

Delivery methods of shared decision making in LCS: the potential for outreach

Nichole T. Tanner, MD, MSCR
Associate Professor of Medicine
Division of Pulmonary & Critical Care
Medical University of South Carolina
Ralph H. Johnson VA Hospital



Disclosures

- *Grant Support:*
 - American Cancer Society
 - VA HSR&D

Shared decision making & Counseling Visit for LC Screening

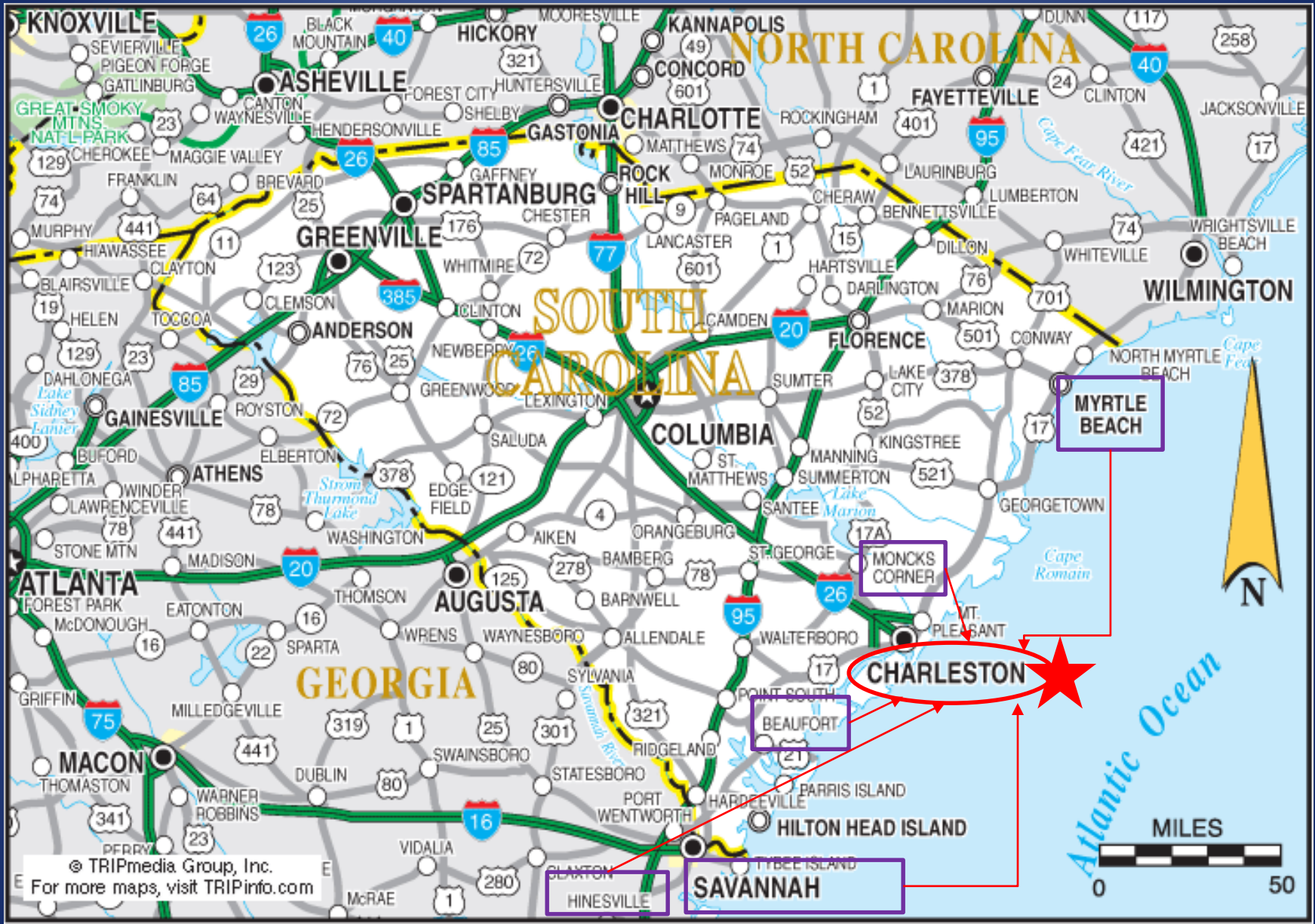
- Must occur before initial LDCT scan is ordered and performed
- Face-to-face encounter
- Provided by a Licensed Independent Practitioner who can then order the LDCT
 - i.e. MD, ARNP, PA-C

Essential elements of a SDM visit

- Determine patient eligibility
- Discussion about Benefits and Harms
 - False positive rate
 - Follow-up diagnostic test
 - Over-diagnosis
 - Radiation exposure
- Counseling about:
 - Smoking abstinence
 - Annual adherence; not a 1 time scan
 - Willingness to undergo diagnostic procedures and treatment
- Decision Aids used to promote decisional support.

**BUT DOES SDM HAVE TO HAPPEN
FACE-TO-FACE?**

Ralph H. Johnson Veterans Affairs Hospital and it's Community Based Outpatient Clinic (CBOC's)



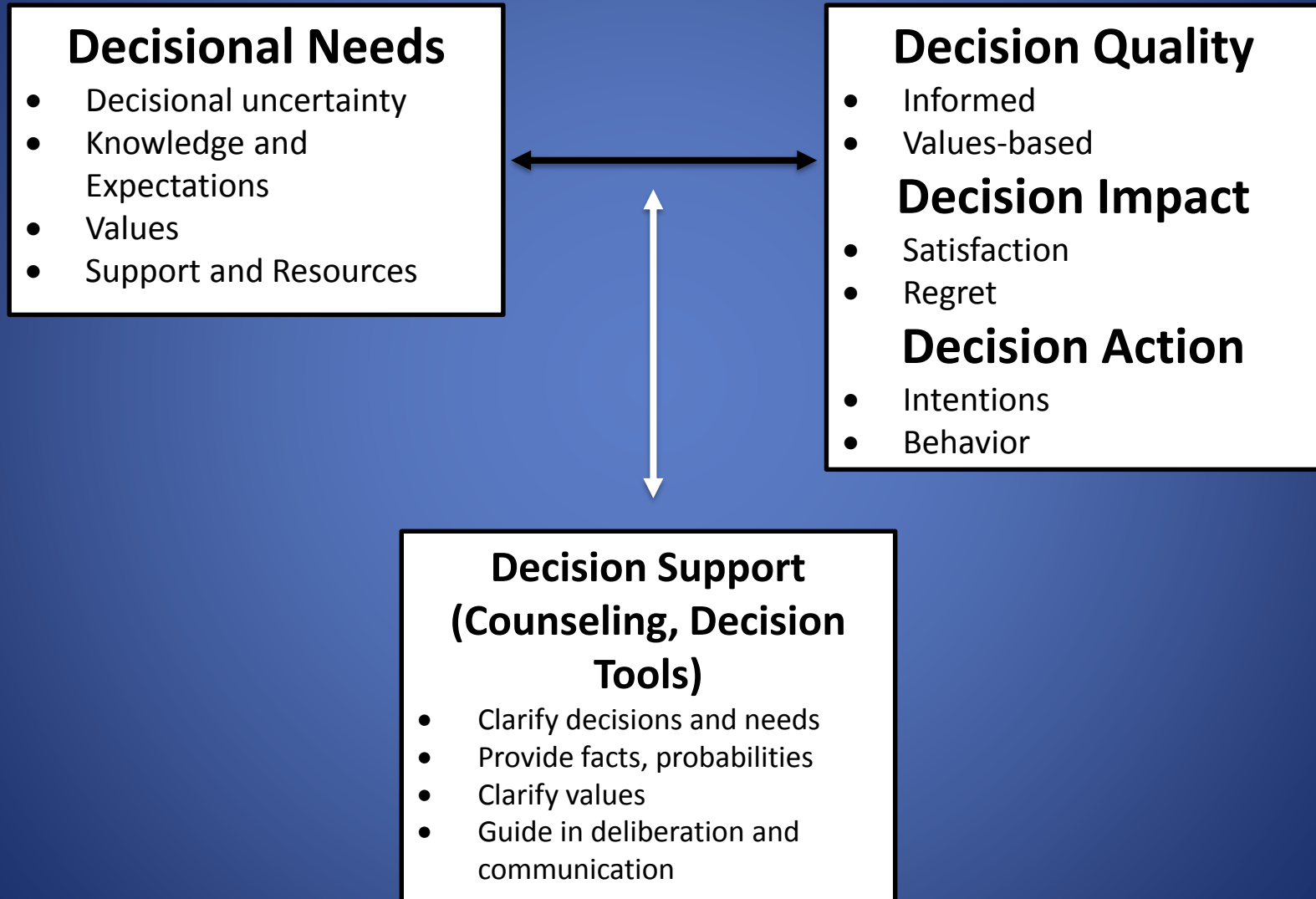
© TRIPmedia Group, Inc.
For more maps, visit TRIPinfo.com

The association of in-person versus by telephone shared decision making for people considering lung cancer screening: an observational study

Tanner NT, Banas E, Yeager D, Dai L, Silvestri GA, Hughes Halbert C

- Rationale:
 - Little data on the optimal format for SDM in LCS
 - Constrained resources and logistics (e.g. distance to health care facility) may make in-person SDM difficult
- Aim: Determine the effectiveness of a SDM delivered by two different methods on patient decisional satisfaction and regret

Ottawa Decision Support Framework



Study Design and Population

- Design: prospective observational study (part of usual care)
 - SDM assignment was based on location of recruitment
 - Informed consent obtained
 - Survey prior to SDM and then one month following decision
- Population: All met USPSTF criteria for LCS
 - In-person Cohort (n= 68)
 - Medical University of South Carolina
 - Identified through the EMR and waiting room advertisements
 - Telephone Cohort (n=69)
 - Ralph H. Johnson VAMC
 - Identified through the EMR via clinical reminders for LCS
 - Referred for LCS

Survey Instruments

- Baseline (self administered)
 - Communication with providers (CAT)
 - Multi-dimensional Cultural Values Assessment Tool (MCVAT)
 - Perceived benefits and risk of LC screening
- 1 month post survey (administered over phone by coordinator or fellow)
 - Satisfaction with Decision Scale
 - Decisional regret Scale

SDM visit

- In person

- Paper decision aid provided prior to meeting with provider
- Face to face SDM visit using shouldiscreen.com with provider (NP or pulmonologist)
- Individual risk provided using $PLCO_{m2012}$

- Telephone

- Paper decision aid mailed one week prior
- Telephone SDM visit outlining risk and benefits
- Individual risk provided using $PLCO_{m2012}$

Results

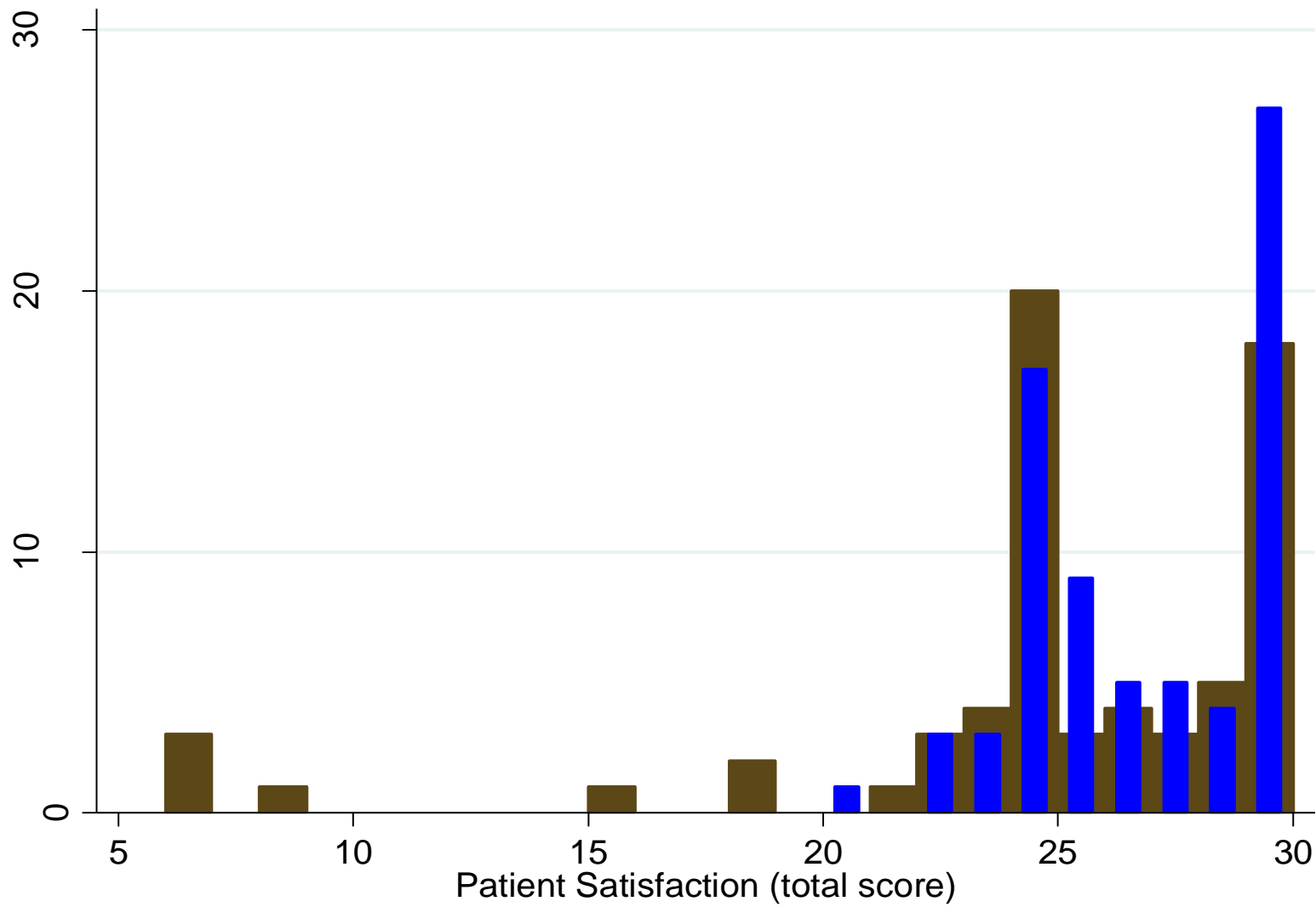
| | Total n=137 | In-person n=69 | Telephone n=68 |
|-------------------|----------------|-------------------|-------------------|
| Age | 64.7 (sd 6.1) | 64.1 (sd 6.0) | 65.2 (sd 6.2) |
| Gender** | | | |
| Male | 97 (70.8) | 33 (47.8) | 64 (94.1) |
| Female | 40 (29.2) | 36 (52.2) | 4 (5.9) |
| Race | | | |
| White | 88 (64.2) | 45 (64.2) | 43 (63.2) |
| Black | 39 (28.5) | 20 (28.5) | 19 (27.9) |
| Hispanic | 7 (5.1) | 3 (5.1) | 4 (5.9) |
| American Indian | 2 (1.5) | 0 (0.0) | 2 (2.9) |
| Other | 1 (0.7) | 1 (1.5) | 0 (0.0) |
| Quintiles of Risk | | | |
| Q1 | 2 (1.5) | 1 (1.5) | 1 (1.5) |
| Q2 | 2 (1.5) | 1 (1.5) | 1 (1.5) |
| Q3 | 5 (3.7) | 3 (4.4) | 2 (2.9) |
| Q4 | 28 (20.4) | 16 (23.2) | 12 (17.7) |
| Q5 | 100 (73.0) | 48 (69.6) | 52 (76.5) |

Results

- Decision Action: 88.3% (121/137) had LDCT
 - In person: 88.4% (61/69)
 - Telephone: 88.2% (60/68)
- Decisional Quality
 - Satisfaction with Decision Scale (max score 30)
 - All participants (mean, SD): 25.7 (4.5)
 - Screened (n=121): 25.9 (4.7)
 - Not screened (n=16): 24.1 (2.0)

Decisional Quality Results

- Satisfaction with Decision Scale (max score 30)
 - All participants: 25.7 (4.5)
 - In Person: 26.7 (2.8)
 - Telephone: 24.6 (5.6) * $p < 0.01$
- Decisional Conflict Scale (min score 10)
 - All participants: 11.7 (3.4)
 - In Person: 11.3 (3.4)
 - Telephone: 12.1 (3.4) $p = 0.08$



Conclusions

- Patients undergoing SDM within LCS were highly satisfied with their decisions and had little regret.
 - This was true regardless of decision for or against LCS
- Telephone and in person SDM had similar high satisfaction* and low regret scores
- This has implications for expanding outreach and access to high-risk patients living in areas without a comprehensive screening program

Thank you

MUSC Thoracic Oncology Research Group

- Gerard A. Silvestri, MD, MS
- Nicholas J. Pastis, MD
- Paul Nietert, PhD
- Neeti Kanodra, MD
- Kate Taylor, MS

Hollings LC Screening

- Ben Toll, PhD
- Cassie Frazier, ARNP

Charleston VA HSR&D COIN

- Leonard Egede, MD, MS
- Mulugeta Gebregziahber, PhD
- Chanita Hughes-Halbert, PhD
- Charlene Pope, PhD
- Lin Dai, MS

Ralph H. Johnson VA LCS

- Shannon Magee, ARNP

EXTRA SLIDES

Satisfaction with Decision Scale

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|--------------------------|-----------------|-----------------------------------|--------------|-----------------------|
| I was adequately informed about the different options available about lung cancer screening. | 1 | 2 | 3 | 4 | 5 |
| The decision I made was the best decision possible for me personally. | 1 | 2 | 3 | 4 | 5 |
| My decision was consistent with my personal values. | 1 | 2 | 3 | 4 | 5 |
| I expect to carry out the decision I made. | 1 | 2 | 3 | 4 | 5 |
| I had as much input as I wanted in the choice about screening | 1 | 2 | 3 | 4 | 5 |
| I am satisfied with the decision that was made about lung cancer screening | 1 | 2 | 3 | 4 | 5 |

Decisional Conflict Scale

| | Yes | Unsure | No |
|---|-----|--------|----|
| I knew which options were available to me. | 1 | 2 | 3 |
| I knew the benefits of each option. | 1 | 2 | 3 |
| I knew the risks and side effects of each option. | 1 | 2 | 3 |
| I was clear about which benefits mattered most to me. | 1 | 2 | 3 |
| I was clear about which risks and side effects mattered most to me. | 1 | 2 | 3 |
| I had enough support from others to make a choice. | 1 | 2 | 3 |
| I made a choice without pressure from others. | 1 | 2 | 3 |
| I had enough advice to make a choice. | 1 | 2 | 3 |
| I was clear about the best choice for me. | 1 | 2 | 3 |
| I felt sure about what to choose. | 1 | 2 | 3 |