RESEARCH TOOLS

Programme : Ph.D. (Education)

Topic : A CRITICAL STUDY ON THE INFLUENCE OF TEACHING RELATED INPUT SESSIONS ON TEACHER BEHAVIOUR OF TEACHER TRAINEES

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Guide : Dr. P.S. Chandrakumar,
Principal, J.J. College of Education,
Ammapettai, Tiruchirappalli.

University : Alagappa University, Karaikudi.

Dear Respondents,

I seek your help to identify the nature of the input sessions being provided in your college for various academic and non-academic activities for the students to the B.Ed. programme. The data provided by you will be used only for research purpose.

Thanking you,

Yours sincerely,

M.P. Sheela Rani

PERSONAL DATA

Name : 

College Name :

Optional Subjects : Mathematics [ ] Natural Science [ ]
                  Physical Science [ ] Social Science [ ]

Type of College : Government [ ] Aided [ ]
                  University Centre [ ] Self-financing [ ]
Instruction: The bunch of research tool given to you contains rating scale for according your responses related to 12 input sessions. Since, each one is important, you are requested not to leave out any one of them. For each input session, a set of key points is given to help you recollect your past experience with regard to them, so as to respond to the scale accordingly. I request you to rate the nature of the input provided in your college by putting a tick mark (✓) under any one of the five responses.

RATING SCALE FOR TEACHING RELATED INPUT SESSIONS

I. Methods and Techniques of Teaching

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
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</table>

1. Lecture Method
The students were explained about the steps like subject marking, sequential arrangements of concepts, systematic arrangement of subject matter, language used, ensuring continuous attention of listeners, intellectual participation of pupils, reflection by the listeners, posing challenging situation etc.

2. Demonstration Method
Pupils should be able to observe adequate lighting of the demonstration table, proper arrangements of apparatus, instructions of observation (to the pupils). Student-involvement step-by-step pattern of demonstration, phase of demonstration (fast / slow). Recording of data by the pupils, curiosity of pupils, summarization of key concepts on the blackboard.

3. Lecture cum Demonstration Method
This allows a large number of pupils to learn at the same time thereby, reducing the time devoted to training. The instructors use training aids, demonstrations, lectures and group discussions which increase the effectiveness of the training.
4. **Laboratory Method**

Teacher explained the different inventions and discoveries, appreciation by the pupils, creates interest / attitude, contrast between ancient and modern.
Teacher explained the different steps involved in this method like student activity, cooperation with peers, assistance of teacher, verification of theories/principles, handling of apparatus, reading the instrument/skill.
Drawing diagrams, interpreting graphs, collecting and arranging data, drawing conclusion, satisfying the curiosity of pupils application of acts. Supervision by the teacher.

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<thead>
<tr>
<th>Very Poor</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
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5. **Biographical / Historical Method**

This is an excellent tool for analyzing individual narratives of participants’ lives in relation to the larger cultural matrix of the society in which they live.
Historical method is the process of critically examining the records of the past.

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<tr>
<th>Very Poor</th>
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<th>Average</th>
<th>Good</th>
<th>Very Good</th>
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</table>

6. **Heuristic Method**

Teacher explained about the steps involved in the method.
Responsibility, motivation to discover, collection of data, systematic work, application of facts, discussion (if any), arriving at generalisation, asking of questions (by the teacher), arousing curiosity of pupils, desire to learn, judgement of pupils, marking of laboratory techniques (if any), develops research skills, development of self-confident/self-reliance/ self-discipline catered to individual differences, planning of work by the teacher. Assistance by the teacher.

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<tr>
<th>Very Poor</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
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</table>

7. **Project Method**

Teacher has given the details of the steps involved in this method. It includes the components of the above two methods. Keen observation by the pupils, proper explanation of details.

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<th>Very Poor</th>
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<th>Average</th>
<th>Good</th>
<th>Very Good</th>
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</thead>
</table>
8. Problem Solving Method
Teacher explained the theoretical steps like:
sensing the problem, interpreting, defining and
determining the problem, collecting the relevant
data, organising and evaluating the data,
formulating tentative solution, arriving the final
solution.

9. Dalton Plan
Ability grouping, assignment of pupils, freedom,
self-effort, individual work at pupils own rate,
group interaction, laboratories given, recordings
- using graphs / diagrams, continuity of work
initiative, discipline, resourcefulness, handling
of apparatus (if any), practicability.

10. Supervised Study
Teacher explained the steps like
   a. Use of reference books, maps, charts,
diagram
   b. Guide pupils in preparation of notes /
reports
   c. Assist pupils in the formulation of
hypotheses
   d. Guide pupils in the interpretation of data,
graphs, formula
   e. Individual attention to pupils.
   f. Through training in study habits.
   g. Use of library
   h. Responsibility of pupils
   i. Development of democratic human
relations
   j. Teacher-Pupil relation
   k. Classroom management

11. Dogmatic Method
Rigorous teaching of Mathematics is extremely
emphasized. ‘Rigor’ means the strict
enforcement of rules. Mathematics is the
learning in exactness which is amply provides.
Teacher tells what to do, what to observe, how
to attempt and how to conclude.
12. Analytic-Synthetic Method

It is a combination of two methods, unknown to known. Analyses means breaking up of the problem, conducting its operation to know its hidden aspects, stand with what is to be found out.

Synthetic means known to unknown. Synthesis is the compliment of analysis. It is in the process of putting together known bits of information to reach the point where unknown information becomes obvious and true.

13. Topical Method

A topic is taken as a unified whole or as an unbreakable unit. A topic is selected and is made the basis of many other topics. The selected topic becomes the centre of correction.

14. Concentric Method

This method implies widening of knowledge system of arrangement of the subject matter. A steady progress is maintained in the acquisition of knowledge of a topic for sufficient number of years continuously.

15. Inductive and Deductive Method

Inductive teaching, the lesson progresses from the general (a rule, concept or formula) to the specific student experience.

In the inductive approach, the student accumulates a large number of observation and then summaries his findings with general statements.

i) Examples and Illustrations

Teacher has mentioned the examples and illustrations for each method.

ii) Merits

Teacher explains the merits of each method.

iii) Limitations

Teacher explains the limitations of each method.
II. Writing Instructional Objectives and Lesson Plan

<table>
<thead>
<tr>
<th>1. Stages / Steps involving Lesson Plan Writing</th>
<th>Very Poor</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
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<tbody>
<tr>
<td>a. Instructional Objectives</td>
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<td>Teacher gave the importance of general objectives of teaching and the specific objectives of teaching, so that she explains the instructional objectives.</td>
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<td>b. Previous knowledge</td>
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<td>Mention about the relevance, sufficiency and motivation.</td>
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<td>c. Teaching Aids</td>
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<td>Teacher explained the appropriateness, meaningfulness, innovation and attractiveness of teaching aids.</td>
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<td>2. Importance of each column</td>
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<tr>
<td>What is content (what) specifications, learning experience, evaluation, theory and principles.</td>
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<tr>
<td>How each column is related to other column.</td>
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<tr>
<td>Teacher gives importance of specifications of (why). It can be observable, measurable and attainable behavioural change. How the specifications related to learning experience (how) and how the learning experience and behaviour are evaluated (how much). Mention above theory / principles involved in teaching. The teacher has explained Bloom’s taxonomy.</td>
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<tr>
<td>Mention about the stages of the lesson introduction, development and review. It should be relevant, effective, and continuous and sequence.</td>
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<tr>
<td>3. Illustration and Examples</td>
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<td>The teacher explains with illustrations and examples to understand the connection between the content, specification, learning experiences and evaluation.</td>
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<tr>
<td>4. Model Lesson Plan developed on the Blackboard</td>
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<tr>
<td>Teacher prepared a lesson plan for a particular content in consultation with the teacher trainees on the blackboard with all details.</td>
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</tbody>
</table>
5. Preparation of Lesson Plan in groups and by individual

Teacher divided the class students into small groups and gave each group a subunit to prepare a lesson plan. After that, she made each student to prepare a lesson plan for 45 minutes by themselves.

III. Observing Senior Teachers’ Classes

Introduction to Teacher Trainee

The teacher gives instructions to observe the classes of the senior teachers of the schools. Hints / suggestions to look for relevant information and classified them. How the teacher motivates a particular lesson to begin or to introduce a lesson, how she develops it, how the teacher asks questions, what are the different types, how the teacher makes the students to answer for the probing questions, how she reinforces the students etc.

IV. Sessions on Micro Teaching

1. Preparatory Part

Teacher explained what is teaching skill and mentioned about the major skills like skill of questioning, skill of stimulus variation, skill of explanation, skill of reinforcement, set induction, skill of using blackboard etc. Teacher explained that microteaching is scaled down process for teacher trainees to improve their teaching skills. It is micro in the sense strength 5 to 7 students, duration 5 minutes to 7 minutes, developing only one skill and concentrating on a particular concept to improve particular skill.
Teacher asked the teacher trainees to prepare a micro lesson in a question-answer method and mark the sub-skills may be marking at relevant places.

3. Execution
Teacher explained about microteaching cycle. Teacher arranged the students into small groups (5 to 7 students) and the microteaching cycle - plan - teach - feedback - re-plan - re-teach - re-feedback was repeated for 30 minutes. The micro lesson class was conducted by the teacher to improve certain skills.

V. Demonstration classes by Teacher Educators
The teacher explained, what to teach, how to teach and how to evaluate. Then the teacher taught with relevant steps and techniques and had discussion after teaching with teacher trainees. Based on the discussion, students must complete the observation marks about teaching.

VI. Demonstration Classes by Outside Experts
The students should observe the class to identify the introduction, development and review. The teacher showed the relevant steps and techniques.

VII. Preparation and Demonstration of AV Aids
The teacher should introduce necessary audio-visual aids for effective teaching the concept. The teacher trainees should observe the demonstration of AV aids from the teacher.
VIII. Organising Simulated Classroom Teaching

Classroom as a demonstration laboratory; achieve the maximum potential with pre-student teaching-learning experience and may become a new kind of demonstration laboratory prior to student learning.

IX. Observing Peer Group Teaching

Preparation techniques and how the student teacher finished his/her lesson in 45 minutes. Here, strength and weakness are criticised and given suggestion to improve his/her teaching. Feedback was given by the teacher. Teacher asked the trainees to prepare a micro lesson in a question answer method and mark the sub-skills may be marked at the relevant places.

X. Using Videos on Classroom Communication

Teaching of experts, subject oriented, content to be taught, strategies involved in teaching the particular content. Actual demonstration discussion with the students.

XI. Discussion on Models of Teaching

1. Concept Attainment Model
(Theorist - Jerome S. Bruner)

Focus:
The concept attainment model is designed to help students’ learning concepts and to help them become more effective at learning concepts.
Syntax
  a. Presentation of data and identification of concepts
  b. Testing attainment of concepts
  c. Analysis of the thinking strategies

Social System
The teacher assumes a major role initially in choosing the concept, selecting and organizing or sequencing data. The teacher controls action but with subsequent phases student interaction is encouraged.

Principles of Reaction
Discussing and evaluating their thinking strategies. Analysis of the merits of various strategies seek the one best strategy.

Support System
Form of examples marked as positive and negative to be presented to the students for concept attainment.

Elements of the Concept
  a. Name
  b. Attributes
     i. Essential Attributes
     ii. Non-essential Attributes
  c. Examples
     i. Positive Example
     ii. Negative Example
  d. Definition

2. Inquiry Training Model
   (Richard Suchmann - Theorist)

Focus
  a. To develop scientific process skills
  b. To develop among students the strategies for creative inquiry.

Syntax
  a. Encounter with the problem
  b. Data gathering verification
  c. Data gathering experimentation
  d. Formulating rules or explanation
  e. Analysis of the inquiry process

Social System
Selects or designs the puzzling situation and presents.
### Principles of Reaction

**Support System**
Specific conditions

### 3. Constructivist Model

**Focus**
To construct knowledge by themselves with the help of previous knowledge.

**Syntax**
- Orientation
- Elicitation
- Challenges and Changes
- Application
- Review

**Social System**
Establish a climate.

**Principles of Reaction**
Teacher empowers children in the process of construction of knowledge.

**Support System**
Textbook and worksheets.

### 4. Scientific Process Model

**Focus**
To develop scientific process skills such as observing, classifying, collecting data, inferring, predicting etc.

**Syntax**
- Sensing a problem
- Defining a problem
- Analysing the problem
- Collecting data
- Interpreting data
- Formulating hypotheses
- Testing hypotheses
- Drawing conclusions and generalizations
- Applying generalisations to new situations

**Social System**
Moderately structured.

**Principles of Reaction**
Teachers help the students to generate ideas and roles.
Support System

All the specific conditions required for the smooth running of all phases of model should be provided.

5. Information Generating Model

Focus

a. To give training in learning through reflection.

b. To develop positive interpersonal relation skill and practice cooperative learning.

Syntax

a. Posting the problem

b. Generating multiple perspective

c. Making informed decision

d. Meaningful assessment

XII. Organisation and Supervision of Intensive Teaching

In the first semester, 10 classes for practice teaching.

Whether senior teachers observe, whether the peer groups observe, number of discussion classes, senior teachers or supervising teachers checked the lesson plans, gave suggestions for improvement.
TEST ON KNOWLEDGE RELATED TO TEACHING

1. Define General Instructional Objective.

2. Enumerate any three distinct categories of Specific Instructional Objective.

3. Define ‘Motivation’.

4. List any three advantages of Project Method.

5. What are the important components of a ‘Model’ of Teaching?

6. List any four uses of Blackboard.

7. Why should reinforcement be used while teaching?

8. Who are gifted children?

9. How will you assist the slow learners during the course of teaching?

10. What is the merit of Concept Attainment Model?

11. Why should a teacher use Probing Questioning?

12. What is the major advantage of using Inquiry Training Model?

13. List any three characteristics of a good exercise.

14. How will you review a lesson?

15. Why should we recapitulate at the end of the class?
**TEACHING COMPETENCE RATING SCALE**

Name of the College :  
Name of the Supervisor :  
Name of the Student Teacher :  
Optional Subject of the Student Teacher :  

In general, under which of the three following categories would you classify (please tick the appropriate category) the student teacher you are rating:

i. Competent (  )  
ii. Not so competent (  )  
iii. Incompetent (  )  

Directions:

The roles / functions that teachers are expected to perform are given below. Against each role / function, four categories of responses and their numerical equivalents are also given. As a supervisor, please rate the student teacher on the roles / functions defined in the rating scale. The student teacher is to be rated for his/her competence in respect of his / her roles / functions as defined. Please note that you are to encircle only one numerical value for each role / function of a teacher.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Role / Function of a Teacher</th>
<th>Very Poor</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Preparation, Planning and Presentation of Teaching</td>
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<td></td>
<td>Ability of the student teacher in preparing, planning and organizing for teaching in accordance with the course objectives by using different source materials.</td>
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<td></td>
<td>Preparing</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>Planning</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
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<tr>
<td></td>
<td>Organizing</td>
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<tr>
<td>B.</td>
<td>Classroom Management</td>
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<td></td>
<td>Ability of the student teacher to successfully communicate, motivate the pupils and evaluate the teaching - learning process and to interact with them effectively in the classroom within the framework of a democratic organization</td>
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<td></td>
<td>Communication</td>
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<td>2</td>
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<td></td>
<td>Motivation</td>
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<td></td>
<td>Evaluation</td>
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<td>2</td>
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<td></td>
<td>Interaction</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td>C.</td>
<td>Knowledge of Subject Matter</td>
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<td></td>
<td>Ability of the student teacher in acquiring, retaining, interpreting and making use of the content of the subject he/she is dealing, within the classroom situations.</td>
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<td>Mastery of the subject</td>
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<td>3</td>
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<td>5</td>
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<td>D.</td>
<td>Personal Presentability</td>
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<td></td>
<td>Those characteristic behaviour of the student teacher, which facilitate effective classroom teaching learning process.</td>
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<td></td>
<td>Physical, Emotional and Intellectual disposition</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

(xiv)
SELF-ESTEEM INVENTORY

Read the twenty-five statements given below carefully. Put a tick mark (√) in the box marked 'Like Me' if the statement describes how you usually feel. Put a tick mark (×) in the box marked 'Unlike Me' if the statement does not describe how you usually feel. Be sure to put a tick in one or other box for each of the twenty-five statements. Remember, there are no right or wrong answers.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Like Me</th>
<th>Unlike Me</th>
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<tbody>
<tr>
<td>1. I often wish I were someone else.</td>
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<td>2. I find it very hard to take in front of the class.</td>
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<td>3. There are lots of things about myself I'd change if I could.</td>
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<td>4. I can make up my mind without too much trouble.</td>
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<td>5. I get upset easily at home.</td>
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<td>6. I am a lot of fun to be with.</td>
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<tr>
<td>7. It takes me a long time to get used to anything new.</td>
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<td>8. I am popular with students my own age.</td>
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<td>9. My parents usually consider my feelings.</td>
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<td>10. I give in very easily.</td>
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<td>11. My parents expect too much of me.</td>
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<td>12. It is pretty tough to be me.</td>
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<td>13. Things are all mixed up in my life.</td>
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<td>14. Friends usually follow my ideas.</td>
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<td>15. I have a low opinion of myself.</td>
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<tr>
<td>16. There are many times when I'd like to leave home.</td>
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<td>17. I often feel upset in college.</td>
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<td>18. I am not as nice looking as most people.</td>
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<tr>
<td>19. If I have something to say, I usually say it.</td>
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<tr>
<td>20. My parents understand me.</td>
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<tr>
<td>21. Most people are better liked than I am.</td>
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<td>22. I usually feel as if my parents are punishing me.</td>
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<tr>
<td>23. I often get discouraged in college.</td>
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<td>24. Things usually don't bother me.</td>
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<tr>
<td>25. I cannot be depended on.</td>
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