# ASCR ECX Evaluation Toolkit

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# README for ETK Method of Adjustment Module

## File List:

* ETK-MethodOfAdjustmentQualtrics.html
* ETK-MethodOfAdjustmentQualtrics.css
* ETK-MethodOfAdjustmentQualtrics.js
* ETK-MethodOfAdjustmentREADME.docx
* ETK-MethodOfAdjustmentSurveyFlow.png
* Image00.png
* Image01.png
* Image02.png
* Image03.png
* Image04.png

## Overview

This module is intended to be run within a Qualtrics survey. Qualtrics survey software can be found at www.qualtrics.com.

The Method of Adjustment is a psychophysical technique to find a threshold or a change point. In this image-based implementation, a participant (study subject) can rotate through a "carousel" containing a list of images and select the image where the stimuli of interest undergoes a change or reaches some threshold. A generic study within Qualtrics might consist of:

1. An IRB consent block/question.
2. An introduction block/question to explain the task and the threshold or change point of interest.
3. A study block with one or more Method of Adjustment carousel questions.
4. A demographic block containing any relevant demographic questions.

## Instructions for implementation of the Method of Adjustment Module

There are three files that work together for the implementation, an HTML, a CSS and a JavaScript file. The CSS file is added in the Look and Feel part of the survey options. Choose the Advanced tab and click on Add Custom CSS. Cut and paste the CSS sheet as directed. The HTML and JS files are added in the individual question. Choose a Descriptive Text question type. Click on the question text and an HTML View tab will appear. Click on the HTML tab and insert the HTML file. The list of images will need to be updated as will the phrasing of the specific question under study. Lastly, to the left of the question is the settings icon. Click on the settings icon and choose Add JavaScript. The custom JavaScript code should be added there.

Detailed information on developing surveys and using the Qualtrics JavaScript API can be found on the Qualtrics website.

A set of five example images are included so the user can explore the functionality. An imgURL variable is used to point to the URL host for the images and must be modified by the user. Implementing the above files should produce a Qualtrics question that allows the participant to rotate the carousel back and forth between a set of numbered images (00 to 04).

## Study Output: Embedded Data Variables

The study participant “chooses” the threshold or change point by clicking the Qualtrics >> (forward to next question) button to record their choice. The Qualtrics JavaScript API allows the user to write out information via the setEmbeddedData method. The embedded data variable MUST be created within the Survey Flow in order to save this information. A screenshot from an example Survey Flow is shown in the accompanying image file. The JavaScript file must be edited so that the embedded data variable names match. More information on creating embedded data variables and the survey flow can be found on the Qualtrics website.

An alternate way of saving the participant choice would be to embed the carousel in a multiple choice question and have the participant select one or more image numbers. There is code commented out within the JavaScript that will add a title over each image as “Image Number: XX”. Uncommenting this code snippet will allow the participant to identify and choose multiple images.

Note that the Qualtrics go-to-next-question (>>) button text can be changed via the General tab of the Look and Feel section. One could change this to SUBMIT CHOICE or another option based on the user’s particular study.

## Amazon Mechanical Turk

Amazon Mechanical Turk, <https://www.mturk.com/mturk/welcome>, is a crowdsourcing site that can provide a convenient source of study participants for online studies. A URL link to a Qualtrics study can be input into an Mturk HIT to launch a study. More information can be found on the Mechanical Turk website.

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