

# Social Competence Measurement Of Tribal And NonTribal Students Using IRSA

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**Abstract—** *The Interaction Rating Scale Advanced (IRSA) is based on practical index of social competence development. In the present study, the purpose is to correlate the social competence and academic achievement of tribal and non tribal students of Odisha. 20 participants (10 tribal & 10 non tribal students) were chosen who completed a five-minute interaction session, during which they were observed and assessed using the IRSA. Thus, the IRSA appears to measure social competence with high validity and reliability. Since the IRSA provides context-based evidence of social competence development, this measure should be useful for evaluating the various features of social interaction in a practical setting.*

**Keywords:** *Social Competence, Interaction, Evaluation, Scale, IRSA.*

## 1. INTRODUCTION

Social competence has been defined as a dimension of social intelligence [1-3]. Social intelligence is the ability to engage in adaptive and positive social interactions, which is theoretically distinct from general academic intelligence. However, it is often difficult to discriminate social intelligence from general intelligence. Researchers have a long history of being interested in social competence because it strongly affects peoples' lives and wellbeing. Moreover emotional intelligence which overlapped with social competence, gained much attention. The model of emotional intelligence includes the ability to: identify/decode others' emotions, accurately express/encode one's own emotions, and monitor and regulate felt emotions. This work suggests that most components of emotional intelligence involve nonverbal/emotional communication skills, which are the key components of the social competence model. Social competence is broadly defined as the ability to understand others in the context of a social interaction and engage in smooth communication. Thus, social competence should be evaluated by the interaction between the individual and his/her social environment.

We developed four social competence scales for different stages of lifespan development:

- The Interaction Rating Scale (IRS), which is an observation method for child– caregiver interactions that assesses children under 8 years old [5,6];

- The Interaction Rating Scale between Children (IRSC), which is an observation method for child–child interactions that assesses children 3 to 18 years old [7];
- The Interaction Rating Scale Advanced (IRSA), which is an observation method for adult–adult interactions that assess individuals over 15 years old [8]; and
- The Social Skill Scale (SSS), which uses an enumerator method to assess children under 7 years old [9]. These scales, based on accumulated knowledge from the developmental sciences, have focused on measuring the quality of an environment where positive interactions with the environment are significantly related to healthy development. The IRSA is derived mostly from multidisciplinary research in the measurement and development of social, emotional, and interpersonal skills.

It represents an attempt to develop a general framework for the measurement of the basic social competence components that comprise global social skills or social/emotional competence. According to the above-mentioned measures, the current study used the most common factors for assessing social competence developing: “empathy/coordination,” “self-regulation,” and “assertion.” Our factors are referred to as “sensitivity/responsiveness,” “self-control/regulation,” and “assertiveness/expressivity.” The purpose of the current study was to clarify the validity and reliability of the IRSA as a context-based practical index of social competence [10-15].

## **2. LITERATURE SURVEY**

### **2.1 THE INTERACTION RATING SCALE ADVANCED ( IRSA )**

The Interaction Rating Scale Advanced (IRSA) was defined as the rating scale which is based on the ability to understand others in the context of social interaction and to engage in smooth communication with them. IRSA is defined as observation method for adult-adult interaction available for adolescents over 15 years old . The scales that were based on accumulated knowledge from the developmental sciences focused on measuring the quality of an environment with the theory that optimistic interactions with the environment are significantly related to healthy development [15-20].

IRSA is a 92-item instrument, which was designed as a brief, yet comprehensive, observation measure to assess basic social competence over 15 years of age. The IRSA is used to measure social competence through five-minute observations of interactions. It forms a behavioral score and six subscales for an impression score, which are “self-control,” “expressivity,” “sensitivity,” “assertiveness,” “responsiveness,” and “regulation.” As the IRSA was developed three years ago, IRSA is a reliable, valid, and relatively easy way of assessing basic social competence levels, as researchers are increasingly in need of more practical measures to incorporate into their research [20-25].

## **3. METHODS**

Participants 100 healthy adults, 50 males and 50 females, aged 15 to 19 years old each from tribal school and non-tribal school were taken into consideration with their own consent of parents to participate in the studies and were complied with all other ethical standards before conducting this IRSA interaction with the students.

All participants were signed a consent that they can withdraw from the study at any time of their interest. To maintain confidentiality, a personal ID system were made to protect personal information. Furthermore, all video picture data were stored on a disk, which was password protected.

The IRSA is a 92-item instrument designed to measure comprehensive observation that assesses basic social competence for individuals over the age of 15. The Social competence is examined through five-minute observations of a social interaction. One advantage of the IRSA is that evaluations of interactions can be completed in a short period within normal, daily situations.

The IRSA includes a behavioral score and 6 subscales scores that combined provide an impression score: “self-control,” “expressivity,” “sensitivity,” “assertiveness,” “responsiveness,” and “regulation”.

The Scaling of IRSA is based on two different variables are scored: behavior and impression.

For the behavior variable, items are assessed in terms of the presence of a behavior (0 = no, 1 = yes), and the sum of all items in provides the overall score. The total score can range from 0 to 92.

**Table 1 . Scaling: Behavior Variables**

SCALING : BEHAVIOR VARIABLES	SCORE
PRESENCE OF BEHAVIOUR	0= NO / 1 =YES

For the impression, each observed behavior is rated on a five-point scale where 1 is “not evident at all,” 2 is “not clearly evident,” 3 is “neutral,” 4 is “evident,” and 5 is “highly evident.”

**Table 2 . Scaling: Impression Variables**

SCALING : IMPRESSION VARIABLES	SCORE
NOT EVIDENT	1
NOT CLEARLY EVIDENT	2
NEUTRAL	3
EVIDENT	4
HIGHLY EVIDENT	5

The rating procedure is as follows: the evaluator completes the checklist, focusing on the participant's behaviors (e.g., expressing his/her own feelings to the partner).

The emotions on which the IRSA scaling were done listed below :

**3.1. Expressivity: Expresses his/her thoughts and feelings precisely**

- Vocalizes.
- Expresses his/her own feelings to the partner.
- Attempts to elicit help or consolation from the partner.
- Shows self-assertiveness to the partner through a gesture.
- Casts the partner a glance to seek sympathy.
- Shows the change of his/her feelings through facial expressions
- Smiles or laughs.
- Attempts to make eye contact with the partner
- Attempts to elicit a response from the partner.
- Looks at the partner's face to get information/clarification.
- Shows his/her feelings by words and actions together.

**3.2. Assertiveness: States his/her opinion or position clearly to others.**

- Speaks up to the partner about what he/she thinks.
- There are words and actions that indicate his/her decision.
- Talks to, suggests, or lets the partner accomplish something while he/she pays attention.
- Expresses his/her opinion to the partner.
- Verbalizes a differing opinion or position.
- Exhibits a differing opinion by his/her expression and gestures.
- Uses both verbal descriptions and non-verbal instruction.
- Provides guidance through explanation but not through order.
- Explains his/her opinion according to the level of competence/ability of the partner.
- Instructions and opinions are clear and unambiguous.
- Explains his/her opinion logically.
- Expresses his/her own idea after showing that he/she understands the partner's idea.
- Expresses his/her ideas after indicating his/her understanding to the partner through expression and gesture.
- Makes a decision after indicating that he/she understood the partner's idea/suggestion.
- Makes a decision after showing through non-verbal expression that he/she understood the partner.

**3.3. Sensitivity: Ability to read the partner's feelings and thoughts accurately.**

- Shows an appropriate reaction through a change in his/her expression and gestures.
- localizes or speaks in response to the partner's verbalization.
- Vocalizes or adjusts own behavior in response to the partner's verbalization.
- Looks at the partner or materials when he/she shows non-verbal behavior.
- Vocalizes in response to the partner's behavior or nonverbal cues.

- Vocalization, makes a facial expression, or moves in response to the partner's behavior or nonverbal cues.
- Vocalizes after noticing changes in his/her partner's facial expression.
- Looks at his/her partner or materials after noticing the changes in the partner's facial expression.
- Vocalizes, expresses, or moves according to changes in partner's expression.
- Smiles or frowns within five seconds after the partner's vocalization.
- Looks at the partner's face or eyes when the partner attempts eye contact.
- Behaves appropriately in response to the partner's gestures or changes in expression.

### **3.4. Acceptance: Understands and respects the partner's opinion or position**

- Smiles in response to the partner's smile.
- Praises the partner's efforts, success, and behavior.
- Smiles, claps hands, or shows he/she is glad when the partner is feeling happy.
- Shows empathy by verbal or non-verbal responses when the partner is in a bad mood.
- Emits positive, sympathetic, or soothing verbalizations in response to the partner's feelings.
- Responds to the partner's vocalizations with an affectionate verbal response.
- Smiles at the partner's verbalization.
- Nods in response to partner's verbalizations and/or actions
- Emits a soothing non-verbal response (e.g., pat, touch, rock) at the partner's successes or failures.
- Smiles and/or nods at the partner during the episode.
- Does not vocalize or interrupt the partner while he/she is speaking.
- Nods at the partner's comment.
- Accepts the partner's opinion partially or totally by saying, "let's do it," or by acting in a manner consistent with the partner's suggestion.
- Accepts the partner's opinion even when his/her own opinion differs.
- Pauses when the partner starts to verbalize.
- Disturbs the partner.
- Allows the partner to decide what he/she wants to do.
- Praises the partner's skills during the assignment.

### **3.5. Regulation of the interpersonal relationship: Works with the partner to develop a good relationship.**

- Provides an environment free of distractions for the partner.
- Does not make negative comments to the partner.
- Does not behave negatively toward the partner.
- Affirms the partner with nods or other gestures.
- Laughs while they are looking at each other.
- Laughs while they are looking at the same thing.
- Moves in the same manner as the partner moves.
- Does not turn away from the assignment and pays close attention to the partner.
- Verbally praises the partner during the assignment.

- Praises the partner with applause.
- Talks to the partner positively or encouragingly during the assignment.
- Says "Thank you" to the partner when he/she grants a concession.
- Does not criticize the partner when they have differing opinions.
- Tries to talk with the partner logically when they have differing opinions.
- Tries to avoid emotional conflicts with the partner.
- Tries to respond calmly when the partner becomes angry or agitated.

### **3.6. Self-control: Ability to control personal emotions and behaviors.**

- Waits for the partner's reaction or action for at least five seconds.
- Emits appropriate movement of eyes.
- Emits appropriate phonation.
- Emits appropriate utterances.
- Emits appropriate movements.
- Makes clearly recognizable hand motions towards materials during the assignment.
- Concentrates on the task and is gentle with the materials.
- Does not interrupt the partner's activity
- Is not destructive/rough with the materials.
- Not tense.
- Does not shout or raise his/her voice.
- Does not display distress cues even when the task does not go well.
- Is not rude to the partner.
- Avoids displeasing the partner.
- Does not speak negatively of others.
- Does not curse at people or at things.
- Follows the rules of the game.
- Touches a task together.
- Emits appropriate emotional expression.
- Praises the partner when he/she succeeds or when the partner fails, he/she commiserates.

## **4. PROCEDURE :**

The IRSA was evaluated during the interaction with tribal and nontribal students based on their social competence and academic achievement.

We were made 92 questions based on the emotions and expressions related the IRSA rating scale. The questions are listed below :

### **4.1. EXPRESSIVITY:**

- You are very hungry .How do you ask your mother for food?
- You made some elderly people suddenly. What would you like to do with them?
- You have secured very bad marks in the exam. Would you like to express your sadness
- To your friend? How?
- Do you have love affairs or are u angry with your friends? How would you express?

- You have lost money .What would you like your friend to do for you? Do you expect your best friend to provide your consolation for a loss?
- Do you share your success with your friends? How?
- You have made a mistake or told a lie. Would you like to receive sympathy from your friend?
- Do you express your feelings through facial expression? How do you do with children?
- Do you know that you are handsome/ beautiful? You don't know?
- Look at me straight and say if you believe in God.
- Do you know something peculiar about you? May be in your daily habits or taste of choice of food.
- Are you a beginner in the field of your study or do you know something about your studies? Can you give hints?
- Express through actions your favourite game.

#### 4.2. ASSERTIVENESS:

- Can you guess what type of person I am?
- What do you want to be in your life?
- What would you suggest me to keep my fitness?
- I think politics is good. What do you think? Why not life as a farmer in village?
- What would you do if you find a stranger or a foreigner at your place seeking your assistance for his/her food, stay and travel?
- Tell something about the subjects you study right now.
- Can you give a road map to your home?
- We know about atom bombs or nuclear bombs. But do you know how nuclear energy benefits us?
- Would you like to work out some problems of in mathematics or grammar? I will help you.

#### 4.3. SENSITIVITY :

- You have written your class exam, Have you done well ? Do you know that you have failed in it?
- What does your father do? If he loses his job/business and depend on you then what would you do?
- Do you know that your behaviour towards me is not good?
- Do you have android in your mobile phone? What do you use when you do not know its use?
- If your friend beats you up over a small matter , What would you do?
- How would you react if your friend snatches your mobile phone and starts reading the what's app message.
- Look at your friends drinking wine. Do you drink? Would you like to take a drink?

#### 4.4. ACCEPTANCE: The interviewer to notice the reaction

- Your partner has written all your assignment for this semester. How would react to this?
- To notice the reaction.
- How would you react if your close friend's father dies in sudden accident.



- How would you provide consolation to your close friend who has failed in the exam when you are the topper?
- Observe the activity of the candidate
- What would you do if your suggest you to go on joining the sanitation programme in your locality.
- Who is your favourite player Sachin or Dhoni, Why?
- Observe to be done by the interviewer
- Please wait here for half an hour; I have some work to do. What is your opinion?
- Do you praises/criticize when your friend complete an assignment?

#### 4.5. REGULATION OF INTERPERSONAL RELATIONSHIP:

- Do you want to disturb your friend to get an idea while working together with a friend for a task?
- What will be your reaction if all your friends will get jobs and you will become jobless?
- Can you help me in understanding this equation?
- Look at this picture.
- Let's draw this picture together.
- To be observed during interaction
- Can we complete working 100 mathematical problems together?
- What will you do if I solve your problems?
- What will you do if I cannot fulfill my promise to help you?
- What is your idea on Indian movies? Are they good and useful for us?
- To be observed during interaction.

#### 4.6. SELF -CONTROL: To be observed during interaction

- Do you have any idea about typing?
- Give a mathematical problem and observe
- I would like to it too much sweet now.
- Give an instrument to him to handle and see the reaction (Mobile or Watch)
- Give an analytical problem and see the reaction.
- To be observed
- What is your opinion about terrorism?/Barabati match
- Ask the rules of a game :football , cricket
- To be observed
- Tell something about your last day in the school
- Do you praise your partner when he or she succeeds in a work or job?

### 5. OBSERVATION

The observation is based on two variables of IRSA scaling factor : Impression & Behaviour. The observation were made by interacting with the ten tribal and nontribal student from either verbal or



nonverbal communication. The set of 92 questions were mentioned above, were asked to the students for around 5-6 minutes observation of social interaction with students. Basically, the aim to study the psychology by observing the characteristics of the student. To gain an understanding of tribal and nontribal people and their thought processes by interaction with them. Behaviours & Impression observation results how information is received and interpreted, and individual differences can vary from one student to others. The result is listed below:

**Table 3.** Result Analysis

Coordination	0.66
Self-Regulation	0.67
Assertion	0.75
Overall	0.84

## 6. CONCLUSION

A comparative analysis was done after assessment of the tribal and nontribal students. The rating scale of tribal people is less as compared to nontribal people. The tribal people are not mature enough in impression as well as behavior scaling. Further research should expand on the possibilities of practical outcomes for social interaction development by both practitioners and researchers.

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