

**Paper 3**

# **Interactional Competence measured in group oral tests:**

How do test-taker characteristics, task types and group sizes affect co-constructed discourse in groups?

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*Symposium 3: Exploring interactional competence in paired and group speaking tests*

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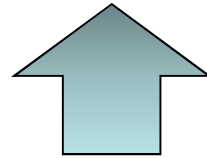
# Research Background

# Impact of test-taker characteristics

- Gender
- Acquaintanceship
- Cultural background
- L1
- Personality
- Proficiency level

(e.g. O'Sullivan, 2000; Berry, 2004; Norton, 2005; Ockey, 2006; Van Moere & Bonk, 2004)

- Results are often mixed in terms of the direction of the effects

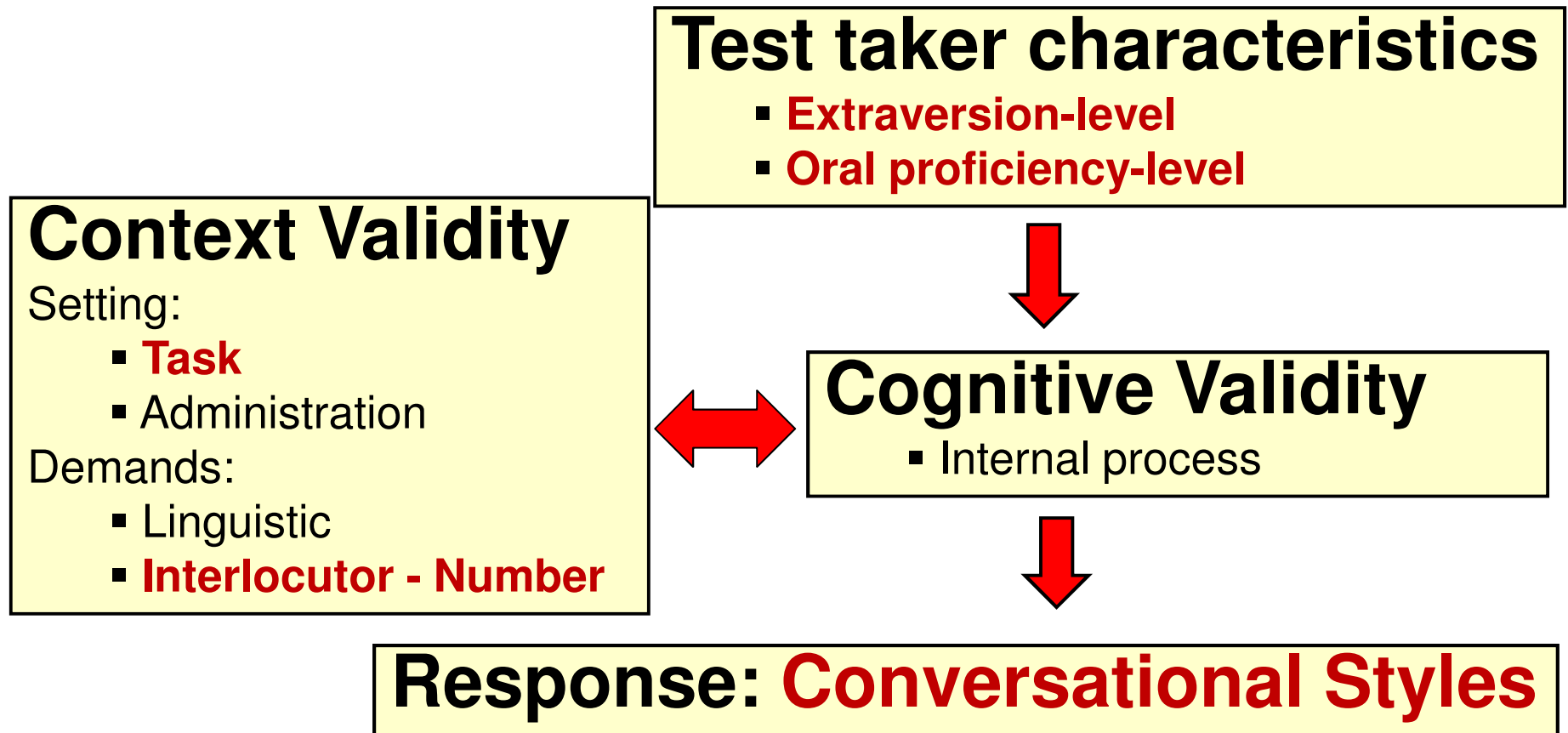


## [Paired/Group test studies in relation to test-taker characteristics]

- Only a few studies have investigated **task qualities** (Berry, 1997; Van Moere, 2007)
- **Task implementation conditions** have not yet been researched

# Socio-cognitive framework for validating speaking tests

Weir (2005)



# Research Questions

## RQ1: Impact of two test-taker characteristics in general

- Are conversational styles in groups affected by a test-taker's own and his/her group members' **extraversion- and proficiency-levels**?

## RQ2: Impact of two test-taker characteristics & task types

- Do test-takers' extraversion- and oral proficiency-levels have different influences on conversational styles **among different task types**?

## RQ3: Impact of two test-taker characteristics & group sizes

- Do test-takers' extraversion- and oral proficiency-levels have different influences on conversational styles in **groups-of-three** participants as against **groups-of-four**?
- ❖ If there is any influence/difference, **how & why** does it occur?

# Method of Data Collection & Data Analysis

# Data Collection

- **Subjects:** 269 Japanese high school students
- **Grouping:**
  - Grouping students into **groups of 3 or 4** as they wish (controlling for **acquaintanceship** and **gender**)
- **Test-taker characteristics:**
  - **Extraversion-level:** a Japanese version of Eysenck Personality Questionnaire (EPQ) (Iwawaki *et al.*, 1980)
  - **Oral proficiency-level:** classroom teacher's assessment
- **Tasks:**
  1. **Information-gap task** more closed/more structured
  2. **Ranking task** ↑↓
  3. **Free discussion task** more open/less structured

Your class has **20,000 yen** to spend **by next March**. It was agreed to use this money to buy a **camera**. Your classmates asked your group to **decide what camera to buy**. You have information about *Camera C* and *D*, and your group members have information about *Camera A*, *B*, *E* and *F*.

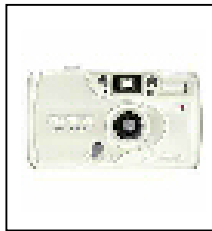
**(1) Exchange all the information you have and (2) decide which camera your class is going to buy.** (Note: you can use all 20,000 yen, but you may want to save some money for other things.)

When you have finished discussing, please tell me **which camera you would buy and why you want to buy it.**

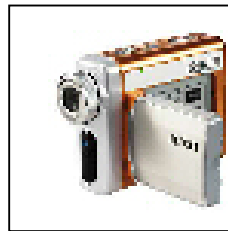
Camera A  
Camera F



Camera B



Camera C



Camera D






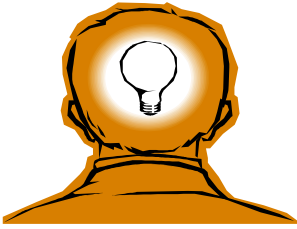




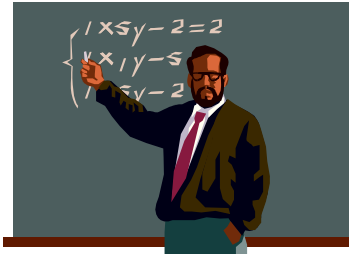

Camera E



	Price (yen)	Weight (gram)	Type of camera	Other characteristics
Camera A				
Camera B				
Camera C	16,000	91	Digital camera	You can take movies. (2 Mega pixels)
Camera D	600	90	Disposable camera	You can take 27 photos with flash.
Camera E				
Camera F				



It is said that a good high school teacher should have the following qualities.

 <p><b>Knowledge of subject</b></p>	 <p><b>Clear speaking voice</b></p>	 <p><b>Ability to organize class</b></p>	
 <p><b>Intelligence</b></p>	 <p><b>Pleasant appearance</b></p>	 <p><b>Enthusiasm for teaching</b></p>	 <p><b>Sense of humor</b></p>
 <p><b>Fairness</b></p>	 <p><b>Clear writing</b></p>	 <p><b>Love of students</b></p>	

(1) Discuss **how important** these qualities are.

(2) Decide **which three qualities are the most important**, and give the **reasons**.

When you have agreed on three qualities, please tell me **which three things are the most important** and **why you thought so**.

Your friend, Ken, will have the first date with his girlfriend tomorrow.

He came to your group and asked a question.

## Should boys pay all the costs for dates?

Here are some opinions from other friends.



Boys and girls are equal. Neither girls nor boys have the right to ask the other to pay the bill.

Many girls like boys who are generous. But, if I keep paying for all the dates, I will be poor and I won't be able to see my girlfriend any more.



Some boys like paying for dates. If they pay, they can usually plan the date and impress girls.

Generally speaking, boys eat a lot!



Please **discuss your opinions** so that you can **give him suggestions** on what he should do tomorrow.

When you have finished discussion, please tell me what you, as a group, would like to suggest him. 10

# Data Analysis

## Quantitative Analysis (Multiple Regression)

### ■ Predictors (IVs)

- **Extraversion-level: Japanese EPQ (0-20)**
  1. Self (own) score
  2. Self-excluded group mean
  3. Self-excluded group Std.Dev.
- **Oral proficiency-level: classroom teacher's assessment (0-5)**
  4. Self (own) score
  5. Self-excluded group mean
  6. Self-excluded group Std.Dev.

### ■ Measure of Conversational Styles (DVs)

- **Goal-Orientation:** measured by Topic initiation
- **Interactional Contingency:** measured by Topic ratification
- **Quantitative Dominance:** measured by The amount of talk

(Van Lier, 1989; Young & Milanovic, 1992; Young, 1995; Kormos, 1999)

## Qualitative Analysis (Conversation Analysis)

To interpret and elaborate the quantitative results

# Quantitative Results

# MR Model Summary

- The given model (with six IVs) accounted for a certain degree of variance in **topic initiation** and in **the amount of talk**, but *not* topic ratification.

DV	R Square	Sig.
<b>Topic initiation</b>	<b>.144</b>	<b>.000</b>
<b>Topic ratification</b>	.004	.955
<b>The amount of talk</b>	<b>.208</b>	<b>.000</b>

## Main Finding 1 [Overall]

- A more extraverted/more proficient test-taker **initiated more topics and talked more**, especially when they were grouped with **less extraverted/less proficient group members**.

### MR results [overall]

DV	Predictors	Standardized Coefficients	
		Beta	Sig.
Topic initiation	(Constant)		.000
	Ext -self	.158	.000
	Ext -self excluded group mean	-.100	.036
	Ext -self excluded group std.dev.	-.052	.270
	Prof -self	.335	.000
	Prof -self excluded group mean	-.274	.000
	Prof -self excluded group std.dev.	.016	.734
The amount of talk	(Constant)		.000
	Ext -self	.191	.000
	Ext -self excluded group mean	-.141	.002
	Ext -self included group std.dev.	-.109	.016
	Prof -self	.391	.000
	Prof -self excluded group mean	-.324	.000
	Prof -self included group std.dev.	-.005	.904

## Main Finding 2 [Task-type comparison]

- **The proficiency-level variables** were influential in all tasks.
- **The extraversion-level variables** were more influential **in more open tasks** (the ranking and the free discussion tasks), but *not* in the info-gap task.

## MR results (DV: topic initiation) [Task-type comparison]

Task	Predictors	Standardized Coefficients	
		Beta	Sig.
Info-gap	(Constant)		.035
	Ext -self	.066	.423
	Ext -self excluded group mean	.015	.864
	Ext -self excluded group std.dev.	.054	.538
	Prof -self	.299	.002
	Prof -self excluded group mean	-.255	.007
	Prof -self excluded group std.dev.	-.010	.911
Ranking	(Constant)		.008
	Ext -self	.216	.004
	Ext -self excluded group mean	-.195	.017
	Ext -self excluded group std.dev.	-.127	.104
	Prof -self	.330	.000
	Prof -self excluded group mean	-.281	.001
	Prof -self excluded group std.dev	.038	.612
Free discussion	(Constant)		.024
	Ext -self	.170	.041
	Ext -self excluded group mean	-.096	.265
	Ext -self excluded group std.dev.	-.057	.508
	Prof -self	.362	.000
	Prof -self excluded group mean	-.310	.002
	Prof -self excluded group std.dev	-.002	.985



## MR results (DV: the amount of talk) [Task-type comparison]

Task	Predictors	Standardized Coefficients	
		Beta	Sig.
Info-gap	(Constant)		.000
	Ext -self	.098	.217
	Ext -self excluded group mean	-.046	.600
	Ext -self excluded group std.dev.	-.023	.784
	Prof -self	.396	.000
	Prof -self excluded group mean	-.342	.000
	Prof -self excluded group std.dev.	-.010	.908
Ranking	(Constant)		.000
	Ext -self	.143	.053
	Ext -self excluded group mean	-.143	.077
	Ext -self excluded group std.dev.	-.141	.069
	Prof -self	.413	.000
	Prof -self excluded group mean	-.350	.000
	Prof -self excluded group std.dev.	-.008	.914
Free discussion	(Constant)		.000
	Ext -self	.303	.000
	Ext -self excluded group mean	-.192	.017
	Ext -self excluded group std.dev.	-.106	.182
	Prof -self	.381	.000
	Prof -self excluded group mean	-.326	.000
	Prof -self excluded group std.dev.	-.017	.830

## Main Finding 3 [Group-size comparison]

- **The extraversion-level variables** were more influential in **groups of 4** than in groups of 3.
- There was an influence of **the proficiency-level variables** in both group sizes. But the influence was larger in **groups of 3** than in groups of 4.

## MR results (DV: topic initiation) [Group-size comparison]

Group size	Predictors	Standardized Coefficients	
		Beta	Sig.
Group of 3	(Constant)		.001
	Ext -self	.107	.077
	Ext -self excluded group mean	-.082	.195
	Ext -self excluded group std.dev.	-.050	.424
	Prof -self	.399	.000
	Prof -self excluded group mean	-.344	.000
	Prof -self excluded group std.dev.	-.001	.988
Group of 4	(Constant)		.025
	Ext -self	.225	.001
	Ext -self excluded group mean	-.141	.067
	Ext -self excluded group std.dev.	-.056	.472
	Prof -self	.249	.002
	Prof -self excluded group mean	-.187	.017
	Prof -self excluded group std.dev.	.023	.741

## MR results (DV: the amount of talk) [Group-size comparison]

Group size	Predictors	Standardized Coefficients	
		Beta	Sig.
Group of 3	(Constant)		.000
	EPQ -self	.144	.015
	EPQ -self excluded group mean	-.110	.075
	EPQ -self excluded group std.dev.	-.117	.057
	Prof -self	.409	.000
	Prof -self excluded group mean	-.367	.000
	Prof -self excluded group std.dev.	-.066	.277
Group of 4	(Constant)		.000
	EPQ -self	.244	.000
	EPQ -self excluded group mean	-.183	.012
	EPQ -self excluded group std.dev.	-.087	.231
	Prof -self	.370	.000
	Prof -self excluded group mean	-.277	.000
	Prof -self excluded group std.dev.	.057	.386

# Qualitative Results

**1) In general, a more extraverted/proficient test-taker initiated more topics and talked more, esp. when grouped with less extraverted/proficient group members. How & why?**

❖ **Scaffolding behaviour in expert/novice asymmetric interactions**

**[Excerpt 1]** 4008 (E:15, P:4) 4024 (E:0, P:2) 4032 (E:16, P:3)

1 → **4008:** So, let's discuss about qualities ((looking at 4024 and 4032)). (.5) First one,  
2 knowledge of subjects? (.5) What do you think about it? ((looking at 4032))

3 4032: Uh, Huh huh [uh

4 4008: [Wha(h)t?

5 (.8)

6 4032: Uh: uh::: uh: uh I think knowledge of subject is very important.

7 4008: Yeh ((nodding)), of course.

8 4032: Uh huh

9 (1.0)

10 → **4008:** How about clear speaking voice? ((gesturing towards 4024))

11 4024: I think this is more important (.5) for us to clear speaking voice.

12 4008: uh huh ((nodding))

## ❖ Use of body language

- (a) to involve quiet members (b) to solve interactional problems (c) to draw an attention

[Excerpt 2] [1107 \(E:12, P:4\)](#) 1110 (E:8, P:4) 1113 (E:10, P:3) 1116 (E:13, P:3)

1 ((all test-takers looking at one another))

2 → 1107: I a- ((raising a hand)) I think share the (1.0) cost [with each other is [huh huh

3 1110: [uh huh [huh huh

[Excerpt 3] [1022 \(E:14, P:4\)](#) [1023 \(E:15, P:4\)](#) [1024 \(E:12, P:4\)](#)

1 → 1023: Ah, OK. ((clapping hands)) Sense of humour is important.

2 1022: [uh

## ❖ Tolerance of silence

[Excerpt 4] [3013 \(E:8, P:3\)](#) [3017 \(E:14, P:3\)](#) [3028 \(E:7, P:3\)](#)

1 3017: Uh: I organize, ability to organize class is, a- what mean ability to

2 organize class?

3 (6.0)

4 → 3017: Wha(h)t does mean ability to organize class?

5 (4.0)

6 → 3017: Organize mean *soshiki*? *Soshiki*?

7 3028: ((nodding))

8 (3.0)

9 → 3017: I (.5) I e? most important is love of student, but it is

## 2) Extraversion-level variables were more influential in more open tasks. How & why?

### Info-gap Task

- ❖ **Compulsory info exchange → Making all test-takers talk**
- ❖ **Information order forcing the interactional order & role**

[Excerpt 5] 5001 (E:8, P:3), 5006 (E:14, P:3), 5007 (E:16, P:3)

5 5001: I know about camera A. Uh It's price is uh

:

15 5007: I have camera C. This camera is sixteen thousand yen.

:

21 5006: Camera E is two: two thousand ye- uh?

:

25 (3.0) ((5006 & 5007 looking at the prompt card, while occasionally throwing a glance at 5001))

26 5001: uh

27 (2.0)

28 5006: huh huh

29→5001: What do you like uh? What do you uh:: would you like , what what  
30 would you like to, Midori?



## Ranking Task

- ❖ **Many items to talk about → Making some extraverted test-takers more goal-oriented**

## Ranking & Free Discussion Tasks

- ❖ **Personalising the given topics**
  - (a) to justify opinions (b) to persuade other group members (c) to suggest to quiet speakers to personalise topics (d) to involve quiet speakers into the personalised stories

[Excerpt 6] [2104 \(E:20, P:3\)](#) [2105 \(E:10, P:3\)](#) [2106 \(E:14, P:3\)](#) [2107 \(E:14, P:1\)](#)

1 → **2104:** Eh: A- What teacher what teacher

2 [best sense of humour? [Who who who who? Huh huh

3 2105: [Uh

4 2106: [Ah::: yes who who

5 (3.0) ((thinking who has the best sense of humour...))

6 → **2106:** Uh:: a- same [ same class, s(h)o sociaty teacher is ver(h)y very

7 2107: [Same class

8 2016: good sense hair.

## **Free Discussion Task**

- ❖ The discourse agenda not formulated → the liveliness of the interaction differed greatly (e.g. involvement of jokes)
- ❖ Difficulty in using well-functioning sequence openers (in Expert/Novice asymmetrical interaction)

[Excerpt 7] [1071 \(E:16, P:2\)](#) [1077 \(E:18, P:3\)](#) [1081 \(E:6, P:1\)](#) [1083 \(E:4, P:0\)](#)

1 → **1071**: Do you think? What do you think? [[←unspecific](#)]

2 1083: Huh huh huh huh

3 (1.5)

4 → **1077**: What do you think? [[←unspecific](#)]

5 (3.0)

6 → **1071**: If you you:: (.5) you go to restaurant, restaurant with a boy, (.5) ah you

7 pay or money pay

8 1081: Pay [me?

9 → **1071**: [pay or boy pay? Which do you like? [[←specific](#)]

10 1081: Half and half.

### 3-1) Extraversion-level variables were more influential in groups of 4 than in groups of 3. How & why?

#### ❖ Collaborative atmosphere in groups of 3 → Mitigating the effect of extraversion variables

#### ● Joint utterance completion in groups of 3

[Excerpt 8] Group of 3, 3004 (E:6, P:3) 3016 (E:6, P:3) 3021 (E:12, P:3)

1 → 3016: Teacher's enthusiasm makes us our enthusia(h)sm, so (.5) we study (1.0)  
2 very (1.5)

3 → 3021: So ah[:

4 → 3004: [We can study more work.

#### ● More success in involving introverted participants in groups of 3 ⇔ Avoidance behaviour in groups of 4

[Excerpt 9] Group of 4, 5045 (E:0, P:3) 5046 (E:16, P:4) 5047 (E:14, P:4) 5049 (E:1, P:3)

1 5046: What do you think? ((making deliberate eye contact with 5049))

2 → 5049: Me too.

[Excerpt 10] Group of 4, 3002 (E:3, P:3) 3022 (E:5, P:1) 3026 (E:12, P:) 3032 (E:12, P:5)

1 3032: Do you have any any ( ) anything else?

2 (8.0)

3 3026: huh huh *Ryoko*?

4 → 3022: Do you think about clear speaking voice, *Azumi*?

**3-2) There was a larger influence of the proficiency-level variables in groups of 3 than in groups of 4. How & why?**

**❖ The turn-taking was sometimes mechanical in groups of 4 → Mitigating the impact of proficiency-level variables**

**[Excerpt 11] Specifying Turn-Taking Order by Gesture in Groups of 4**

1 2104: Have you ever been (.) have you ever going to date, date?

2 (1.0)

**3→ 2106:** ((indicating to take turns in a counter-clockwise way))

**[Excerpt 12] Irrelevant use of “How about you?” in Groups of 4**

**1→ 5002: How about you, Maya?**

2 5001: Ah:: I I think clear writing is uh is important, because uh my teacher

:

**6→ 5001: S(h)o I think clear writing is important. How about you, Midori?**

7 5007: Uh:: I think love of students is important, because when ah teacher

:

**10→5007: How about you, Yukari?**

**The test interaction does not allow “*schisming*” (Schegloff, 1995 ; Egbert, 1997)**

→ unconsciously avoiding the simultaneous talk

→ inducing the unnatural way of turn-taking

# Conclusion

- **A test-taker's characteristics, his/her group members' characteristics, group sizes** affected the resulting test-takers' discourse in group oral tests.
  - the **interactionalist view** of construct definition (e.g. Brown, 2005)
  - Greater attention should be paid to **task types & group size**
  
- **[in general]** A more extraverted/more proficient test-taker **initiated more topics and talked more**, especially when they were grouped with less extraverted/less proficient group members.
  
- **[task]** **The proficiency-level variables** were influential across the 3 tasks. In contrast, **the extraversion-level variables** were systematically more influential in more open tasks.

- If extraversion-level variables are not within the test construct, **the info-gap task** could be the most preferable...
  - However, if group oral tests are **to test communication ability**, extraversion-level should be a part of the test construct (considering the reasons for the impact).
  - **The information order** in the prompt card occasionally determined **the interactional role**  
←**Problematic!**
  
- **[Group size]** Interactions in **groups of 3** seem more suitable for group oral tests.
  - Groups of 4 could make it more difficult to elicit ratable speech from introverted test-takers.

- Incompatibility between talking naturally in groups of 4 and talking in groups of 4 in oral tests

→ **Grouping test-takers into groups of 4 might not always provide a suitable environment where test-takers could display their communication ability!!**

- To refine **‘interactional communication’ rating scales** for the co-constructed interaction
  - *Not* ‘shared scoring’ (e.g., May, 2007)
  - Rating scales that take the dynamics of the interaction process into account (Chalhoub-Deville & Deville, 2005: 826) → **use of a descriptive rater report** as well as the rating score



Thank you very much!

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