The that-trace effect in Trinidadian English Creole

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About Trinidadian English Creole (TEC)

- Atlantic Creole
- Primarily used in Trinidad and Tobago and in diaspora communities in the UK, Canada and the US
- Major lexifier: English
- Other contributing languages: West Bantu languages, Caribbean French Creoles, Spanish, Bhojpuri (Mülheisen 2013)

About this study

Exploratory descriptive study of the *that*-trace effect in TEC using acceptability judgements presented orally

Questions

- 1. Does the *that*-trace effect occur in TEC?
- 2. Are *that*-trace judgements different if the anterior completive marker *had* is present in the embedded clause?

The that-trace effect

- Ungrammaticality of sentences in which:
 - a subject is extracted from an embedded clause
 - presence of complementiser that

The that-trace effect in Standard English

1. Keisha called Michael

- 2. Who do you think Keisha called?
- 3. Who do you think *that* Keisha called?

The that-trace effect in Standard English

1. Keisha called Michael

- 2. Who do you think Keisha called?
- 3. Who do you think *that* Keisha called?

- 4. Who do you think called Michael?
- 5. *Who do you think *that* called Michael?

The that-trace effect in TEC

1. Keisha call Michael

- 2. Who you think Keisha call?
- 3. Who you think *that* Keisha call?

- 4. Who you think call Michael?
- 5. ?Who you think *that* call Michael?

The that-trace effect in TEC

1. Keisha call Michael

- 2. Who you think Keisha call?
- 3. Who you think *that* Keisha call?

- 4. Who you think call Michael?
- 5. ?Who you think *that* call Michael?

6. Keisha had call Michael

- 7. Who you think Keisha had call?
- 8. Who you think *that* Keisha <u>had</u> call?

- 9. Who you think had call Michael?
- 10. ??Who you think that had call Michael?

That that-trace effect cross-linguistically

- Reported in various unrelated languages e.g. French, Russian, Wolof, Nupe, Levantine Arabic, Jamaican Creole (mesolect and to some extent in basilect) (Perlmutter 1971, Pesetsky 1982, Martinović 2014, Kandybowicz 2006, Kenstowicz 1983)
- Subject to
 - dialectal and idiolectal variation in American English (Robin 1987; Cowart 1997, 2003)
 - dialectal variation in Norwegian (Lohndal 2015)
- **Not reported** in Berbice Dutch, Cape Verdean Creole, Kriyol, Mauritian Creole, Papiamentu and Saramaccan (Nicolis 2005)

Use of written language in larger-scale studies of acceptability

- Studies conducted online have the potential to reach many language users, making generalisations about language more robust
- Large-scale experimental studies of acceptability are typically collected using written stimuli
- Many Creoles e.g. TEC
 - do not have a standardised written form that is used widely
 - exist alongside a more prestigious standardised variant with a written form that is used widely

Use of written language in larger-scale studies of acceptability

- The use of written language stimuli to collect acceptability judgements in a minoritised oral language can impact ratings e.g. the use of written English to collect TEC judgements can invoke English norms
- The use of audio stimuli has the potential to mitigate such effects (Sedarous & Namboodiripad 2019)

Method

• Acceptability judgements administered through Qualtrics online in 2020

Participants

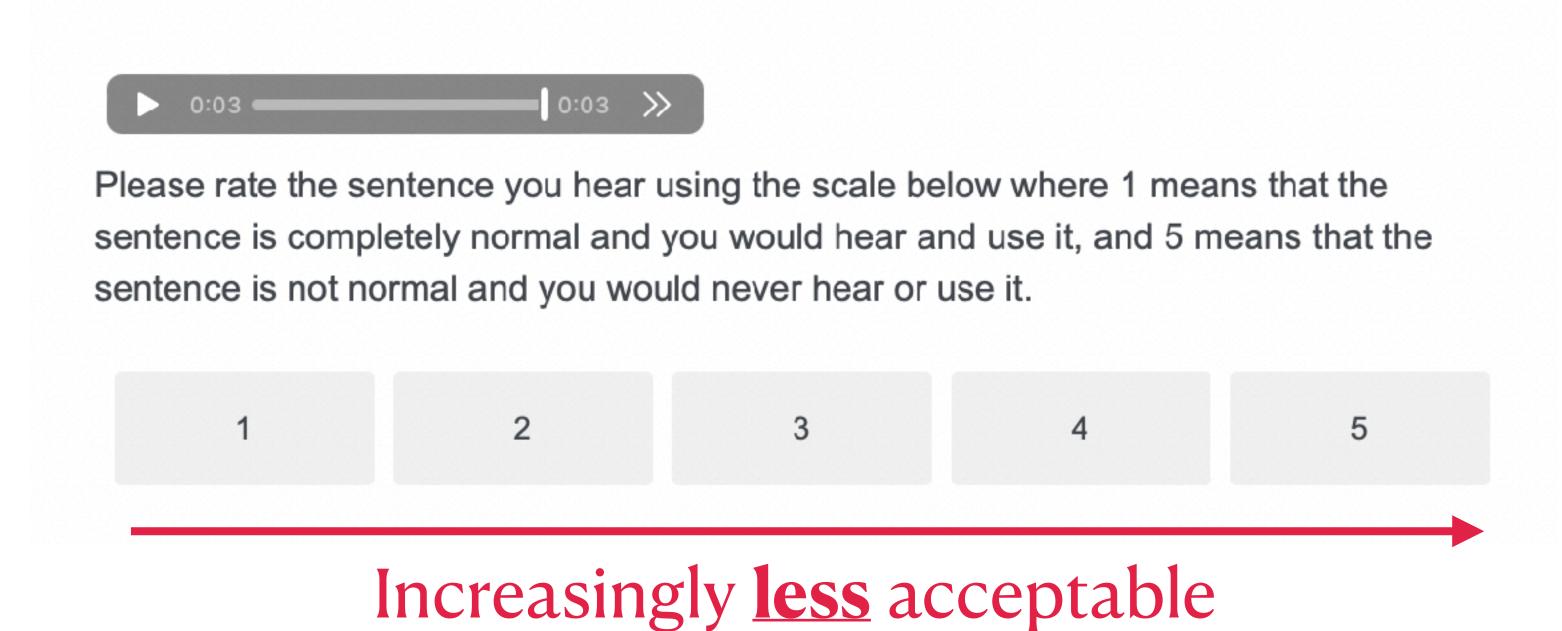
- 34 speakers of TEC recruited through my social network
 - 30 with tertiary-level education
 - Likely to be influenced by written and spoken Standard English norms
- Average age: 31.6 years
- Average length of time lived in Trinidad & Tobago: 28.3 years

Design

- 24 sentences presented through audio recordings
 - 10 target
 - 14 fillers
 - random order

Design

- Participants listen to sentence and rate using a five-point Likert scale
- Ratings were z-scored



Sentence types

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S = sentence
OE = object extraction, SE = subject extraction
+that = that present, -that = that absent
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- S1 = no extraction e.g. I think Sean call Kelly yesterday
- $S_2 = OE$, +that e.g. Who you think that Sean call yesterday?
- $S_3 = OE$, -that e.g. Who you think Sean call yesterday?
- $S_4 = SE$, -that e.g. Who you think call Kelly yesterday?
- $S_5 = SE$, +that e.g. Who you think that call Kelly yesterday?

target

Conditions

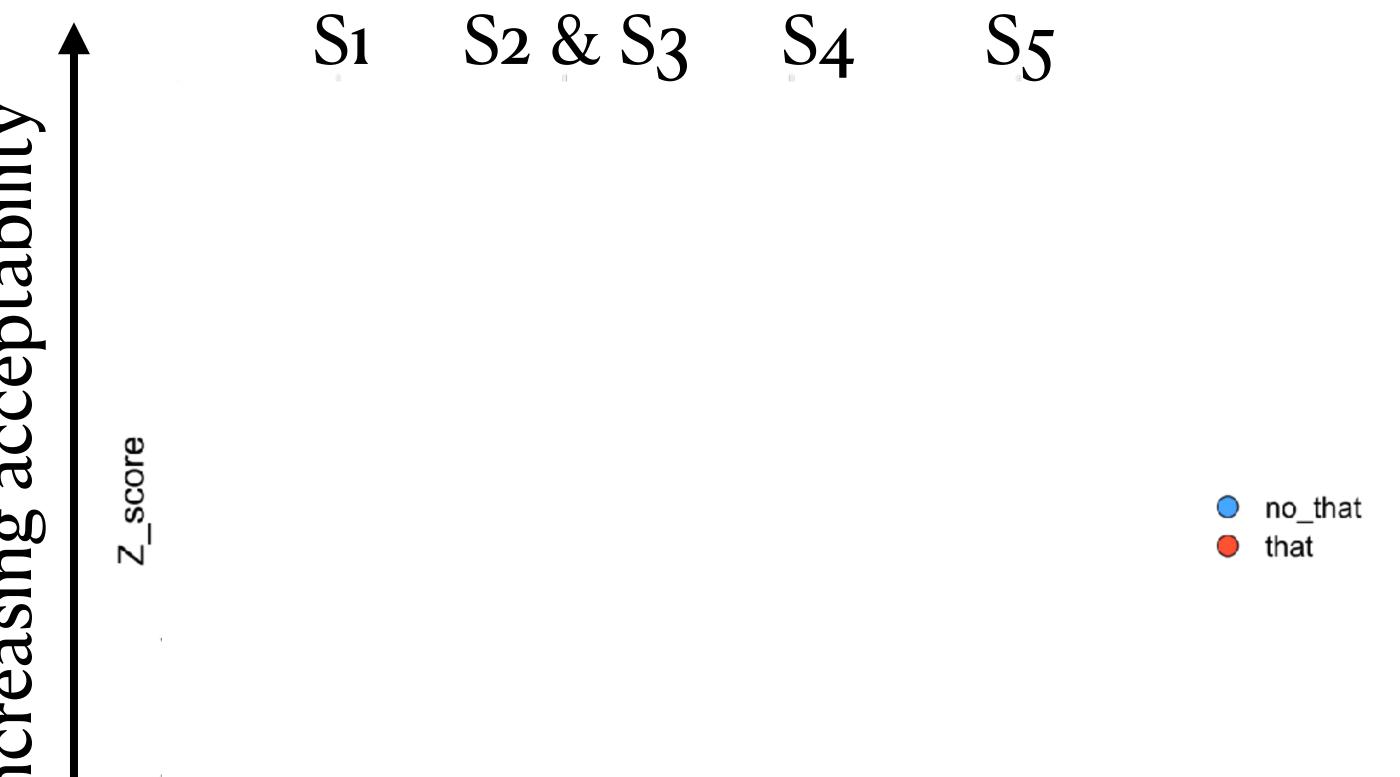
• -had

- S1 = no extraction e.g. I think Sean call Kelly yesterday
- $S_2 = OE$, +that e.g. Who you think that Sean call yesterday?
- $S_3 = OE$, -that e.g. Who you think Sean call yesterday?
- $S_4 = SE$, -that e.g. Who you think call Kelly yesterday?
- $S_5 = SE$, +that e.g. Who you think that call Kelly yesterday?

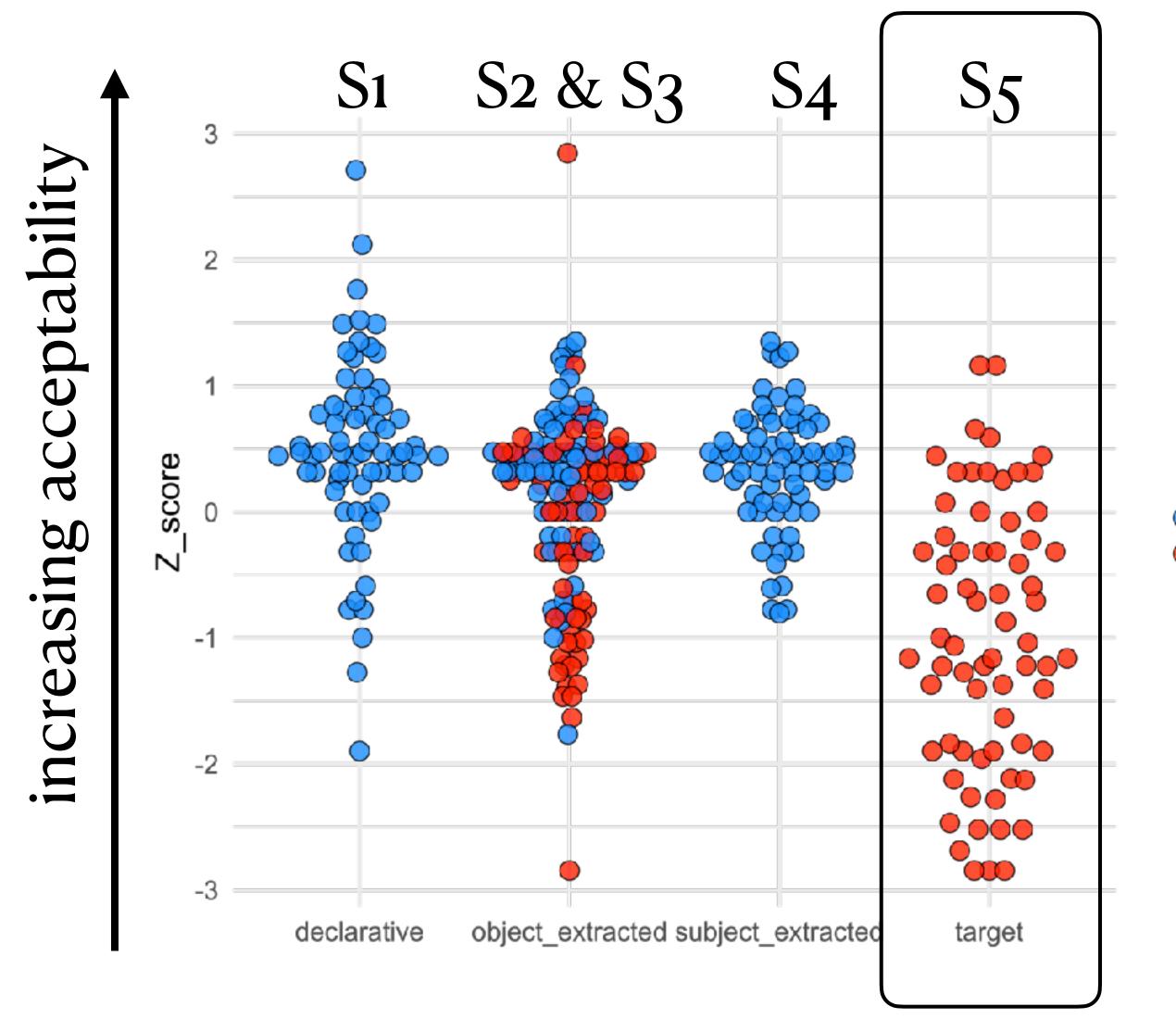
• +had

- S1 = no extraction e.g. I think Sean had call Kelly yesterday
- $S_2 = OE$, +that e.g. Who you think that Sean had call yesterday?
- $S_3 = OE$, -that e.g. Who you think Sean had call yesterday?
- $S_4 = SE$, -that e.g. Who you think **had** call Kelly yesterday?
- $S_5 = SE$, +that e.g. Who you think that **had** call Kelly yesterday?

Overall acceptability of sentence types



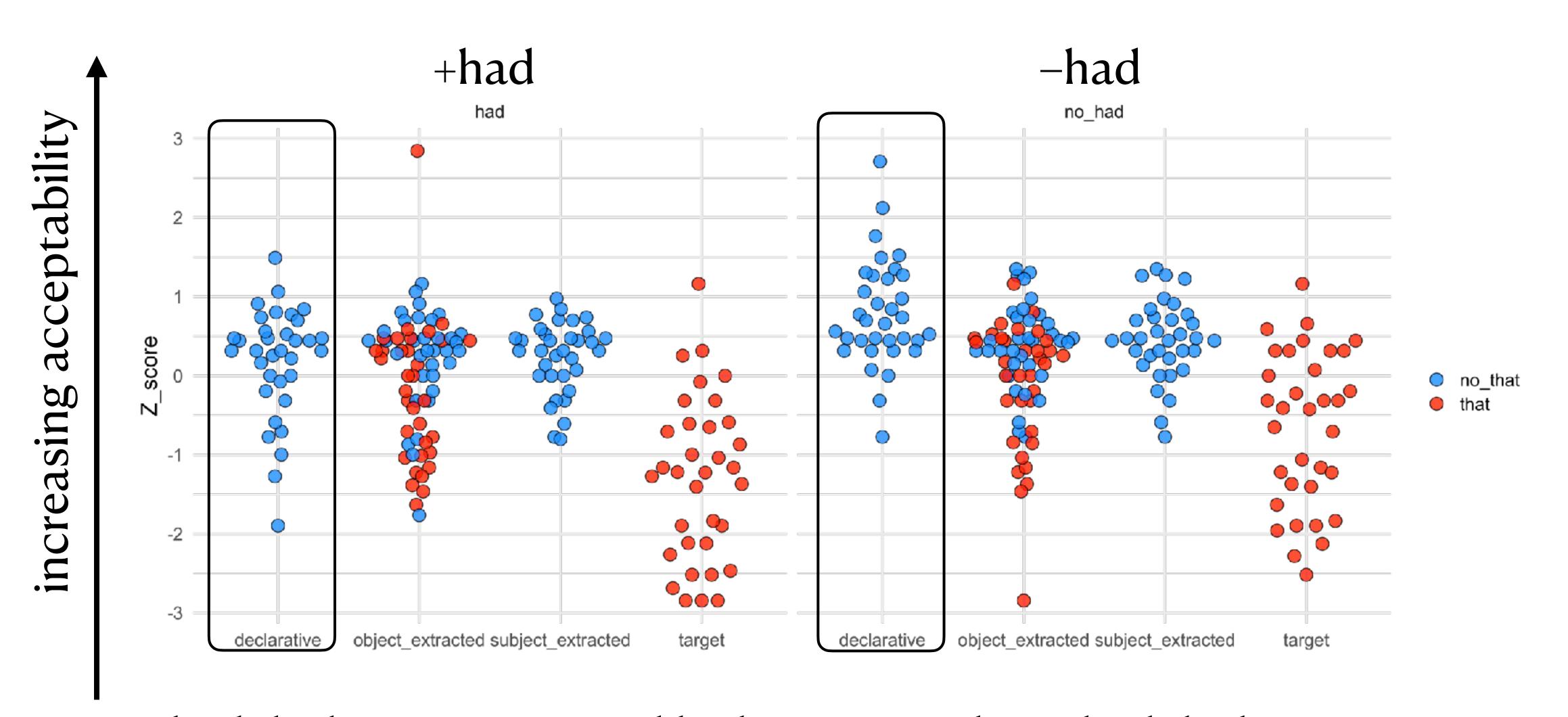
Overall acceptability of sentence types



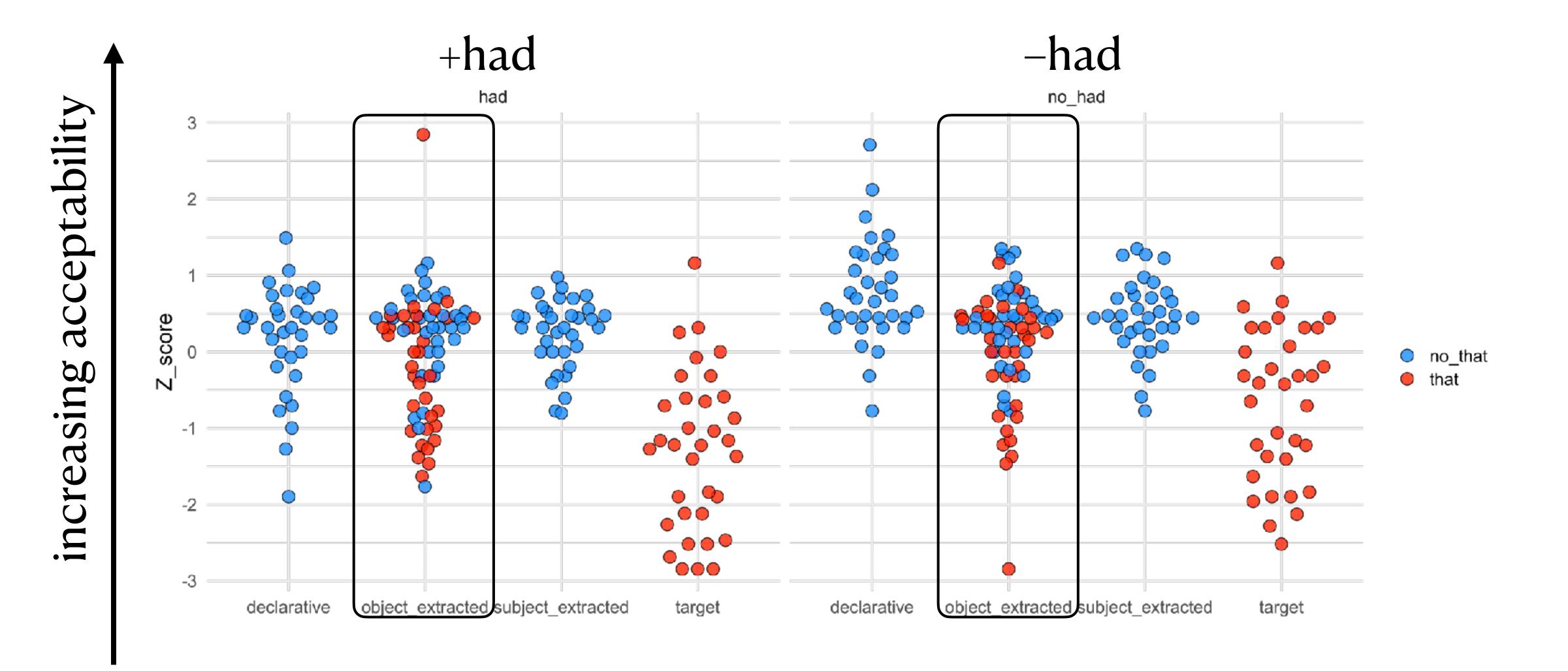
no_that

Subject-extracted sentences with *that* received lower acceptability ratings than all other sentence types

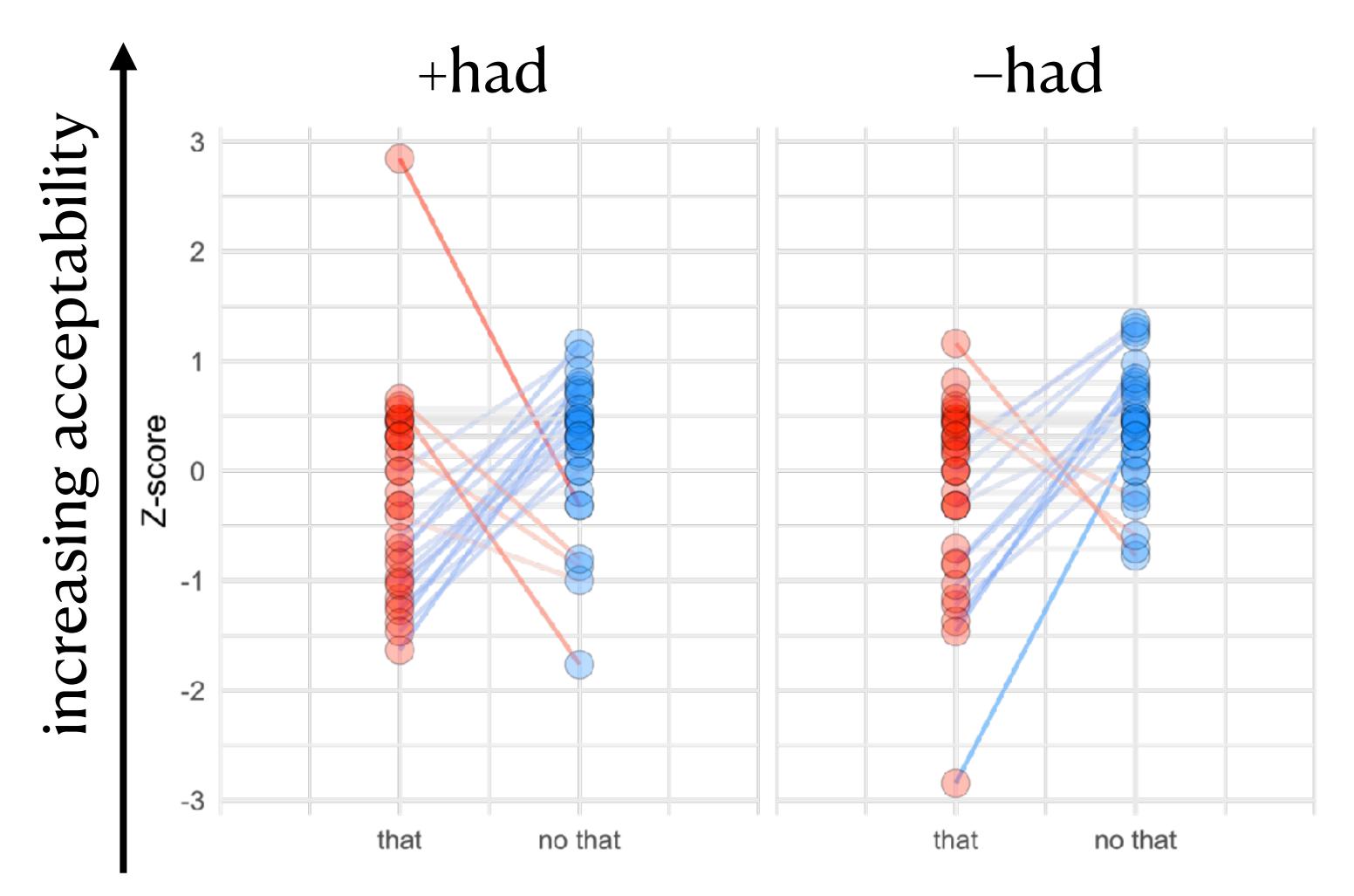
Acceptability of sentence types in +had vs -had



-had declaratives received higher ratings than +had declaratives

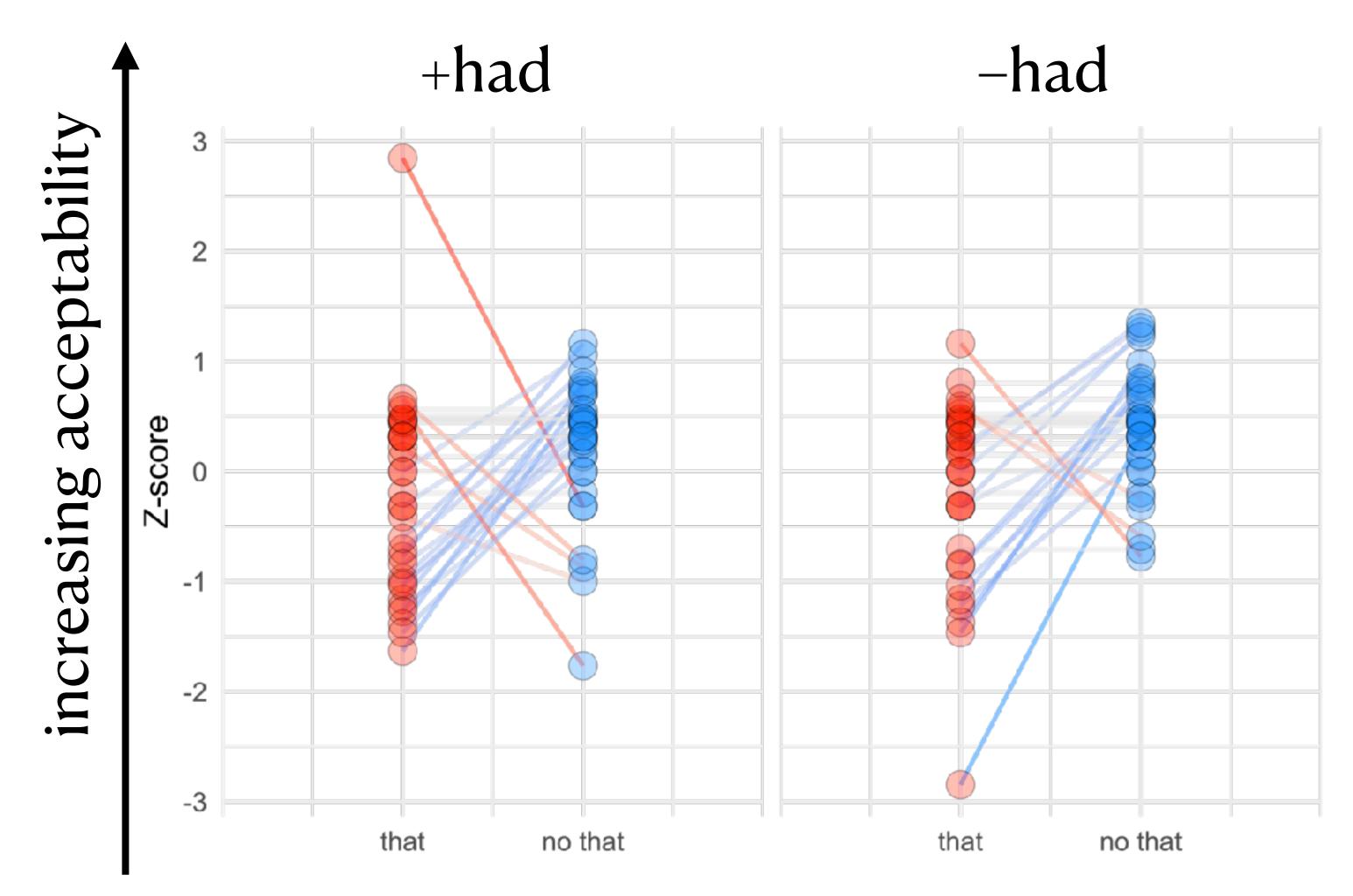


Object extraction condition



- blue circle = -that rating
- red circle = +that rating

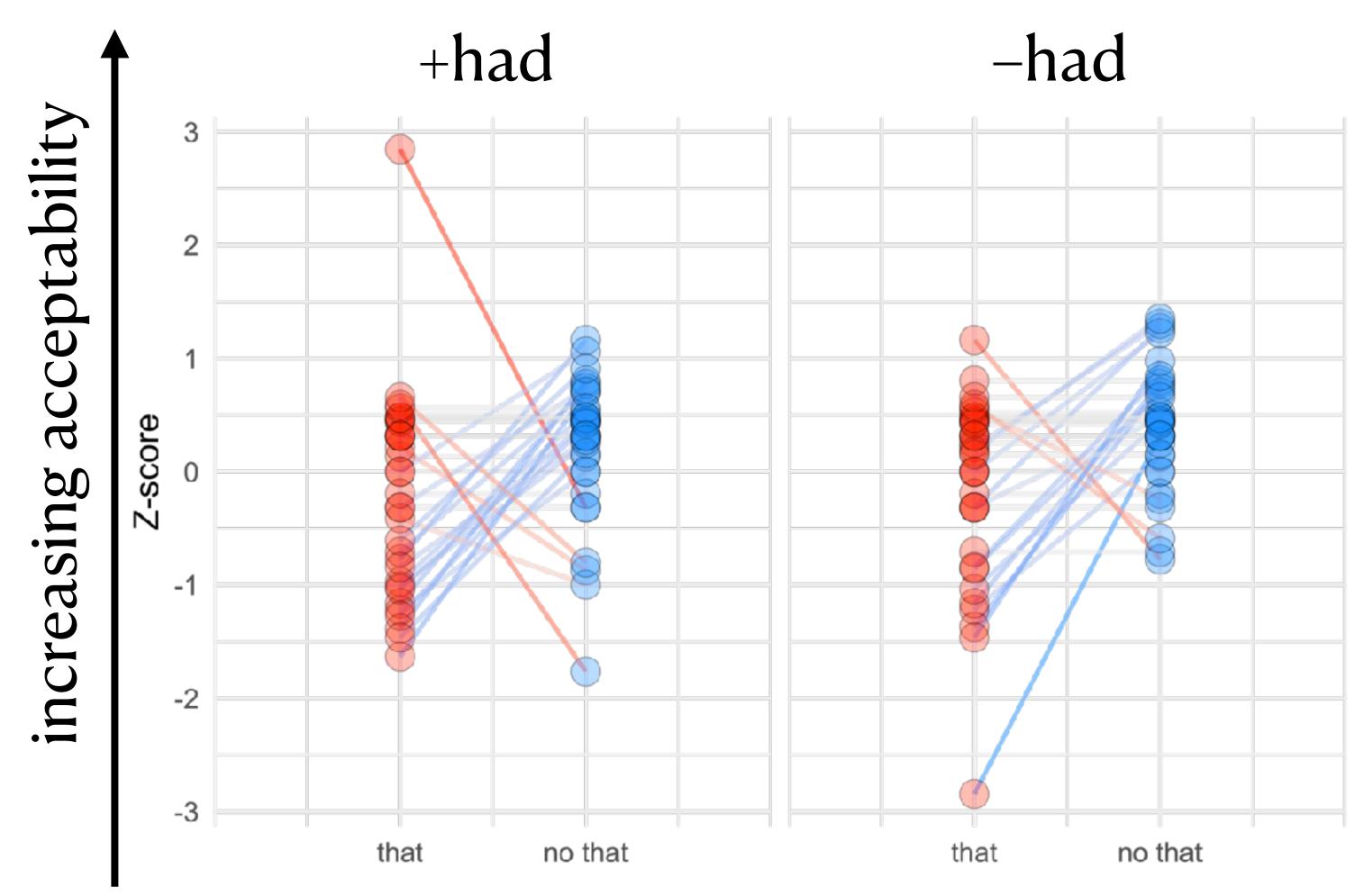
Object extraction condition



- blue circle = -that rating
- red circle = +that rating

/ blue line = -that sentence rated higher \ red line = +that sentence rated higher

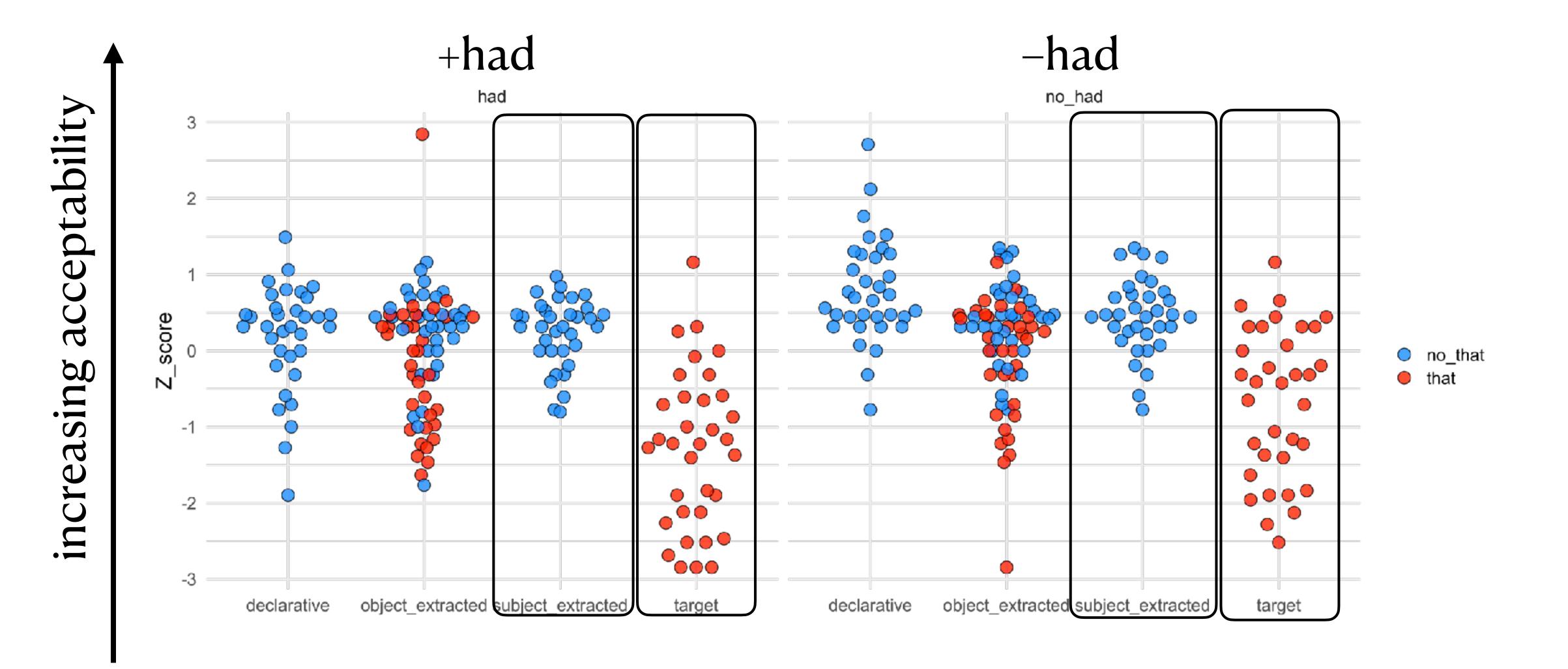
Object extraction condition



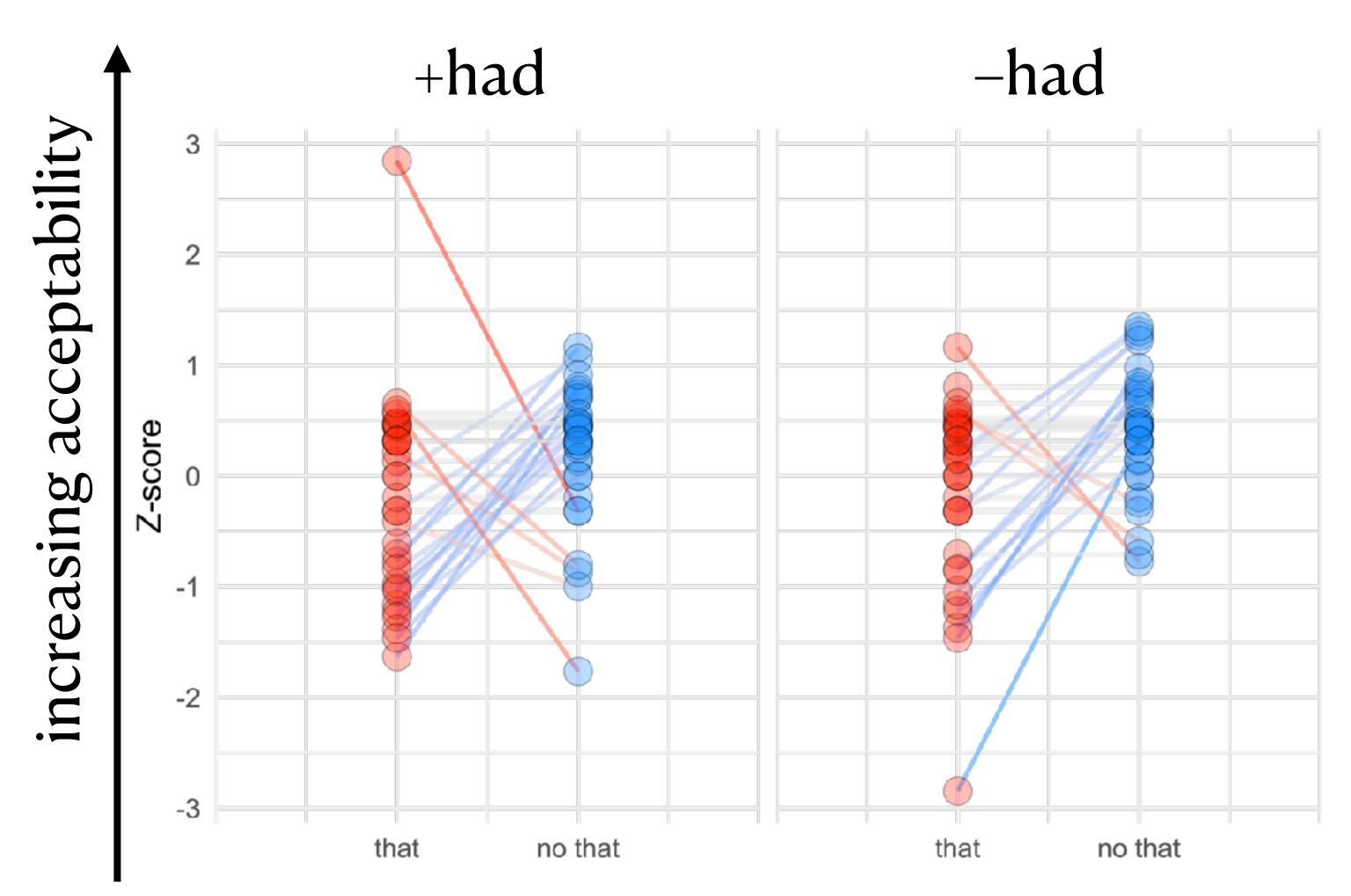
- blue circle = -that rating
- red circle = +that rating

/ blue line = -that sentence rated higher \ red line = +that sentence rated higher

No significant difference in ratings when *had* is present vs absent $(X^2(1) = 0.060714, p = 0.8054)$



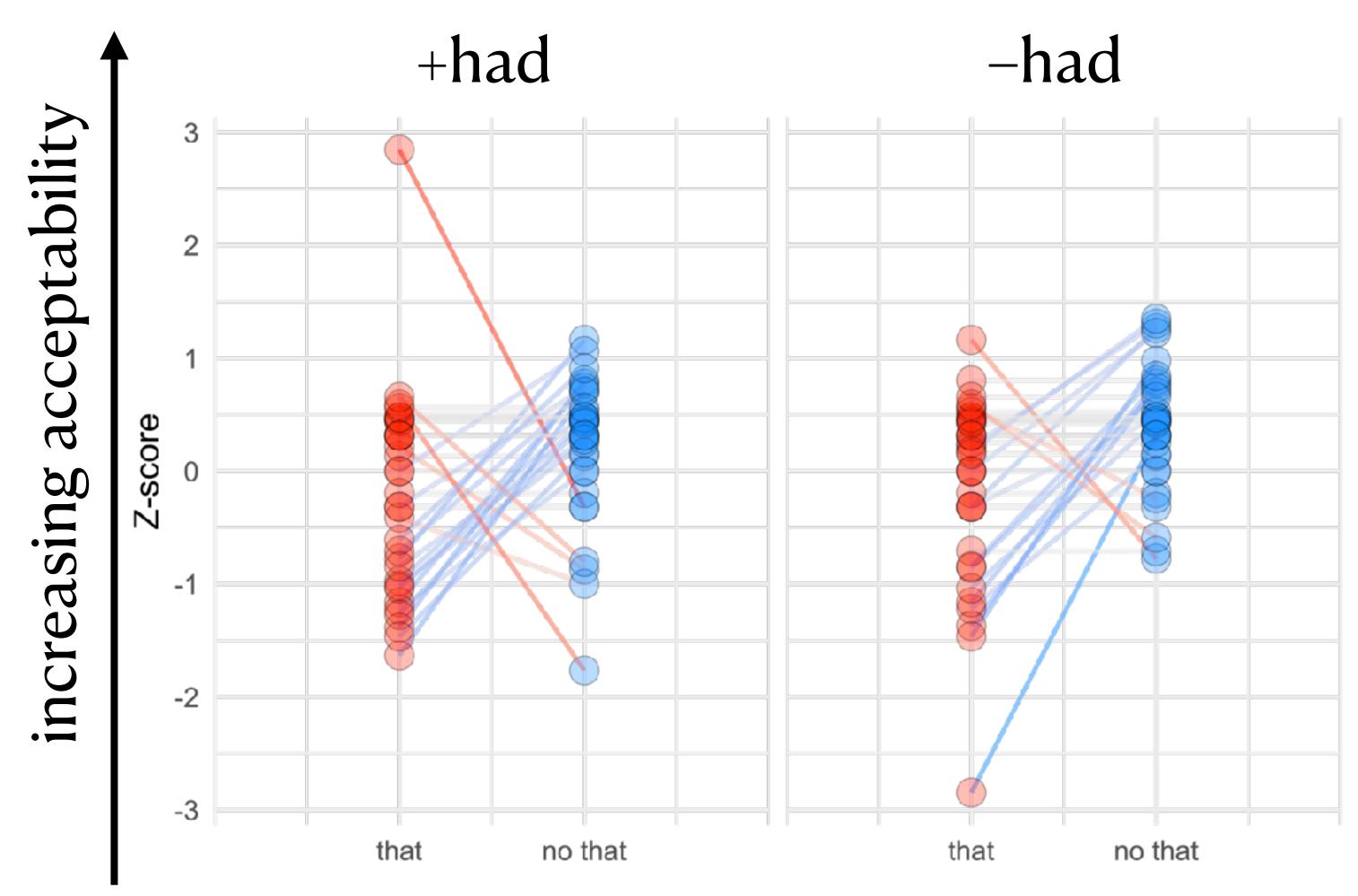
Subject extraction condition



- blue circle = -that rating
- red circle = +that rating

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Subject extraction condition



- blue circle = -that rating
- red circle = +that rating

/ blue line = -that sentence rated higher \ red line = +that sentence rated higher

No significant difference in ratings when *had* is present vs absent $(X^2(1) = 1.7708, p = 0.1833)$

Subject vs object condition—the that-trace effect

- No difference in +had vs –had condition
 - Ratings are grouped by subject vs object extraction condition

Subject extraction

Object extraction

+that a. Who you think that (had) call Kelly yesterday? c. Who you think that Sean (had) call yesterday?

-that b. Who you think (had) call Kelly yesterday?

d. Who you think Sean (had) call yesterday?

Subject vs object condition—the that-trace effect

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Subject extraction

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d. Who you think Sean (had) call yesterday?

- $X^2(1) = 10.767, p < 0.01$
 - a +that construction is rated lower than a -that construction more times in the subject extraction condition than the object condition

Discussion

- The *that*-trace effect occurs in this group of TEC users (30-year-olds with tertiary education)
 - Aligns with studies of the mesolectal variety of Jamaican Creole
- No significant difference in *that*-trace effect if anterior completive marker, *had*, is present in embedded clause or not
- Presence of had lowers acceptability of declaratives
 - Maybe *had* more clearly marks a sentence as Creole, leading to lower ratings?

Discussion

- More judgements needed
- Prosody in stimuli should be controlled more and accounted for (Kandybowicz 2006)
- Instructions given in written English which could skew participants toward using English norms

Conclusions

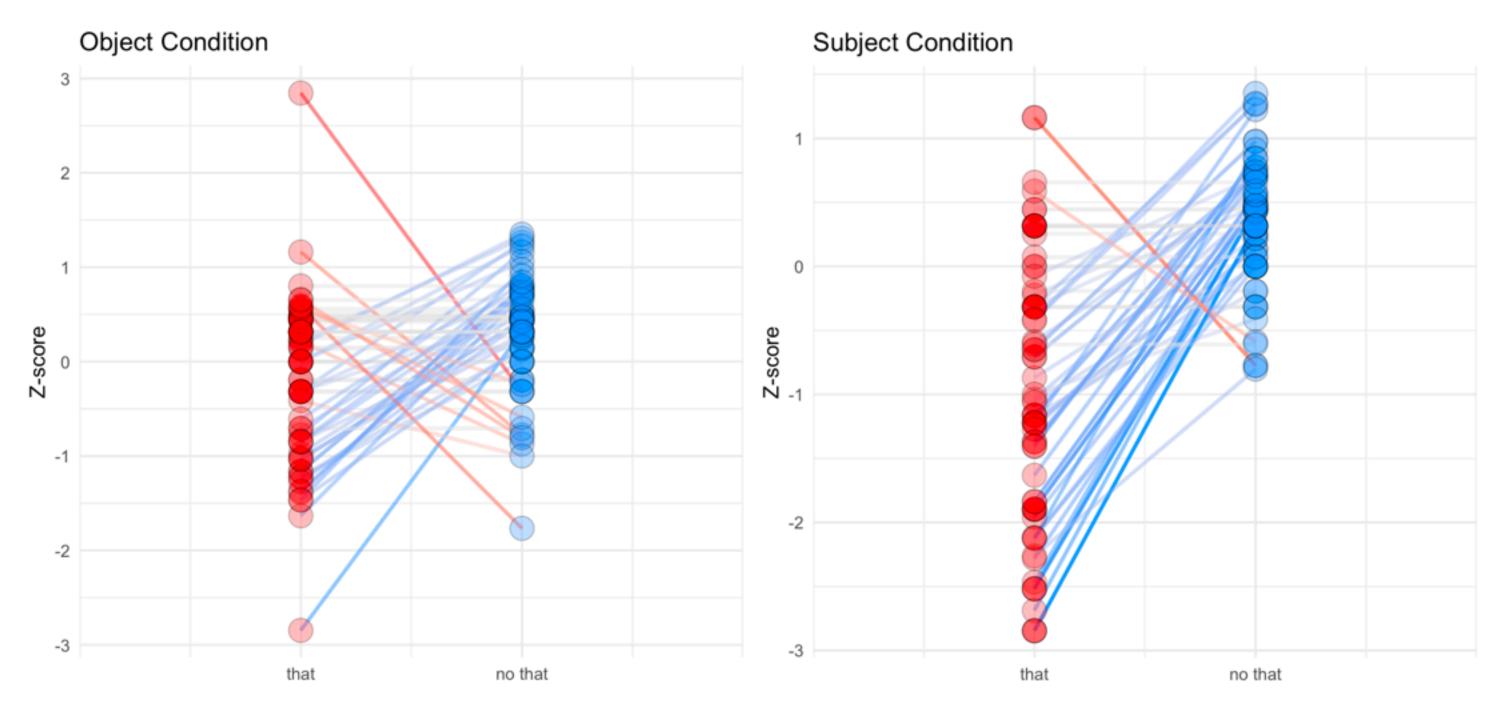
- that-trace effect occurs in TEC but may be subject to idiolectal variation
- online surveys using audio stimuli are useful when collecting acceptability judgements in Creoles
 - however, judgements may generally be lower when more Creole-type features are present in any modality

Thanks!

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/ blue line = -that sentence rated higher

\ red line = +that sentence rated higher