

We thank you for giving us the opportunity to revise our manuscript. As suggested, we have made point-by- point response within the response letter.

### **Reviewer #1's comments**

Q1. The introduction was too long, it should be focus on what the studied done as the background.

### **Response:**

Thanks for your suggestions.

To clearly demonstrate the present study, we revised the structure of Introduction. The revision of the Introduction is divided into 3 parts:

To be more concise and clear, we have rewrote some parts of our introduction as:

Social context: “Domestic violence has always been a serious social problem with a high incidence rate. Data from the WHO indicated that one-third of women worldwide have experienced physical violence, with many of these incidents happening in front of children and adolescents, therefore making it even more disturbing.” (Line 60-63, page 3)

Significance of current study: “To better understand the process of reactions to stressful events among young adults and to develop prevention or intervention programs, most importantly, this study aimed to identify factors that mediate the association between physical domestic violence and PTG and PTSD. This study further examined and compared the mechanisms underlying these associations. It may inform future mental health interventions for vulnerable individuals. In addition, this study has critical significance as it was conducted amidst the COVID-19 outbreak, thus it may provide insights on the development of PTG and PTSD in the context of a global pandemic. Such insights emphasize unique psychosocial dynamics, especially among those who experienced trauma in the past and those currently experiencing global psychosocial stressors attributable to the pandemic. ” (Line 77-87, page 3)

Conceptualization: “the Kumpfer’s resilience framework believes that individuals who encountered the traumatic event would gather their own resources to cope with the stress based on their cultural context. The more risk factors (such as childhood exposure to domestic violence) or the fewer protective factors in the background there are, the higher probability individuals perform maladaptive, and vice versa. Hence, the stress would be alleviated or strengthened by the cultural context. Then, interactions between individuals and the environment would happen to handle stress, which may lead to the changes of the internal resources and traits associated with resilience. Consequently, the process of

resilience influenced by such traits would bring about the adaption or maladaptation, which may reduce the possibility of developing PTG and PTSD.” (Line 89-98, page 4)

The framework above can clearly describe the relationship among the variables but self-compassion. So we added empirical evidence to elaborate the effect of self-compassion (as a portion in the framework) as follow:

“Self-compassion is the ability to treat oneself with the same kindness and compassion as one would treat others in the same situation, which was regarded as a trait associated with resilience. Existing literature indicated that self-compassion is an important predictor for resilience and promoting self-compassion may facilitate individual resilience. This suggests that individuals with high self-compassion can exhibit a higher level of resilience and better adapt and recover when facing stress or difficulties. In contrast, individuals with a low level of self-compassion are inclined to criticize or reject themselves, which often form negative self-beliefs, low self-esteem, and unworthy of love. These eventually lead to a low level of resilience.” (Line 99-107, page 4)

Due to the updated theoretical framework, we deleted the previous theoretical construction (SWAT, PTG model, COR theory) of individual paths as follows:

“The shattered world assumption theory (SWAT) suggested that following a trauma, an individual’s basic perceptions of personal worth, trust in others, and justice or predictability in the world can be severely challenged and becomes unstable and unbalanced. These individuals would feel fearful and afraid and often leading to the incidence of PTSD symptoms.”

“The PTG model proposed that the psychological stress caused by traumatic events could stimulate cognitive reappraisal processing. When these types of thoughts turn to constructive processing, individuals think positively about themselves, others, and the world around them following trauma, which may ultimately contribute to the formation of PTG.”

“The COR theory believes that the internal resources of an individual play an important role in alleviating the negative effects of stress on mental health, such as self-compassion and resilience. Specifically, self-compassion is the ability to treat oneself with the same kindness and compassion as one would treat others in the same situation. Previous findings suggested that exposure to trauma, such as childhood abuse, reduces the level of self-compassion. This makes it difficult for individuals to face difficulties and traumas with a positive attitude.”

Q2. In the discussion should be added what was the impact of the study results in the point of view government. What the action should be taken, regarding this issue.

**Response:** As suggested, we have added necessary information:

“The government should pay attention to domestic violence with timely and appropriate actions that should be taken: (1) establish and improve the maternal and child protection system; (2) strengthen the support for community work to reduce the occurrence of domestic violence; (3) provide shelter for victims in the domestic violence during the epidemic period; (4) form a public opinion environment against domestic violence.” (Line 340-345, page 12)

Q3. The potency of recall bias regarding the data should also be mentioned as the limitation of the study.

**Response:**

Thanks for your comment. We have revised the manuscript and mentioned the potency of recall bias as follow:

“Fourth, due to the cross-sectional design, the participants have to recall their childhood experience instead of reporting existing circumstances, which leads to the potency of recall bias.” (Line 327-329, page 12)

## **Reviewer #2's comments**

Q1. Introduction: Well written but too much information. It's better to explain the relationship between the main variables of the study, that is, self-compassion, resilience, domestic violence, posttraumatic growth, and posttraumatic stress disorder.

**Response:**

Thanks for reviewer's valuable comment.

To clearly demonstrate the present study, we revised the structure of Introduction. The revision of the Introduction is divided into 3 parts:

To be more concise and clear, we have rewrote some parts of our introduction as:

Social context: “Domestic violence has always been a serious social problem with a high incidence rate. Data from the WHO indicated that one-third of women worldwide have experienced physical violence, with many of these incidents happening in front of children and adolescents, therefore making it even more disturbing.” (Line 60-63, page 3)

Significance of current study: “To better understand the process of reactions to stressful events among young adults and to develop prevention or intervention programs, most importantly, this study aimed to identify factors that mediate the association between physical domestic violence and PTG and PTSD. This study further examined and compared the mechanisms underlying these associations. It may inform future mental health interventions for vulnerable individuals. In addition, this study has critical significance as it was conducted amidst the COVID-19 outbreak, thus it may provide insights on the development of PTG and PTSD in the context of a global pandemic. Such insights emphasize unique psychosocial dynamics, especially among those who experienced trauma in the past and those currently experiencing global psychosocial stressors attributable to the pandemic.” (Line 77-87, page 3)

Conceptualization: “the Kumpfer’s resilience framework believes that individuals who encountered the traumatic event would gather their own resources to cope with the stress based on their cultural context. The more risk factors (such as childhood exposure to domestic violence) or the fewer protective factors in the background there are, the higher probability individuals perform maladaptive, and vice versa. Hence, the stress would be alleviated or strengthened by the cultural context. Then, interactions between individuals and the environment would happen to handle stress, which may lead to the changes of the internal resources and traits associated with resilience. Consequently, the process of resilience influenced by such traits would bring about the adaption or maladaptation, which may reduce the possibility of developing PTG and PTSD.” (Line 89-98, page 4)

The framework above can clearly describe the relationship among the variables but self-compassion. So we added empirical evidence to elaborate the effect of self-compassion (as a portion in the framework) as follow:

“Self-compassion is the ability to treat oneself with the same kindness and compassion as one would treat others in the same situation, which was regarded as a trait associated with resilience. Existing literature indicated that self-compassion is an important predictor for resilience and promoting self-compassion may facilitate individual resilience. This suggests that individuals with high self-compassion can exhibit a higher level of resilience and better adapt and recover when facing stress or difficulties. In contrast, individuals with a low level of self-compassion are inclined to criticize or reject themselves, which often form negative self-beliefs, low self-esteem, and unworthy of love. These eventually lead to a low level of resilience.” (Line 99-107, page 4)

Due to the updated theoretical framework, we deleted the previous theoretical construction (SWAT, PTG model, COR theory) of individual paths as follows:

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trauma, an individual's basic perceptions of personal worth, trust in others, and justice or predictability in the world can be severely challenged and becomes unstable and unbalanced. These individuals would feel fearful and afraid and often leading to the incidence of PTSD symptoms."

"The PTG model proposed that the psychological stress caused by traumatic events could stimulate cognitive reappraisal processing. When these types of thoughts turn to constructive processing, individuals think positively about themselves, others, and the world around them following trauma, which may ultimately contribute to the formation of PTG."

"The COR theory believes that the internal resources of an individual play an important role in alleviating the negative effects of stress on mental health, such as self-compassion and resilience. Specifically, self-compassion is the ability to treat oneself with the same kindness and compassion as one would treat others in the same situation. Previous findings suggested that exposure to trauma, such as childhood abuse, reduces the level of self-compassion. This makes it difficult for individuals to face difficulties and traumas with a positive attitude."

Q2. Method: First, the study design should be better explained.

**Response:**

Thanks for reviewer's valuable comment. We have changed the word "study" to "cross-sectional survey" as follow:

"Hence, this cross-sectional design was conducted online" (Line 138, page 5)

And we elaborated the procedure as follow:

"Participants who clicked the survey link would be automatically directed to the questionnaire website page. It would not be proceeded to the next page unless participants completed all the items on the current page so that there was no missing data for those who completed the questionnaire." (Line 141-145, page 5)

Q3. It is necessary to calculate the appropriate sample based on the standard criteria and the sampling formula. Second, why a purposive sampling? Could you give more information about the targeted population such as gender, age, and rationale for targeting them? Exactly, who are the targeted population? If it is individuals in a university, then how did the authors adjust for the Hawthorne Effect since the participants were persons who made a conscious decision to be in the school.

**Response:**

We thank reviewer for suggestions. In order to state clearly the sampling formula, we have detailed methods section as follow:

“To ensure the adequate power, we calculated the sample size using the sampling formula  $(N=[(Z \sqrt{p(1-p)})/d]^2)^{[27]}$ , which determined that at  $\alpha = 0.05$ ,  $p = 0.3$ ,  $d = 0.03$ , the sample size needed was approximately 896 individuals. The sample size of 2038 in the present study should be sufficient.” (Line 131-135, page 5)

And the inclusion criteria was elaborated as follows:

“college students who have been or have not been exposed to domestic violence.” (Line 122-123, page 5)

“...were invited on the basis of the following inclusion criteria: being at least 18 years of age and fluent in Chinese.” (Line 127-128, page 5)

To make clear the method to control Hawthorne Effect, we have revised the text as follow:

“all volunteers signed the online consent forms which is opaque about the aim of the study to control the Hawthorn Effect.” (Line 125-126, page 5)

Q4. Third, there is no information about the scales' reliability and validity with the original population. In all the scales, the authors have provided the Cronbach's alpha for the study, but this is post-analysis. How were the scales determined to be reliable and valid for the study before the execution of the study?

**Response:**

Thanks for reviewer's valuable comment. To explain the reliability and validity of the scales, we added the Cronbach's alpha of the materials in the previous study as follows:

“The PCL-C possesses good psychometric with a sensitivity of 0.78 and a specificity of 0.71.” (Line 158-159, page 6)

“The inventory in prior studies was found to have good psychometric properties in the Chinese context with the internal reliability of 0.88.” (Line 171-172, page 6)

“The Chinese version of the revised Adverse Childhood Experiences Question possesses good psychometric properties with the internal reliability of 0.83<sup>[35]</sup>.” (Line 181-183, page 7)

“This scale was adapted in Chinese and reported good reliability (Cronbach’s  $\alpha = 0.96$ ) and validity among Chinese adolescents and college students.” (Line 191-193, page 9)

“This original scale in Chinese was adapted and reported with good reliability (Cronbach’s  $\alpha = 0.88$ ) and validity.” (Line 202-203, page 7)

Q5. Result: The potential confounders were not fully controlled. Measurements of these confounders appear to be very crude. Without proper adjustment for these important confounders, misleading results cannot be ruled out.

**Response:**

Thank you for your advice. To ensure the validity of results, we have carried out the analysis again and have revised the text about confounders (gender, age, subjective social economic status, family structure) which should be controlled.

The descriptions of control variables were added as follow:

“The descriptions of cofounders were as follow: gender, 755 males and 1286 females; age, 20.56 (SD = 1.90); subjective social economic status, 4.85 (SD = 1.38); family structure, 1859 intact and 179 non-intact.” (Line 233-235, page 9)

As a consequence of re-analysis, we conducted Partial Correlations instead of Pearson Correlation to examine the association between the variables while controlling the age, gender, subjective social economic status, family structure. The text has been revised as follow:

“Secondly, Partial correlations were performed to examine the association between domestic violence and PTG, PTSD, self-compassion, and resilience while controlling the age, gender, subjective social economic status, family structure.” (Line 207-209, page 8)

Besides, the additional control variable (family structure) was added into the model as follows:

“In the process of path analysis, all aforementioned variables were treated as observed variables in terms of their total scores, with controlling the cofounders as above.” (Line 221-223, page 10)

“This model fits the data better,  $\chi^2 = 424.026$ ,  $df = 49$ ,  $p = 0.000$ , CFI = 0.966, TLI = 0.951; RMSEA = 0.061, 90% confidence interval (CI) (0.056, 0.067), SRMR = 0.024, while controlling the age, gender, subjective social economic status and family structure.” (Line 237-238, page 8)

“Based on the results of the direct effect model, the indirect effect model was established controlling the cofounders as above.” (Line 257-258, page 9)

“Using these procedures, a parsimonious model was built (Figure 1) controlling the cofounders as above.” (Line 263-264, page 10)

**Q6. Discussion:** First, the first part of the discussion is appropriate to some extent, but since the study is comparative, it is necessary to interpret the differences between the groups.

**Question:**

Sincerely thank you for your suggestions. But it is a little bit confused for us to understand which difference of groups should we interpret? Do the comments mean that we need to discuss the differences between pre and post COVID-19? Or the differences in the group who was exposed to domestic violence and the group who was not exposed to domestic violence? We are looking forward to your further comments and revising the manuscript!

**Q7.** Second, the Discussion and Conclusion are based on results that do not align with the presented conceptualization of the manuscript. The Discussion is a summation of a review of literature built around results that are not conceptually supported. Consequently, the conclusion and applicability in China is theoretical and not substantiated from the conceptualization to the execution of the study reported in this manuscript.

**Response:**

We thank you very much for valuable comments and suggestions.

We have revised the conceptualization in the introduction which has been demonstrated in the Question 1, we hope that the result now basically aligns with the present conceptualization.

Since we have crossed out the SWAT, COR theory and PTG model, and instead used the Kumpfer's resilience framework, accordingly we deleted the context about those theories as follow:

“First, childhood exposure to domestic violence was directly associated with PTG and PTSD, which further supports the SWAT and PTG model, According to the two theories, traumatic events, such as exposure to domestic violence, may challenge and shake an individuals' basic beliefs about cognition, themselves, others, and the world, leading to cognitive imbalance. These may increase PTSD



symptoms and reduce PTG possibility.”

And centered on the Kumpfer’s resilience framework as follow:

“First, childhood exposure to domestic violence was directly associated with PTG and PTSD, which further supports the Kumpfer’s resilience framework. According to the theory, when individuals are under stress, those who with more protective factors can easier get through the crisis, but those who with more risk factors may become maladaptive.” (Line 287-291, page 10)

In addition, we modified an error:

“we identified a 2-step indirect path from domestic violence to PTG and PTSD via from self-compassion to resilience, which was consistent with Hypothesis 3”, not “Hypothesis 2”. (Line 298-300, page 11)

And we revised the explanation to make it more concise as well as precise as follow:

“When facing challenges, Individuals with more exposure to domestic violence in their childhood are less likely to be self-compassionate and lead to a lower resilience. By contrast, adolescents who are more self-compassionate tend to be resilient and “bounce back” from challenges. This process may reduce PTSD symptoms and promote PTG.” (Line 300-304, page 11)

Last, we found that the non-significant path is more likely to support another definition as follow:

“resilience is a dynamic development process, which accords with the latest academically accepted definition that it refers to an individual’s efforts to adjust and actively adapt under stress on the one hand instead of a steady trait and it emphasizes an individual’s adaptive outcome on the other hand. Thereby, the profile of resilience cannot represent the dynamic process.” So we revised the interpretation as follow: “the profile of resilience cannot appropriately represent the dynamic process.” (Line 311-316, page 11)

As a result of revising the conceptualization and interpretation, we deleted the previous text as follows:

“Such cognitive imbalance may trigger an individuals’ repetitive thinking about the experienced traumatic events, leading to their alert response and negative emotions, such as feeling unsafe and helpless. In addition, during the pandemic, every household was isolated and family members had to stay together for a long time, increasing psychosocial stressors at the intrapersonal and interpersonal level, especially in households with preexisting risks of aggressive behavior among family members. Consequently, family conflicts, including domestic violence, could have increased significantly (Bradbury - Jones & Isham, 2020).”

“Self-compassion is an effective resource for individuals to cope with stress caused by adversity such as exposure to domestic violence. Self-compassion also provides emotional safety for individuals to see themselves and the reality clearly (Allen & Leary, 2010), facilitating the cognitive processing of negative experiences (Yeung & Wong, 2017) into a more positive cognitive framing (Phillips & Ferguson, 2012). During this process, individuals.”

“When witnessing parental conflict or violence, children often tend to condemn themselves, believing that they may be the reason behind their parent’s altercation. When such negative thoughts get internalized, they start doubting their self-worth or if they are even worthy of love. They are then filled with rejected positive thoughts and emotions and punish themselves. This is the manifestation of low levels of self-compassion. Thus, when encountering stressful events, such as the COVID-19, individuals with a low level of self-compassion are more likely to exhibit PTSD symptoms and less PTG. ”

“Usually, people with lower levels of self-compassion tend to self-criticize and over-identify negative emotion suffering and fall into the pain of adversity.”

We hope that Discussion could be more concise and structural. We will appreciate it if there were any comments.