REBUTTAL - JoVE manuscript submission by Vicky Tsang and Patrick Chun Kau Chu

|  |  |  |
| --- | --- | --- |
| No. | **Editorial Comments** | **Authors’ Responses & Actions taken** |
| 1 | Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammatical errors. | The manuscript has been proofread and checked for spelling and grammatical errors. |
| 2 | Protocol Language: The JoVE protocol should be almost entirely composed of numbered short steps (2-3 related actions each) written in the imperative voice/tense (as if you are telling someone how to do the technique, i.e. "Do this", "Measure that" etc.). Any text that cannot be written in the imperative tense may be added as a brief “Note” at the end of the step (please limit notes). Please re-write your ENTIRE protocol section accordingly. Descriptive sections of the protocol can be moved to Representative Results or Discussion. | The whole section has been rewritten using the imperative tense and the descriptive sections of the protocol has been moved to Representative results. |
| 3 | Protocol Detail:  Please add all specific details (e.g. button clicks for software actions, numerical values for settings, etc) to your protocol steps. There should be enough detail in each step to supplement the actions seen in the video so that viewers can easily replicate the protocol. | The steps in 3.2 and 4.1 regarding the eyetracker calibration and the selection of AOI in the video have been expanded. |
| 4 | Protocol Numbering: There must be a one-line space between each protocol step. | A one-line space has been added between each protocol step. |
| 5 | Protocol Highlight: Please highlight ~2.5 pages or less of text in yellow, to identify which steps should be visualized to tell the most cohesive story of your protocol steps. | The steps that should be visualized has been highlighted in yellow. |
| 6 | Discussion: 1)  Please ensure that the discussion covers the following in detail: modifications and troubleshooting, limitations of the technique, significance with respect to existing methods, future applications and critical steps within the protocol. | We have modified the content in Discussion further, please see the red parts. |
| 7 | Please remove the numbered list from the discussion. | The numbered lists have been removed from the figure. |
| 8 | Figures: All panels of a figure (e.g. a,b,c should be on one page). | Figures 4a-c has been combined into one single figure in one page. |
| 9 | Figure/Table Legends: Please expand the legends to adequately describe the figures/tables. | The legends have been expanded for Figures 1, 2, 4 and 6. |
| 10 | Please define all abbreviations at first use. | The full form has been defined for ASD, ADHD and AOI at first use in the summary, abstract and the main text. |
| No. | **Reviewer #1** |  |
| 11 | Number of participants - should discuss this limitation | The manuscript is meant to be a case comparison report. So no group data is reported. |
| 12 | In Introduction, the authors may frame the present work as studying "social attention". | Thanks for the suggestions and information. Social attention has been used and related references added to the manuscript. |
| 13 | There are several studies along the same line of the present work using videos and the authors should be aware of these research before claiming "There have not been much research done on dynamic social videos". | Thanks for the comments and information. The references such as Klin et al. (2002) and Byrge et al. (2015) have been added in the introduction and the sentence removed. |
| 14 | The authors need to carefully check the abstract — there are many grammatical errors, especially there is a mixture of tenses. The present version of abstract does not read smooth to the reviewer. | Thanks for the suggestions and comments. The manuscript has been proofread and checked for spelling and grammatical errors. |
|  | **Reviewer #2** |  |
| 15 | While the title is about scan paths, there seems to be more time spent discussing other types of measures … and little is said about how to conduct systematic analyses on scan path data…  It is also unclear how this stands out from the article by Sasson & Elison (2012) and what methodology it is adding (perhaps detailed approaches to analyzing scan paths would have added a novel part to the current work). | Thanks for the suggestions and comments. Some details on the creation of gazepath have been added in 4.3 and the title have been changed to “A comparison of eyetracking data of social videos between children with high functioning ASD, comorbid ADHD and control” to include scanpath analysis as one of the components of eyetraking data. One major difference between the current article and Sasson & Elison (2012) is the introduction of the methodology in using social videos and the detailed delineation of its relevant target AOIs for analysis. |
| 16 | … if the authors want to go in the direction of a case study/qualitative analysis on scanpaths, the article would need to be completely re-conceived. | Most of the article has been rewritten and restructured. Please see the changes in red. |
| 17 | This article feels a bit all over the place and does not have a strong and clear story thread that the reader is following to understand what this work is contributing above and beyond past work (e.g., Sasson & Elison, who are cited by the authors), especially based on the Introduction. | The major contribution of this article is the introduction of target AOI analysis on dynamic social videos when compared with the viewing of photos which are described in most of the previous literature. This is emphasized in the revised abstract. |
| 18 | This entire manuscript needs to be revised for English language, as at least half of the sentences are difficult to interpret because of language-related issues (word choice, grammar, etc). | The manuscript has been proofread and checked for spelling and grammatical errors. |
| 19 | In the Title and Abstract, there is no mention of children, but this study is with 1st - 3rd graders… but it is confusing, as this study is clearly about children. | In the title and abstract, the word “individuals” is changed to “children” following Reviewer’s suggestions. |
| 20 | In the Abstract, there is no mention of ADHD +ASD…The Introduction says nothing about ADHD (e.g., why are you including a subject with comorbidity, what is expected to differ, what has past work shown). It is also unclear the point of getting into detail about the three theories if you don't re-visit any of that or use it to make any predictions about your data. | Relevant details about the comorbid ASD-ADHD group have been added in the abstract and the introductions; and, the theories have been revisited in the introduction and discussion sections. |
| 21 | Final paragraph of Intro discusses 'comparative case study approach' but then the article takes a more traditional statistical analysis approach, despite having only 3 subjects. Again, speaks to the confusion about the authors' intention behind this article. | This article follows the single-case study approach and the regression section has been removed to make our study aim clearer to readers. |
| 22 | I think there is something about scan paths and using more qualitative approaches (combined with quantitative) that could be interesting, but there isn't much at all said to the reader about how to do scan path analyses, whether qualitatively or quantitatively, only about more traditional metrics (# fixations, first fixation duration, total fixation duration). | Details on how to do scanpath analysis have been added in 4.3. |
| 23 | In fact, in the Discussion, it mentions a set of reasons why those kinds of analyses are extremely difficult, especially when using video stimuli with complex social scenes, again causing the reader to wonder what the authors are trying to teach the reader, etc, and why they would use a method full of error, as they say. | We purposefully added the limitations in eyetracking procedures as this is specifically requested in JoVE manuscript guidelines. Therefore we reported this to let future researchers aware of its limitations should they desire to conduct similar procedures. |
| 24 | Results/Table 2 - No statistical analyses of other more quantitative aspects of eye-tracking can be properly looked at with three children across three groups. If this paper is about 3 subjects, it has to be a case study/qualitative approach, and it makes no sense to do any sort of inferential statistics when there is an n=1 for each group. | We have removed the regression table from the results and focused on qualitative analysis in our revised report. |
| 25 | Discussion 2.2 is first moment mentioning anything about the parts of the videos involving people vs. not, and if this is important or worth explaining, it should come up earlier in choices about the videos and the AOIs used, etc. | Thanks for the reviewer’s suggestions. We have added a detailed section on defining and setting up the first moment fixation within AOIs in section 4.1 with a video illustration. |