the United States.

## Background

- Since 2012, American women have seen an increase in access to affordable contraception under the Obama administration due to the Affordable Care Act.<sup>4</sup>
- With the uncertain future for continued broad access to affordable contraception,<sup>4</sup> public health programs must identify individuals most at risk for teenage pregnancy.<sup>5</sup>
- Risky behavior is defined as engaging in any of a wide variety of activities including cigarette smoking, weapon carrying, and unprotected sexual intercourse, all of which contribute to the leading causes of morbidity in youth.<sup>6</sup>
- Health risk assessments can be useful for teenage pregnancy prevention by evaluating how "at risk" a teenager is for unplanned pregnancy based on the number of risk factors they exhibit. Teens at risk of unplanned pregnancy or considering pregnancy can be targeted for specific education that empowers them to have healthy sexual lives.
- Once at-risk populations are identified through epidemiologic studies, health risk assessments can be used to identify individuals at risk for a particular disease. Thus, the MTTP Risk Assessment Tool is based on past epidemiological research that identified the risk factors for teenage pregnancy in Manchester, United Kingdom.
- Figure 1 shows the location of Manchester, United Kingdom.



Figure 1. Map of Manchester, United Kingdom.

## Purpose

This project describes the MTTP Risk Assessment Tool, its use, and compares its risk factors to those described in the literature for teenage pregnancy in the United States. Based on this comparison, we offer recommendations to use the MTTP Risk Assessment Tool as a basis for a similar tool for use in the United States.

## Methods

- The Social Exclusion Unit of the United Kingdom (U.K.) was founded in December of 1997 by the U.K. Prime Minister of the United Kingdom.<sup>7</sup>
- In June of 1999, the Manchester Social Exclusion Unit launched the national campaign *Teenage Pregnancy Strategy*.<sup>8</sup>
- By 2010, the two main objectives of The *Teenage Pregnancy Strategy* were to:
  - reduce the under-18 conception rate by 50%; and
  - increase the employment, education, and training of teenage mothers by 60%.<sup>8</sup>
- The MTTP addressed this challenge by creating a risk assessment tool (Figure 2) and risk assessment checklist (Figure 3), both now available in their no-cost online toolkit (Figure 4).

### Risk Assessment Tool

The tool can be used to identify whether young people are at a high risk of becoming pregnant, and to identify the reasons why. It can be used to identify the reasons why young people are at a high risk of becoming pregnant, and to identify the reasons why. It can be used to identify the reasons why young people are at a high risk of becoming pregnant, and to identify the reasons why.

Risk factor	Weight	Score
Family income (per year) in lowest 10%	10	0
Family income (per year) in lowest 20%	5	0
Family income (per year) in lowest 30%	5	0
Family income (per year) in lowest 40%	5	0
Family income (per year) in lowest 50%	5	0
Family income (per year) in lowest 60%	5	0
Family income (per year) in lowest 70%	5	0
Family income (per year) in lowest 80%	5	0
Family income (per year) in lowest 90%	5	0
Family income (per year) in lowest 100%	5	0
Family income (per year) in lowest 110%	5	0
Family income (per year) in lowest 120%	5	0
Family income (per year) in lowest 130%	5	0
Family income (per year) in lowest 140%	5	0
Family income (per year) in lowest 150%	5	0
Family income (per year) in lowest 160%	5	0
Family income (per year) in lowest 170%	5	0
Family income (per year) in lowest 180%	5	0
Family income (per year) in lowest 190%	5	0
Family income (per year) in lowest 200%	5	0
Family income (per year) in lowest 210%	5	0
Family income (per year) in lowest 220%	5	0
Family income (per year) in lowest 230%	5	0
Family income (per year) in lowest 240%	5	0
Family income (per year) in lowest 250%	5	0
Family income (per year) in lowest 260%	5	0
Family income (per year) in lowest 270%	5	0
Family income (per year) in lowest 280%	5	0
Family income (per year) in lowest 290%	5	0
Family income (per year) in lowest 300%	5	0
Family income (per year) in lowest 310%	5	0
Family income (per year) in lowest 320%	5	0
Family income (per year) in lowest 330%	5	0
Family income (per year) in lowest 340%	5	0
Family income (per year) in lowest 350%	5	0
Family income (per year) in lowest 360%	5	0
Family income (per year) in lowest 370%	5	0
Family income (per year) in lowest 380%	5	0
Family income (per year) in lowest 390%	5	0
Family income (per year) in lowest 400%	5	0
Family income (per year) in lowest 410%	5	0
Family income (per year) in lowest 420%	5	0
Family income (per year) in lowest 430%	5	0
Family income (per year) in lowest 440%	5	0
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Family income (per year) in lowest 460%	5	0
Family income (per year) in lowest 470%	5	0
Family income (per year) in lowest 480%	5	0
Family income (per year) in lowest 490%	5	0
Family income (per year) in lowest 500%	5	0
Family income (per year) in lowest 510%	5	0
Family income (per year) in lowest 520%	5	0
Family income (per year) in lowest 530%	5	0
Family income (per year) in lowest 540%	5	0
Family income (per year) in lowest 550%	5	0
Family income (per year) in lowest 560%	5	0
Family income (per year) in lowest 570%	5	0
Family income (per year) in lowest 580%	5	0
Family income (per year) in lowest 590%	5	0
Family income (per year) in lowest 600%	5	0
Family income (per year) in lowest 610%	5	0
Family income (per year) in lowest 620%	5	0
Family income (per year) in lowest 630%	5	0
Family income (per year) in lowest 640%	5	0
Family income (per year) in lowest 650%	5	0
Family income (per year) in lowest 660%	5	0
Family income (per year) in lowest 670%	5	0
Family income (per year) in lowest 680%	5	0
Family income (per year) in lowest 690%	5	0
Family income (per year) in lowest 700%	5	0
Family income (per year) in lowest 710%	5	0
Family income (per year) in lowest 720%	5	0
Family income (per year) in lowest 730%	5	0
Family income (per year) in lowest 740%	5	0
Family income (per year) in lowest 750%	5	0
Family income (per year) in lowest 760%	5	0
Family income (per year) in lowest 770%	5	0
Family income (per year) in lowest 780%	5	0
Family income (per year) in lowest 790%	5	0
Family income (per year) in lowest 800%	5	0
Family income (per year) in lowest 810%	5	0
Family income (per year) in lowest 820%	5	0
Family income (per year) in lowest 830%	5	0
Family income (per year) in lowest 840%	5	0
Family income (per year) in lowest 850%	5	0
Family income (per year) in lowest 860%	5	0
Family income (per year) in lowest 870%	5	0
Family income (per year) in lowest 880%	5	0
Family income (per year) in lowest 890%	5	0
Family income (per year) in lowest 900%	5	0
Family income (per year) in lowest 910%	5	0
Family income (per year) in lowest 920%	5	0
Family income (per year) in lowest 930%	5	0
Family income (per year) in lowest 940%	5	0
Family income (per year) in lowest 950%	5	0
Family income (per year) in lowest 960%	5	0
Family income (per year) in lowest 970%	5	0
Family income (per year) in lowest 980%	5	0
Family income (per year) in lowest 990%	5	0
Family income (per year) in lowest 1000%	5	0

Figure 2. Manchester Teenage Pregnancy Partnership (MTTP) risk assessment tool.

### Risk Assessment Checklist

The tool can be used to identify whether young people are at a high risk of becoming pregnant, and to identify the reasons why. It can be used to identify the reasons why young people are at a high risk of becoming pregnant, and to identify the reasons why.

Risk factor	Weight	Score
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Figure 3. Manchester Teenage Pregnancy Partnership (MTTP) risk assessment checklist.



Figure 4. Manchester Teenage Pregnancy Partnership (MTTP) risk assessment toolkit.

## Discussion

- When comparing the risk factors for teenage pregnancy between the United States and Manchester, many similarities were identified:
- All of the risk factors found in Manchester (Figures 2 & 3) were also found to be relevant to teenage pregnancy in the United States as well.
- The United States literature for teen pregnancy risk identified low income as an additional risk factor for teenage pregnancy.
- The MTTP Risk Assessment Checklist (Figure 3) categorizes a score of "1" as both a "low" and "moderate" risk for teenage pregnancy (Figure 3, circled). A scoring tool should not have overlapping scores for risk categories.
- Figure 4 shows the MTTP Scoring System, which weights some factors as conveying more risk. Neither the Risk Assessment nor its supporting documentation explains what evidence the weighted point values were based on.

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