

Has the association between mental disorders and suicide among youth declined over time?

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Introduction

Suicide is the fourth leading cause of death among youth globally. Mental disorders are associated with a ten-fold elevation in suicide risk in this group. During the last decade, mental disorder diagnoses has more than doubled among Swedish youth (**Figure 1**), yet suicide rates have remained stable (**Figure 2**).

This is epidemiologically unexpected – an increase in risk factors should produce an increase in the outcome. We see at least four potential explanations for the asynchrony of trends between suicide and mental disorders:

1. Temporal changes in other determinants of suicide
2. The severity threshold for diagnosis has been lowered
3. Changes in the distribution of mental disorder types being diagnosed
4. Improved access to psychiatric care

Potential explanations 2–4 will all lead to weaker associations between mental disorders and suicide over time, but via different mechanisms. Discovering changing associations between mental disorders and suicide has implications both for our understanding of mental disorders and for developing suicide prediction models.

Aim

We aim to determine if association of mental disorders with suicide has declined over time. If so, we aim to determine which of the potential explanations is most likely to explain the weaker associations.

Our plan

We plan to conduct a population-wide cohort study using Swedish register data to determine if the association between mental disorders in general and suicide/suicide attempts has declined over the last decade. Specific diagnostic groups and co-relative controls will be used in additional analyses.

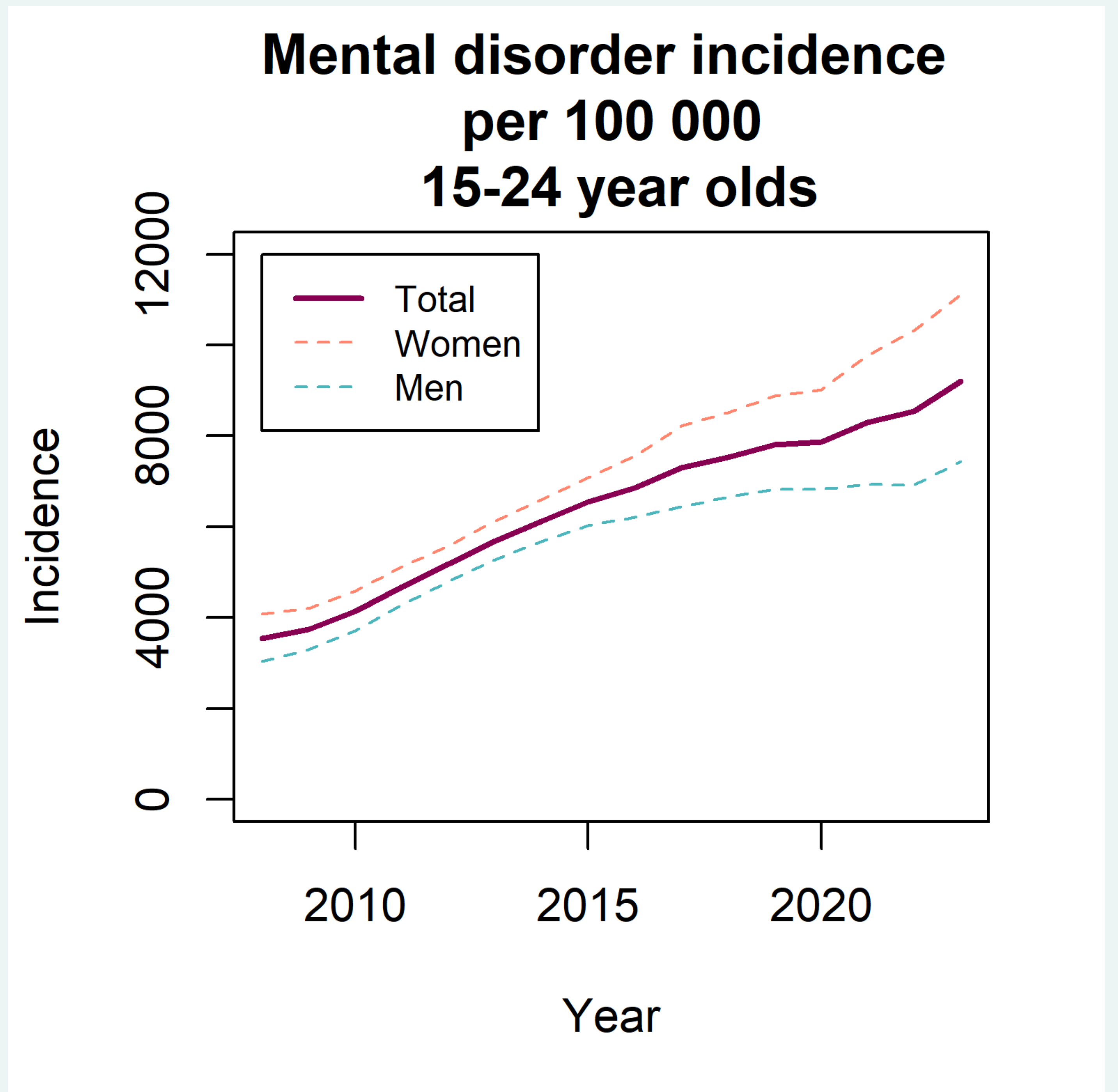


Figure 1. Mental disorder incidence in Sweden 2008–2023 among 15–24-year-olds

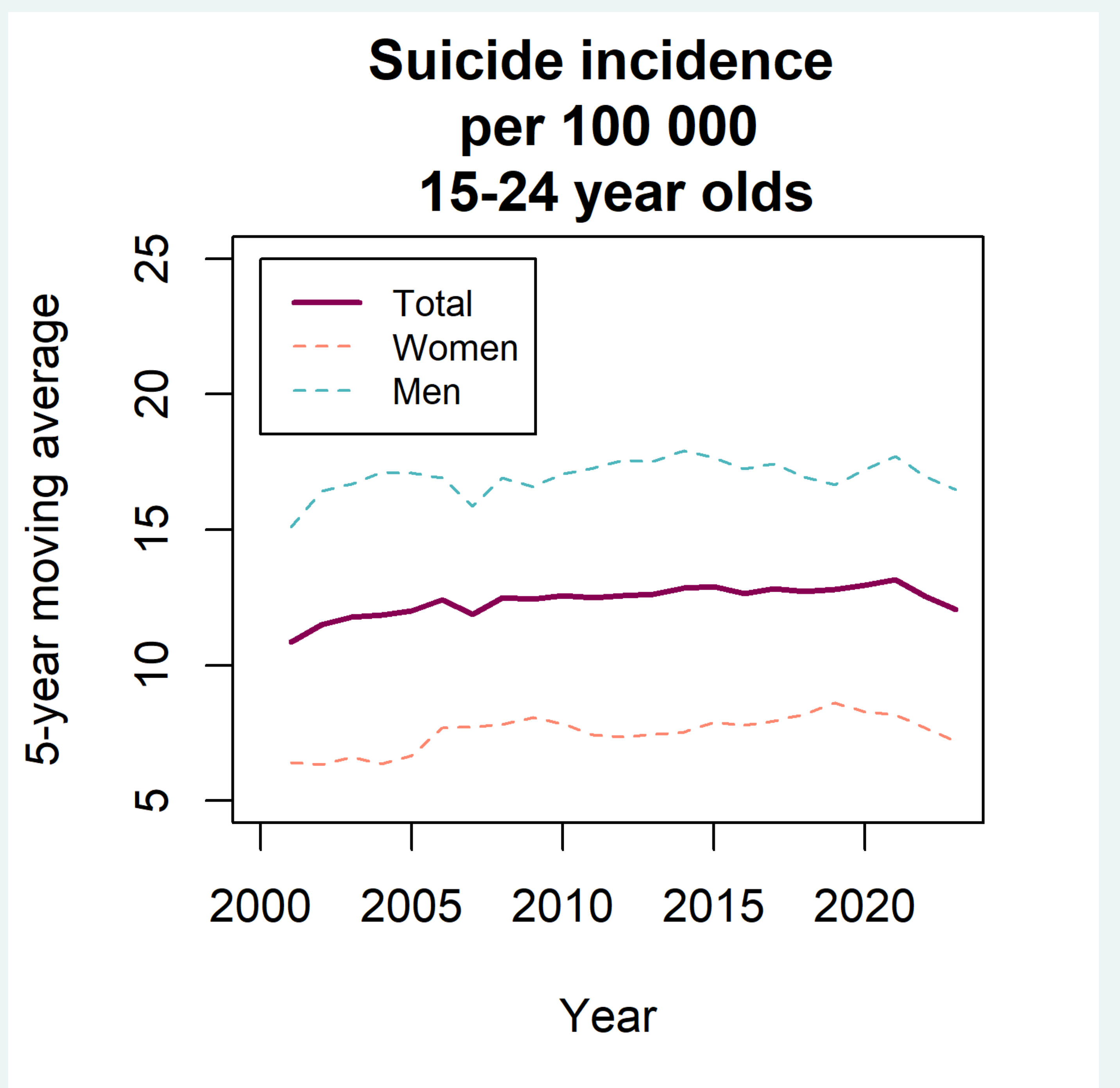


Figure 2. Suicide incidence in Sweden 1997–2023 among 15–24-year-olds



The Saving Lives project collects genetic data on individuals dying by suicide with the aim to improve suicide prediction and prevention



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