

Too many questions, not enough room in the design!

How to combine conjoint data with follow-up questions that will provide valuable insights

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Background

Vineland's Canadian Hardy Rose breeding program needed to identify the rose features that were sought-after by consumers in order to guide breeding of new garden roses.

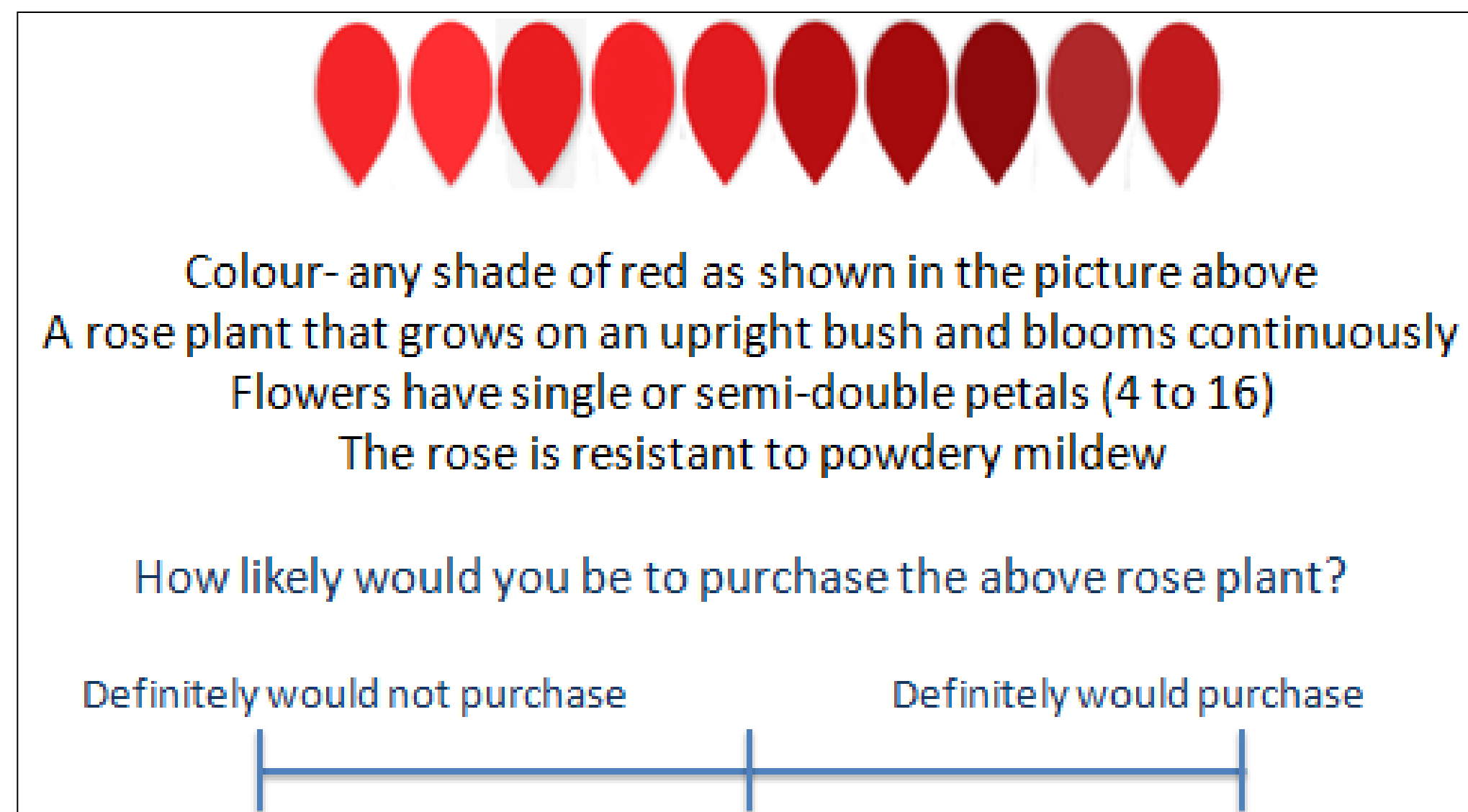
Conjoint analysis is been typically used in the literature to elucidate consumer flower preferences. Due to experimental design constraints, only a handful of feature options can be included. This poses a serious constraint for flower researchers faced with decisions about flower colour. Roses are available in hundreds of shades and hues as well as two-tone combinations of colours however breeders are in need of specific shade preference information in order to make consumer-appropriate rose selections.

Method

Tried 2 approaches
(n=2,053 consumers)

Conjoint with a colour
range specified

Follow-up question:
Select from colour chart



Colour- any shade of red as shown in the picture above
A rose plant that grows on an upright bush and blooms continuously
Flowers have single or semi-double petals (4 to 16)
The rose is resistant to powdery mildew

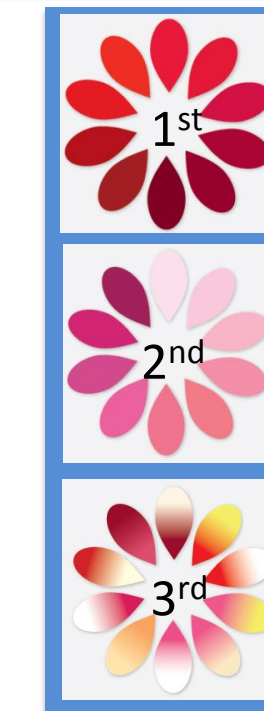
How likely would you be to purchase the above rose plant?

Definitely would not purchase Definitely would purchase



Results

CONJOINT
Top 3 colour
categories



COLOUR
PREFERENCE
QUESTION
Top 3 colours

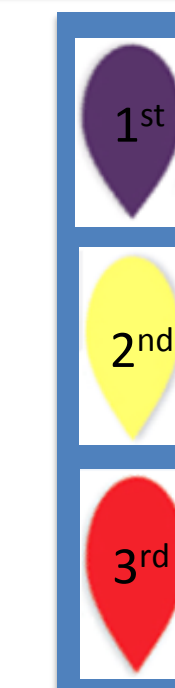


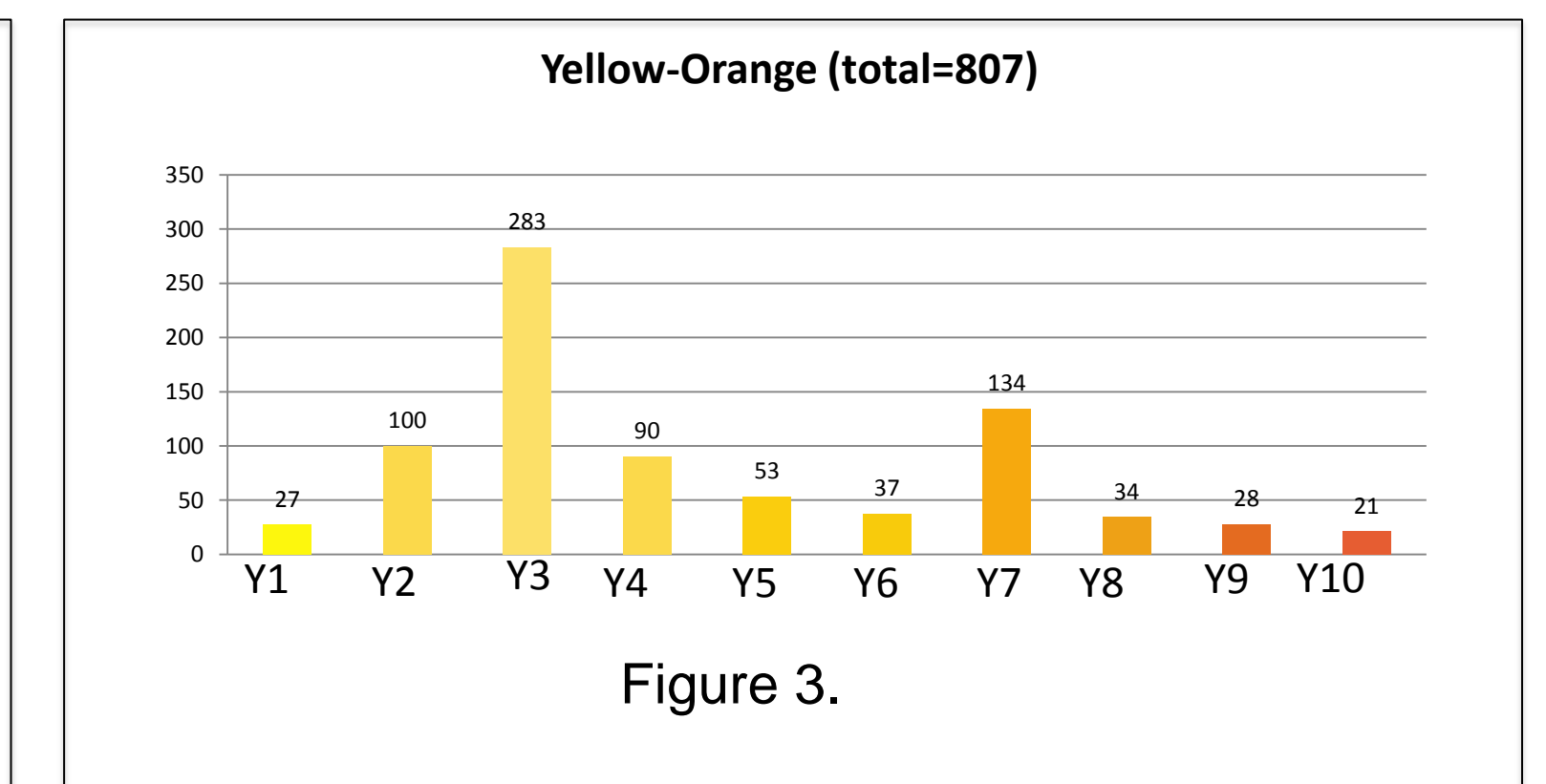
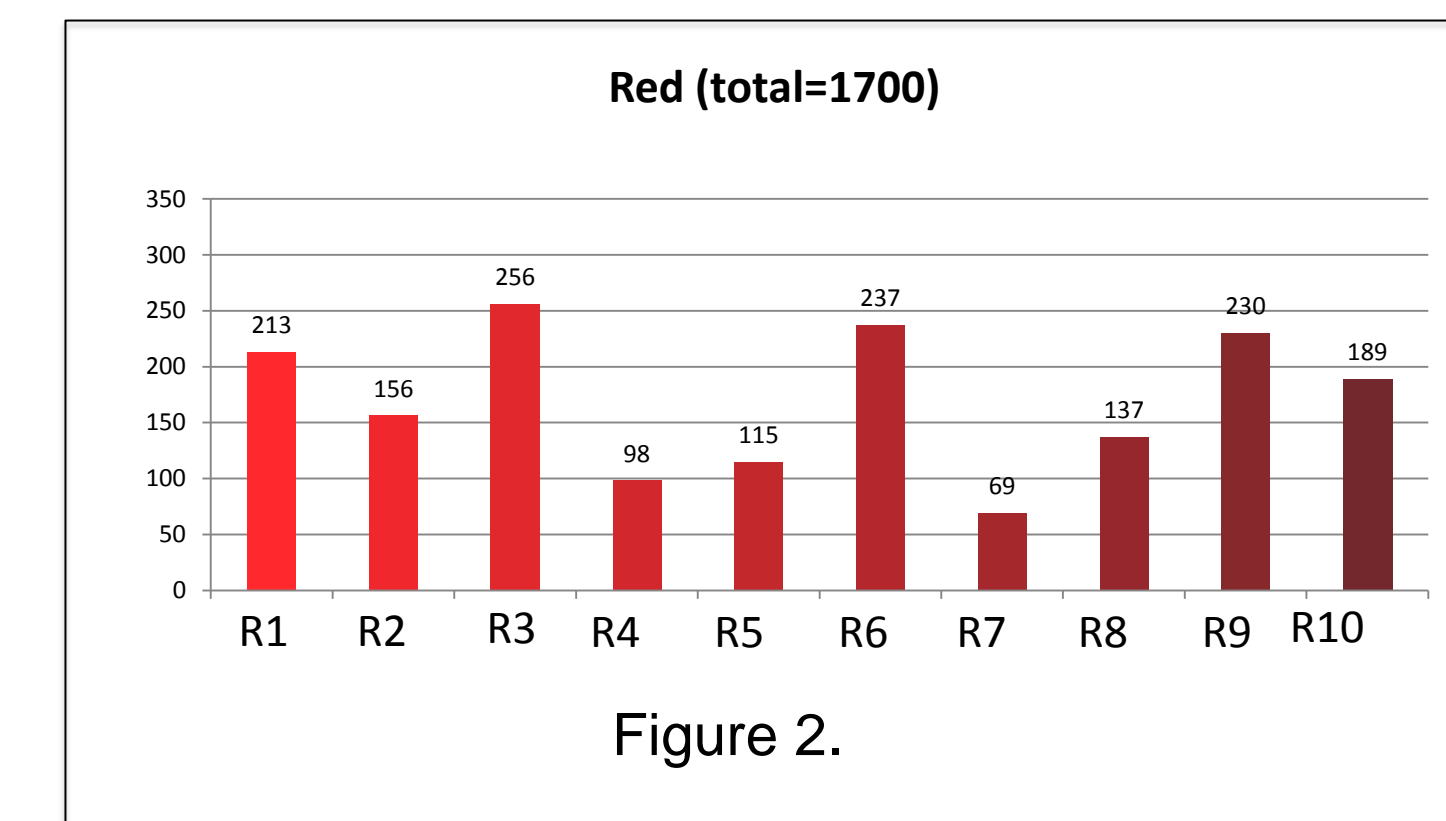
Figure 1.

- The top 3 colour shades from the follow-up question did not correspond to top 3 colour categories from conjoint (Figure 1). Color preferences were not well explained by conjoint alone.

- Pairing follow-up questions with conjoint revealed that consumers have varying ranges of tolerance to shades across colour categories:

- Some colour categories, such as red (Figure 2), are low risk: good consumer acceptance for most shades, deviating from optimal shades is not a major problem.

- Other categories, such as yellow (Figure 3), are high risk: outstanding consumer preference for a specific shade, but low tolerance to deviations from this shade.



Conclusions

By specifying the options to consider in the conjoint analysis then exploring those options deeper in a follow-up question, it was possible to provide a more comprehensive understanding of consumer preferences for a feature that was not well captured by conjoint analysis.

A previously unnoticed characteristic of consumer preference was also highlighted: Consumers exhibit not only preference intensity but also a tolerance range to variations on their preferred colour. The tolerance range is not constant across colour categories. Therefore, care must be taken in interpreting consumer preferences for multi-component attributes, such as colour, in conjoint.

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