Reviewer #2:

Bisphenol A (BPA) is a chemical used in the fabrication of various industrial products, including polyester. There has been controversy surrounding BPA exposure, particularly its effects on the endocrine system. In this manuscript, Castillo et al. examined the behavior of puberty rats for 30 days after exposure to 50 or 500 ug/kg BPA. There was a difference between the results of males and females. Estrous cycles in female rats were altered, with early estrus and a greater number of cycles. There were no clear effects on female behavior, but male rats consistently showed increased anxiety in the open field test (OFT), elevated plus maze test (EPM), light/dark box test (LDBT), and defensive burying test (DBT). The study is well designed, and the conclusions are based on consistent results. Many papers have been published regarding the effects of BPA on humans and animals, some of which indicate differences between males and females. Therefore, the novelty of this study cannot be considered very high. However, some of the previous studies contradict each other, and no clear conclusions have been drawn yet. In this reviewer's opinion, this manuscript's novelty does not diminish its value, since the accumulation of multiple studies from different groups will enable us to accurately assess the effects of BPA. Consequently, this reviewer recommends publishing the manuscript with minor revisions.

Minor points

Figure 3d: There is no description of the results of Figure 3d in the main text.

Response: There was a mistake in the figure number assigned to the description of the results. The correction was made.

*Figure 3: There is no result with *p<0.05 that is indicated in the figure legend.*

Response: The Figure and Figure legend were corrected.

Figure 5d: It is confusing to present the p-values this way, as if there was a significant difference between all the male and female experiment groups.

Response: The Figure was modified accordingly.

Figure 5: Evaluating the results of behavioral experiments requires the correct sample size. Hence, the number of samples per group should be specified as n=9 rather than a range such as n=8-17. For groups with different numbers, this reviewer suggests to include them in the figure if they are difficult to write down.

Response:

As recommended by the reviewer, we now include the number of animals per group within the bars of each figure.