If colspan is added the gridpane seems to be sized as if colspan was ignored.
Colspan attribute removed
Calculating the initial table width, it seems, the longest element of each column is determined.

Then the width of the table pre-colspan is determined, by adding these (here 1,8cm + 4,2cm = 6cm).

Finally, where the spanning cell is larger, the grid size is enlarged.

Cell A „Public.books...“ needs extra space of 5,2cm – 1,8cm – 0,2 cm = 3,2 cm

Cell B „Relationship...“ needs extra space of 7,6cm – 1,8cm – 0,2 cm – 4,2 cm = 1,4 cm

However, in reality, because cell A already enlarged the table by 3,4cm, in this case the extra space for cell B is redundant.

This effect of multiple spanning cells is not subtracted.