

Routine Task Inventory – Expanded

Routine Task Inventory – Expanded (RTI-E) (Allen, 1989)

Manual 2006

Prepared by Noomi Katz

Note. It is understood that this instrument should not be changed, modified or translated without permission of the original author Claudia Allen and the author of the current manual. When referenced it should read: Katz, N. (2006). Routine Task Inventory – RTI-E manual, prepared and elaborated on the basis of Allen, C.K. (1989 unpublished).

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RTI-E Manual

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ROUTINE TASK INVENTORY – EXPANDED RTI-E (Katz, 2006; Allen, 1989)

The RTI-E version has been used in Israel as the standard RTI since 1989 when it was prepared by Allen as an expanded version of the original RTI (Allen, 1985). The RTI-2 (Allen, Earhart & Blue, 1992) which was published later appears to be unclear and too complicated for most practitioners and therefore maybe not used enough.

Excerpts from Allen's (1989) unpublished RTI-E:

The routine task inventory can be thought of as an activity analysis and a functional evaluation instrument. As an activity analysis its clinical utility is limited by the therapist's knowledge of cognitive disability theory (Allen, 1985). As a functional evaluation it seems to make sense to care givers, and experience in living/working with the cognitively disabled may be the prerequisite for reliable use.

The Routine Task Inventory (RTI published in Allen, 1985) has been expanded to include using adaptive equipment (in the physical scale) and child care (in the community scale), a communication scale and a work scale. The internal consistency established by Heimann, Allen & Yerxa (1989) for the original RTI, lead to the confidence needed to extend the task analysis to other activities.

Three sources of information can be used to complete a functional assessment: patient self-report, a family member or other care giver's report, and observations of performance. The self-report of the cognitively disabled is often unreliably tending to under estimate the degree of difficulty. Legal proceedings often include a patient's self-report and discrepancies between self-report and observations can be helpful. For various reasons family members and other care givers may under or over estimate the quality of performance. Most people place more credibility in observations of performance. Therapists observe numerous observations of performance, usually more than can be reasonably communicated in a progress note or team meeting. Preparing a comprehensive, fair, and objective report of a disabled person's ability to function is a complex and time consuming assignment. The format presented on the scoring sheet principle advantage is that it helps to get an overview of the information available to us.

As originally defined by Allen:

“A cognitive disability is a restriction in sensorimotor actions originating in the physical or chemical structures of the brain and producing observable and assessable limitations in routine task behavior” (Allen, 1985, p.31). Like other assessments associated with the Cognitive Disabilities Model, the RTI is intended to assess the degree to which this restriction interferes with everyday task performance through observation of task behavior.

Routine task behavior is defined here as Occupational Performance in areas of self care, instrumental activities at home and in the community, social communication through verbal and written comprehension and expression, and readiness for work relations and performance. The aim of the assessment of routine task behavior is to promote the safe, routine performance of an individual's valued occupations and to maximize participation in life situations.

This manual provides the RTI-E scales, a scoring sheet with a reporting form, tables presenting a summary of research studies that provide initial reliability and validity data for the different versions of the RTI and references (prepared for the ACN symposium 2005). From our experience and limited research data we believe the two areas which were added to the original RTI (Communication and Work readiness scales) are essential in the understanding of everyday functioning and occupational performance for a variety of populations for whom this instrument maybe appropriate.

This manual was prepared to provide practitioners and researchers with clear protocols for administration and scoring so that the assessment can be used consistently by both practitioners and researchers. The RTI-E should be used by professional occupational therapy personnel. Administering this assessment requires knowledge of the cognitive disabilities model, interview skills, and observation and activity analysis skills.

The four areas of the RTI-E can be completed by calculating a mean score for each area. These scores correspond to levels of functional cognition. While the theoretical levels developed by Allen and her colleagues ranges from 1-6, please note that the entire range of scores is not included within each area of the RTI. This is based on the underlying theoretical understanding of the skills necessary for the tasks included in each area. The ranges of possible scores are as follows: Physical scale -ADL 1-5; Community scale-IADL 2-6; Communication scale 1-6; Work readiness scale 3-6. A suggestion for parallel scores on the FIM motor factor for the Physical scale-ADL is suggested.

The Self Report describes the individual's view of the degree to which routine task behaviors are restricted. The Caregiver Report describes the same information from the caregiver's perspective. The Therapist Report describes the judgments of a therapist who has observed the individual perform **at least four** of the tasks within the area being scored.

Procedure

RTI-E Self Report and Caregiver Report

The RTI-E Self report and Caregiver report are administered as a checklist during an interview with the individual who is providing the report. If the individual is able to read, they are provided a copy of the RTI scoring criteria and asked to indicate which items best describe the behaviors that the individual is likely to exhibit. The therapist explains items as needed and encourages the individual or caregiver to provide a detailed description of the behaviors. The therapist then marks items which match the individual's or caregiver's report. If the individual or caregiver is not able to read, the items can be read to them.

Therapist Report

Prior to scoring the therapist needs to observe the individual performing at least four tasks from each area scored. The therapist must report which tasks were observed and the duration of the observations in the reporting form. The therapist may only record behaviors which he/she has directly observed. The scoring of the RTI-E is based on familiarity with the client assessed and observation done during several days in different contexts. It is not based on a one time structured task performance and therefore referred to as routine task performance.

It could be also a team of therapists who observed the client on different tasks and collaborate in scoring the RTI-E. In this case it is important that the therapists establish inter rater agreement between them on scoring the RTI-E. When completing the RTI-E by therapist report, scoring at least two areas of the RTI-E is desirable. However, each area is scored separately and may be reported separately.

Scoring

The scores for all three versions of the RTI-E are determined through a process which is primarily descriptive in nature. Scores are determined by identifying a pattern of behaviors for each task of the RTI-E which is being scored. The therapist matches the data gathered in the process of administering the assessment with the scoring criteria. Therapists then score the highest level at which there is a clear pattern of performance. If the behaviors which have been recorded on a specific task (i.e. dressing, child care) appear to span two levels of performance, an intermediate score such as 3.5 or 4.5 may be recorded. If at least four tasks within an area are scored, a mean score is calculated for that area.

Note: the scores which result from averaging often include decimals, however, this scoring system should not be confused with the modes of performance used in current versions of the Cognitive Disabilities Model and thus they should be referred to as mean or average levels rather than modes of performance

The RTI-E can be completed by more than one method (self, care giver, therapist), in that case, record each scoring in the appropriate column on the scoring sheet. The level of agreement or discrepancy can be used also as a measure of the client's self-awareness.

RTI-E: Reporting Form

(prepared by Sarah Austin)

Client Name _____ Assessment Date _____

ID number _____

This Assessment was completed:

By the individual named above

By a caregiver

Name of caregiver _____

Relationship _____

By a therapist after observation of performance.

If more than one therapist contributed data to this assessment indicate which observations were made by which therapist:

DEMOGRAPHIC INFORMATION:

Gender: Male Female Years of education _____ Age _____

Diagnoses _____

Current Employment: None Sheltered/Supported Part Time Full Time

Retired Other _____

Other Current Roles: _____

Current Living Situation (or most recent if in acute care):

Independent (alone or with others who are not acting as caregivers)

Independent with supervision/assistance

In Community Living with Caregiver(s)

Group Home or Board and Care Home

Long Term Care Facility

Homeless or Homeless Shelter

Other _____

**Routine Task Inventory – Expanded (RTI-E)
(Katz, 2006 based on Allen, 1989)**

Scoring Sheet

PHYSICAL SCALE- ADL (score range 1-5)	S	C	T	COMMUNITY SCALE-IADL (score range 2-6)	S	C	T
Grooming				Housekeeping			
Dressing				Preparing/Obtaining Food			
Bathing				Spending Money			
Walking/Exercising				Doing Laundry			
Feeding				Traveling			
Toileting				Shopping			
Taking Medications (1-6)				Telephoning			
Using Adaptive Equipment (1-6)				Child Care			
Mean scale (sum/8)				Mean scale (sum/8)			
COMMUNICATION SCALE (score range 1-6)	S	C	T	WORK READINESS SCALE (score range 3-6)	S	C	T
Listening/Comprehension				Maintaining Pace/Schedule			
Talking/ Expression				Following Instruction			
Reading/Comprehension				Performing Simple/Complex Tasks			
Writing/Expression				Getting Along With Co-Workers			
				Following Safety Precautions/ Responding to Emergencies			
				Planning Work/Supervising Others			
Mean scale (sum/4)				Mean scale (sum/6)			

Scores notations: S = self-report of the client, C = care giver report of behavior, T = therapist observation of behavior, NA = not applicable, NO = not observed,

SCORING: Check the number that best describes the way you perform the tasks (S), or your observations of performance (C and T).

However, if it seems that behaviors from two levels are appropriate, check both and record an intermediate score on the scoring sheet (1.5; 2.5; 3.5; 4.5; 5.5).

The number recorded is the cognitive functional level (1-6); the intermediate score may parallel to performance modes .4 or .6.

It may parallel to the FIM motor factor for the Physical scale-ADL:
6= (FIM 7-6) independent, 5= (FIM 5) modified dependence with supervision, 4 = (FIM 4) minimal assistance, 3 = (FIM 3) moderate assistance, 2= (FIM 2) complete dependence with maximum assistance, 1 = (FIM 1) total assistance.

ROUTINE TASK INVENTORY - EXPANDED

PHYSICAL SCALE- ADL

SCORING: Check the statements within each level that best describe your observations of performance. If it seems that behaviors from two levels are appropriate check both.

A. Grooming (Care of hair, nails, teeth; cosmetics)

1. Ignores personal appearance.
 - Does not spontaneously cooperate with, or resists, the care giver's help.
 - May change body position for a few seconds on command.
2. Needs total grooming care.
 - May cooperate with efforts of others by spontaneously moving hands, feet, or head, or holding head still, or may resist the care giver's help.
3. Does daily grooming (brushing teeth; washing hands or face or both).
 - May need to be reminded, or
 - May fail to follow typical procedures (i.e., washing face after applying makeup), or
 - Quit before completion of task, or
 - May not use sharp instruments required for nail trimming safely, or
 - May not shave safely with a non-electric razor.
4. Initiates grooming tasks and follows typical procedures to completion of task but neglects features that are not clearly visible.
 - May not match makeup to skin tones, or
 - May not shave all parts of the face and neck for men or underarms and legs for women, or
 - May neglect the back of the head or body.
 - May not brush all teeth surfaces carefully or floss.
5. Initiates and completes grooming without assistance.

B. Dressing

1. Must be dressed by care givers and does not spontaneously alter position of the body to facilitate dressing.
 - May stand, sit, lift arm or leg on command.

2. Spontaneously alter the position of the body to assist with donning garments presented by care givers.
 - May be unable to dress self with upper or lower extremity involvement, or
 - May resist care giver's help, or
 - May need total assistance with fasteners shoes/slippers, or
 - May require support for sitting/standing balance.
3. Dresses self. May have gross errors in selection of method of dressing.
 - May need to be reminded to dress, or
 - May ignore weather conditions, social conditions (e.g., dining out, guests), social customs (e.g., underwear on top, garments inside out or backwards, misuse of sex-specific garments), button alignment, many layers of clothing, or daytime versus night time garments, or
 - May require assistance to finish dressing, bra fasteners, zippers, laces, or
 - May require assistance for physical disability.
4. Dresses self. May have minor errors in selection or method of dressing.
 - Colors or patterns of garments may not be coordinated, or
 - May disregard the appearance of the back of garments, or
 - May require a limited choice of garments.
5. Selects own clothing and dresses without error.

C. Bathing

1. Does not try to wash self and is given a sponge or bed bath by another person or uses a mechanical lift for transfer to bathtub.
 - May move body position on command.
2. Stands in the shower or sits in the bathtub and may require physical support of one or two care givers.
 - May not try to wash self, or
 - May move body parts to assist the care giver, or
 - May resist the care giver's help, or
 - May refuse to enter the shower or bathtub.

ROUTINE TASK INVENTORY - EXPANDED
PHYSICAL SCALE- ADL (continued)

3. Bathes self using soap and washcloth in a repetitive action.
 - May need to be reminded to bathe, or
 - May not bathe entire body unless given verbal or tactile direction, or
 - May refuse to soap the entire body, or
 - May not follow typical procedure; neglecting to use soap, rinse, or dry, or
 - May require light assistance to place legs, come to stand, maintain balance.
4. Bathes the front of the body and no physical assistance required.
 - May not bathe the back of the body, or
 - May not rinse shampoo from the back of the hair, or
 - May not remember to use deodorant, or
 - May not check water temperature for safety before bathing.
5. Bathes without assistance, using shampoo, deodorant, and other desirable toiletries.

D. Walking/exercising

1. Walks, sits, stands, changes position or transfers from bed to chair with physical guidance. May be bedridden/require guardrails, or
 - May remain in or be tied to a supportive chair, or
 - May not notice objects that obstructs his or her path, or
 - May require tactile assistance to bend knees.
2. Is aware of physical comfort/discomfort.
 - Initiates walking, standing, sitting, turning over in bed, climbing stairs within physical capacity.
 - May not recognize physical disability and require restraint from these movements, or
 - Follows the lead or pointed direction of others, or
 - May pace or wander about aimlessly without regard for surroundings, or
 - May not initiate movement to do a familiar activity such as going to the dinner table, bathroom, or
 - May resist the guidance of others, or
 - May not be able to stop compensatory actions when doing therapeutic exercises.

3. Initiates walking within a room to do a familiar activity and may be trained to follow an exercise program after months of practice.
 - May get lost unless escorted from room to room, or
 - May pace or wander about and manipulate physical objects that happen to capture attention, or
 - May require constant assistance, carefully monitored to sustain therapeutic exercises.
4. Walks in familiar surrounding without getting lost and can be trained to follow an exercise program after weeks of practice.
 - May require an escort in unfamiliar surroundings, or
 - May refuse to go to unfamiliar places, or
 - May need to be watched while exercising to avoid compensatory actions and to answer questions about established therapeutic exercise program.
5. Goes about new grounds or city and finds way home or follows a demonstration exercise program and learns requirements within 2-4 sessions.

E. Feeding

1. With intact oral-bulbar function, chews and swallows voluntarily.
 - May need food placed in hand or mouth or prompt chewing/swallowing, or
 - May need hand over hand guidance from plate to mouth, or
 - May eat food with fingers, or
 - May need to be told to chew, or
 - May need intervenous feeding.
2. Feeds self with spoon or non-slip or scoop-edge plate when someone is present most of the time.
 - May eat non-edible objects, or
 - May not use utensils correctly, or
 - Liquids may be spilled and solid food may be dropped, or
 - May ignore packaged items requiring opening (i.e., crackers, milk cartons), or
 - May require reminders to finish eating and intake may be very slow.

ROUTINE TASK INVENTORY - EXPANDED
PHYSICAL SCALE- ADL (continued)

3. Uses table utensils/opens most standard food packages when food is presented by someone else.
 - May require restricted access if intake is restricted, or
 - May spill food and not recognize mess or make no clean-up attempt, or
 - May not use table manners expected by social standards, or
 - May not judge when enough has been eaten or meal is complete, or
 - May require pre-cut food.
4. Everyday table manners are consistent with social standards.
 - May not share a limited quantity of food with others, or
 - May insist on foods, portions of favored foods that are harmful to self or inconsiderate of others.
 - May require assistance to avoid burns, season food, open unfamiliar containers.
5. Considers the size of food portions and shares a limited quantity of food with others.
 - Usually self-monitors a balanced diet.
 - Talks, reads, listens while eating with good manners and facial hygiene.
 - Cuts own food, opens containers, varies seasoning and condiments on food.

F. Toileting

1. Fails to control bowel or bladder, and may require mechanical lift for transfer.
2. Uses the toilet inconsistently or when assisted by care giver
 - May void in unacceptable locations, or
 - May need to be escorted to the toilet, or
 - May need to be positioned on the toilet, totally assisted with clothing, hygiene, adaptive equipment.
3. Uses the toilet or communicates need to defecate.
 - May need to be reminded to go to the bathroom, use may be inconsistent, or
 - May need to be reminded to flush toilet, close door, or
 - May not adjust garments correctly (e.g., zipping up zippers), or
 - May not wipe the body clean.

4. Cares for self at toilet completely.
 - May need to have the location of an unfamiliar bathroom pointed out, or
 - May need to be escorted to an unfamiliar bathroom, or
 - May take several months to consistently follow a new bowel/bladder program.
5. Cares for self at toilet completely and locates an unfamiliar bathroom with little or no assistance.

G. Taking Medication

1. May swallow medication when pills/liquid is placed in mouth.
 - May need to be told to swallow.
2. If taking medications or vitamins, does not obtain them; placed in hand by others who observe swallowing.
3. When directed goes to place where pills are located picks up and swallows pills.
 - May not distinguish among types of pills (e.g., vitamins versus psychopharmacologic drugs), or
 - May not know what he or she is taking, or
 - May not recognize that it is time to take medication.
4. Initiates taking pills in simple dosages at routine times, such as with meals or at medication time.
 - May use a pill dispenser to keep track of medications, or
 - May not understand why a psychopharmacologic drug was prescribed, or
 - May refuse to take psychopharmacologic drugs, or
 - May need supervision to take medications correctly.
5. Is responsible for taking routine medications in correct dosage at correct time.
 - Explains why medication was prescribed and reports individual effects.
 - Compliance with complicated dose schedules (such as every six hours) may be inaccurate, or
 - May have trouble distinguishing concepts such as drug effect, drug side effect, drug synergies, drug tolerance.
6. Complies with new dosages, learns drug concepts, anticipates drug effects and need for refills.

ROUTINE TASK INVENTORY - EXPANDED
PHYSICAL SCALE- ADL (concluded)

H. Using Adaptive Equipment

1. Ignores adaptive equipment and does not spontaneously cooperate with care giver's efforts to adjust/assist with equipment.
 - May move body part on command.
2. Grasps adaptive equipment (i.e., walker, crutch, wheels or wheelchair) and approximates demonstrated use.
 - May attempt to propel wheelchair but not realize it is locked, may go in circles, may run into objects/walls.
 - May cooperate with application of splints/positioning devices by spontaneously moving hands, head, feet, or
 - May refuse to grasp equipment, resist physical guidance with walker, parallel bars.
3. Initiates repetitive actions with adaptive equipment such as walkers, wheelchairs, eating utensils, dressing aids, transfer boards.
 - May require assistance with wheelchair brakes, footplate, clothing, or equipment may be procured and put on by care giver.
4. Imitates use of adaptive equipment when actions are familiar and intended effect is clearly visible.
 - Use may be stereotyped without spontaneous adjustments in pace, pressure, direction of movements, position in space for more effective outcome.
 - May require many repetitions to train sequence of actions for less familiar devices, or
 - May not consistently follow procedures (i.e., locking wheelchair using grab bars).
5. Learns use of adaptive equipment.
 - May not anticipate safety hazards/secondary effects of appliance use (i.e., wet floor/chaffing splint straps), or
 - May not plan for long-term maintenance of appliances.
 - May require assistance in un adapted or unfamiliar environment.
6. Learns use of adaptive equipment.
 - Plans for maintenance/replacement of appliances.
 - Plans own adaptations in unfamiliar environments.

ROUTINE TASK INVENTORY- EXPANDED COMMUNITY SCALE- IADL

SCORING: Check the statements within each level that best describe your observations of performance. If it seems that behaviors from two levels are appropriate check both.

A. Housekeeping

2. Does not participate in or is not directed to do any housekeeping tasks.
3. When directed, uses repetitive familiar actions (e.g., dusting) to be of assistance in housekeeping.
 - May not come close to an acceptable level of cleanliness, or
 - May not complete the usual procedure to do a task, or
 - May unnecessarily do the same thing over and over again.
4. Completes familiar, simple household tasks with the intent of getting the job done.
 - May not recognize dirt unless clearly visible (e.g., sees mess on counter top but not on cabinet door), or
 - May not be able to find cleaning supplies that are out of place or in a new location, or
 - May seek/require help with any new household object.
5. Recognizes and cleans less visible dirt (e.g., dust, cobwebs).
 - May not plan for long-term maintenance, or
 - May not reorganize home environment, or
 - May not anticipate home safety hazards.
6. Organizes home environment, plans a schedule for completing chores, anticipates hazards, and plans for long-term maintenance.

B. Preparing/Obtaining Food

2. Does not participate in obtaining own food; food is placed on tray/plate by others.
3. Uses repetitive familiar actions to be of assistance in meal preparation (peels potatoes, pours milk, sets the table); or is directed to pick up tray/ plate or serve self, or may drop in on a restaurant or mission.
 - May not prepare a meal, or be of little real help, or
 - May not recognize mealtime, or
 - May request food without regard for menu, money, availability.
4. Prepares familiar, simple dishes with few ingredients; or initiates picking up tray/plate or serving self; or follows an established routine for obtaining food from restaurant, etc.
 - May not avoid burning food, self, or
 - May not consistently remember to turn off the stove, or
 - May handle a knife or hot food and cooking equipment hazardously, or
 - May make unreasonable requests for food, or
 - May have a few ingredients in diet, inflexible procedures for obtaining food.
5. Supplies ingredients and utensils and follows a new recipe for food preparation, or seeks out • new ways of obtaining food.
 - May not anticipate burning, or
 - May not coordinate the time of several dishes, or
 - May not plan variations by substituting ingredients, or
 - May not anticipate problems with cost, dietary restrictions or adequate nutrition.
6. Plans menus for adequate nutrition and anticipates potential substitutions and problems.

C. Spending Money

2. Does not handle money, or is given no opportunity to do so.
 - May not realize that money transactions are occurring.
3. Hands cash to another person.
 - May require care giver assistance in handling of money, or
 - May not consider amount of cash given or received, or
 - May forget to pay bills, or
 - May run out of money, or
 - May not understand why he or she owes money.
4. Manages day-to-day purchases, but is slow at making change; may calculate correct change with paper and pencil, calculator, or by counting cash; may be given a daily allowance.
 - May not calculate change in his or her head, or
 - May not accurately anticipate weekly or monthly purchases, or
 - May make errors in calculating cost or change.
 - May require assistance in managing money.

ROUTINE TASK INVENTORY- EXPANDED
COMMUNITY SCALE- IADL (continued)

5. Manages routine weekly and monthly purchases and income.
- May not anticipate infrequent major expenses, or
 - May not plan for long-term financial security.
 - May require assistance with new money transactions – auto tellers, wire transfers, credit cards.
6. Anticipates infrequent expenses and plans for financial security.

D. Doing Laundry

2. Dirty clothing, linens are removed by others, or does not have the opportunity to remove.
3. When directed, puts dirty laundry in hamper.
- May not realize that it is time to clean linens, or
 - May not realize that clothing is dirty.
 - May do repetitive actions for hand laundry but does not judge effects of actions.
4. Initiates a request for clean clothes/linens; may put dirty clothes in a hamper; may do familiar hand laundry or use a familiar washing machine to do a load of clothing.
- May not sort or consider care instructions for new garments, or
 - May not distinguish between machine laundry, hand laundry, and dry clean, or
 - May require assistance in using strong or new cleaning agents.
5. Sorts new clothing.
- May not anticipate shrinkage or bleeding of dyes of new garments, or
 - May not anticipate clothing needs.
 - May require assistance to follow instructions/precautions on cleaning agent labels.
6. Anticipates shrinkage and bleeding of dyes without error.
- Anticipates clothing needs (e.g., takes clothes to the cleaners or does laundry ahead of time), or
 - Reads labels and follows instructions/precautions.

E. Traveling

2. May not have an opportunity to ride in a vehicle, or
- May enjoy riding in a vehicle, looking at scenery.
 - May require assistance to get in and out of vehicle.
3. When directed, gets in and out of a familiar vehicle.
- May get lost without an escort, or
 - May not know or may be confused about destination.
4. Independent travels familiar routes in vehicles driven by others.
- May get lost for hours or days on unfamiliar routes, or
 - May stop at every turn to ask for directions, or
 - May avoid unfamiliar routes, or require assistance, or
 - May insist on driving a car, or traveling to new places with negative consequences.
5. Drives a car or finds way in less frequently traveled or unfamiliar routes with personal map and specific directions.
- May make wrong turns or forget when a car is parked, or get on wrong bus, or
 - May be confused by public maps, or verbal directions.
6. Uses a public map to anticipate directions and determine present position, or follows verbal directions.

F. Shopping

2. Does not have an opportunity to go shopping or walks around shops without noticing merchandise.
3. Goes to a shopping district with an escort and looks in windows or notices items on display.
- May not recognize correct change after a purchase, or
 - May not remember what he or she went to the store to purchase, or
 - May accompany another person without an awareness of, or with confusion about, desired purchases, or
 - Without an escort may take items without paying.

ROUTINE TASK INVENTORY- EXPANDED
COMMUNITY SCALE- IADL (concluded)

4. Shops for small, familiar purchases and pays for them.
- May not do comparison shopping or be able to account for money spent during the day, or
 - May try to purchase an item without enough money for selected purchases, or
 - May refuse to purchase inexpensive items because of an exaggerated concern for lack of funds.
5. Does routine shopping for daily/weekly purchases.
- May not anticipate monthly/yearly shopping needs, or
 - May not follow a necessary monthly budget, or
 - May run out of supplies and make multiple trips to the store(s) each day to fulfill daily/weekly needs.
6. Anticipates and plans for weekly/monthly/yearly shopping needs.

G. Telephoning

2. Does not use the telephone or does not have any opportunity.
3. Answers the phone when it rings and may answer even if it does not ring.
- May dial one or two well-known numbers.
 - May not relay message, or
 - May not call a person to the phone, or
 - May forget the telephone number he or she was trying to find, or
 - May take the receiver off the hook.
4. Dials familiar numbers and calls information for new numbers, relays a message.
- May not look up new numbers in the telephone book, or
 - May have trouble locating infrequently used numbers in an address book, or
 - May be slow in writing down new numbers or messages.
5. Looks up numbers in the White Pages or in a personal address book.
- May not use the Yellow Pages or consider sub classifications such as governmental agencies, or
 - May become confused by answering machines, hold buttons or other new options.
6. Uses a classification system to find a number in the Yellow Pages or in the listing of governmental agencies and learns to use new options.

H. Child Care

2. Does not participate in or is not directed to do any child care tasks.
3. When directed, uses repetitive, familiar actions to interact with a child, or be of assistance in child care (i.e., rolling a ball, holding child).
- May leave child if distracted by other stimuli.
 - May not understand actions (i.e., rolling a ball) as supervision.
 - May think child's needs are same as his/her own.
4. Initiates familiar, simple child care tasks (bathing, feeding, dressing).
- May seek or require help with establishing schedule of routine child care tasks.
 - May be unable to vary routine procedures to adjust to changes due to child's growth, un expected occurrences.
 - May not check for potential hazards (i.e., bath water temperature, skin sensitivities to new products, etc.).
 - May recognize immediate problems (crying child) but be unable to infer causes or suggest solutions.
 - May be unable to adjust communications (emotional tone, loudness, content) to needs of child.
5. Manages routine daily and weekly child care tasks.
- May not foresee home safety hazards.
 - May not plan for long-term health maintenance, educational needs of child.
 - May not anticipate need to adjust communication style to needs of child.
6. Organizes tasks in daily/weekly schedule to account for completion of tasks, avoidance of hazards, and maintenance of adequate health/supervision of child.
- Uses new information and applies it when planning/organizing future actions.
 - Anticipates need to adjust communication, style to needs of child.

ROUTINE TASK INVENTORY - EXPANDED COMMUNICATION SCALE

SCORING: Check the statements within each level that best describe your observations of performance. If it seems that behaviors from two levels are appropriate check both.

A. Listening/Comprehension

1. Locates direction from which a sound is coming when sound is accompanied by calling name or using additional verbal, visual or tactile cues.
 May not consistently respond by moving head or eyes, or
 May be very slow (1-2 minutes) in responding, or
 May not show indications of understanding spoke words but may respond to sounds, like a bell, or name.
2. Understands and follows simple directions using single words and short phrases related to immediate physical comfort/discomfort.
 May not sustain attention, unless accompanied by a demonstrated action, or
 May require repetition, or
 May require a slow rate between words, or
 May require a long duration of spoken word.
3. Understands and follows simple directions and forms immediate memory for messages comprised of phrases or short sentences related to immediate personal interests in surroundings.
 May be distracted by irrelevant stimuli, or
 May misunderstand information according to immediate personal interests, or
 May not maintain focus on topic, or
 May not understand a message given at a normal rate and duration.
4. Understands and acts on information contained in a simple conversation about a highly familiar topic and maintains focus on a topic that conforms with past experiences.
 May not understand new information, or
 New information may need to be repeated slowly, or
 New information may need to be accompanied by pointing to locations, showing how or writing down a message.
 May not listen to the conversations of others.

5. Listens to and understands conversations and new information related to past and present experiences. May understand future events (such as warnings) when cause and effects is demonstrated.
 May not understand verbal explanations of cause and effect in new situations and ignore warnings, or
 May not request clarification of/or anticipate the need for, the new additional information, or
 May present own point of view but not understand the points of view of others.
6. Understands conversations and new information related to planning and organizing future events. Considers hypothetical possibilities when verbally expressed and anticipates safety hazards.

B. Talking/Expression

1. Communicates the presence of pain or fear by verbal expressions and/or gesture.
 May not stop screaming, gesturing when problem has been acknowledged, or
 May not communicate discomfort or displeasure.
 May not initiate a sound/gesture for long periods of time.
2. Communicates physical comfort/discomfort/fear via single words and short phrases.
 Words may be produced at a very slow rate, spoken very softly or unnecessarily loudly, and contain sounds that are unintelligible to the listener.
3. Communicates simple messages via phrases and short sentences related to immediate interest in surroundings.
 May not maintain topic, beyond current manual actions, or
 May not present information in a logical sequence, or
 May include irrelevant information, jargon, neologism, or
 May not adjust rate, emotional tone, loudness, or speaking distance when requested.

ROUTINE TASK INVENTORY - EXPANDED
COMMUNICATION SCALE (continued)

4. Initiates communication regarding an immediate goal or a need for assistance to obtain a personal goal. Engages in conversations about highly familiar topics related to past experiences.
- May interrupt the conversation of others, or
 - May include too little or too much information, or
 - May have word finding problems for common words or use abstract words incorrectly.
 - May adjust rate, emotional tone, loudness, or speaking distance only upon request.
5. Communicates interesting and irrelevant information from past and present experiences.
- May not restate or revise information according to listener/social circumstances, or
 - May not respond to a subtle cue to revise a message, or
 - May have word finding problems for words seldom used or have difficulty learning new words, or
 - May react to information containing different point of view by interrupting/talking, or
 - May not shift between speaker/listener roles and contributes too little or too much to the conversation.
6. Communications go beyond his or her own personal experiences to consider the experiences/needs of others and to anticipate events that could have an impact on the lives of others.
- C. Reading/Comprehension**
1. Locates and gives some indication of recognition of pictures, objects, letters, or own name when visual stimuli is accompanied by verbal, tactile and/or gestural cues.
- May not show a consistent recognition, or
 - May be very slow (1-2 minutes) in responding, or
 - May not be able to speak.
2. Reads single words and short phrases related to immediate physical comfort/discomfort, or familiar addresses, greetings, traffic signs.
- May not read for up to a minute, or
 - May require large print with a single word or phrase per page, or
 - May be hard to hear/understand, if read aloud.
3. Reads and repeats back or answers questions on cue to three simple sentences related to immediate personal situation or from familiar headlines, ads, cartoons, bills.
- May take one or two minutes to read the sentences, or
 - May not comprehend the relationships between the sentences, or
 - May not maintain focus on the context, or
 - May misunderstand information according to immediate, personal needs.
4. Reads and gives a verbatim report or answer to questions about one to three paragraphs related to a topic of familiar interest and experience.
- Reading rate may be decreased, or
 - New information may be ignored or misinterpreted, or
 - May not establish a connection between information read and personal actions, or
 - May ignore most written material.
5. Reads and can answer questions or restate content of lengthy material on familiar topics.
- May read newspapers, magazines, light novels, or
 - May not relate precautions in new situations, commercial product use/ road hazard to own situation, or
 - May not be able to answer questions or restate content of new material.
 - May require demonstration of new information to comprehend reading.
6. Reads and comprehends new information and applies it when organizing/planning future actions.

D. Writing/Expression

1. May write own name, or make random marks.
- May be very slow in responding and in producing name/markers, or
 - Name may be hard to read or an approximation, or
 - May stop before name is complete, or
 - May not grasp pen/pencil.

ROUTINE TASK INVENTORY - EXPANDED
COMMUNICATION SCALE (concluded)

2. Writes single words or phrases related to immediate physical comfort/discomfort or familiar example.
 - May not write when an immediate elimination of discomfort is needed, or
 - May not be legible to unfamiliar readers, or
 - May take a minute or two to write 1-3 words, or
 - May require a repetitive demonstration of writing a word, or
 - May not grasp pen or pencil.
3. Writes simple messages via phrases or short sentences related to immediate, personal interest in surroundings or familiar example.
 - May be slow to get started, or
 - May start and fail to complete messages when distracted by something else, or
 - May write lengthy, illogical messages.
 - May not make a connection between writing and communicating.
4. Writes or types (if already knows how) 1-3 simple paragraphs about highly familiar topic or a letter containing a personal request.
 - Introductory and concluding sentences may not be present or considered, or
 - Supporting details may be over-inclusive or sparse, or
 - May repeat the same ideas/topics over and over again, or in stereotype fashion, or
 - May be slow to write a dictated messages, or
 - Messages may not be delivered.
 - Letters may not be properly addressed or have necessary stamp.
5. Writes or types (if already knows how) multiple paragraphs that restate known information or have a simplistic content.
 - May not consider the response of a reader, or
 - May not revise material for different readers, or
 - May not adjust quantity/quality according to external pressures such as deadlines/birthdays.
 - May avoid new information or reproduce it inaccurately.
6. Writes or types multiple paragraphs and pages from an objective point of view, considers readership, follows an organized format, and delivers material in a timely manner.

EXPANDED ROUTINE TASK INVENTORY

WORK READINESS SCALE

SCORING: Check the statements within each level that best describe your observations of performance. If it seems that behaviors from two levels are appropriate check both.

A. Maintaining Pace/Schedule

3. Unable to alter pace or follow a schedule.
4. Works at less than 75% of a normal pace and inflexibly follows a set schedule.
 - May not alter pace in response to prompting to hurry up or slow down, or
 - May not recognize need to change pace, or
 - Once a schedule is learned, may resist any changes, or
 - May require a schedule established by others, or
 - May need to repeat following schedule for several months before it is learn, or
 - May require external allowances for reduced pace and productivity, or
 - May become bored or frustrated and quit.
5. Works at a reduced or normal pace within an established schedule.
 - May not anticipate need to adjust pace, or
 - May need to be told when an adjustment in pace or schedule is required, or
 - May have a high frequency of tardiness, or
 - May not return from breaks on time, or
 - May not consider relevant factors when planning schedule, or
 - May view schedule from own perspective and require assistance to see other perspectives, or
 - May require assistance to prioritize sequence of tasks, or
 - May require assistance to estimate time required to do a task, or
 - Work schedule is disrupted by self-centered concerns.
6. Sets own pace and plans own schedule, considering relevant factors, other perspectives, priorities, and time constraints.

B. Following Instructions

3. Unable to follow instructions without constant, one to one supervision.
4. Able to follow demonstrated instructions, one step at a time and may be trained to follow a series of new steps.
 - May require months of repetition to learn a series of new steps, or

- May not understand verbal or written instructions, or
 - May not generalize instructions from one situation to another, or
 - May not apply prior knowledge to immediate situation, or
 - May require on-site supervision to answer questions, validate procedures, and solve problems.
5. Able to follow a series of demonstrated instructions and can remember a limited amount of new information.
 - May not understand new information presented verbally without demonstration, or
 - May not request instruction, or clarification of instructions when needed, or,
 - May not understand new information presented in written or diagramed form, or
 - May attempt to generalize instructions but fail to anticipate errors, or
 - May require a demonstration to follow the most efficient procedure, conserve materials and supplies, and to observe safety precautions.
 - May take short cuts to make job easier without considering repercussions.
 6. Able to follow verbal, written and diagramed instructions containing new information, requesting clarification, validation, and relevant information which may indirectly effect work performance.

C. Performing Simple/Complex Tasks

3. Unable to perform simple, repetitive tasks without constant, one to one supervision.
4. Performs simple, repetitive work tasks without variation from standard procedure.
 - May require an exact sample to replicate, or
 - May require tasks which involve objects manipulation with clearly visible outcomes, or
 - May require tasks which do not involve a judgment about amount of materials to be used, or recognition of secondary effects, or
 - May not be able to use tools, safety or effectively, or
 - May recognize errors but be unable to correct.
5. Performs several work tasks, using inductive reasoning to vary actions.
 - May require work tasks that involve the handling of material objects, or
 - May require work tasks that do not involve precise standards, tolerance, or set limits, or

EXPANDED ROUTINE TASK INVENTORY
WORK READINESS SCALE (concluded)

- May not be able to do work tasks which involve the manipulation of symbols, concepts, or hypothetical situations, or
 - May not work efficiently in tasks requiring constant adjustment to change.
6. Performs complex tasks using deductive reasoning to plan actions, achieving precise results, avoiding waste, and following the most efficient and effective procedure.

D. Getting Along With Co-Workers

3. Unable to recognize the need to get along with co-workers.
4. Interacts with co-workers through stereotyped conversations and discussions of personal concern.
- May interrupt the work of others, or
 - May repeat the same conversation over and over, or
 - May not add new information to a conversation, or
 - May ignore co-workers, or
 - May alienate co-workers through a disregard for social cues or self-centered conversation, or
 - May require training to interact with co-workers.
5. Associates with co-workers who have common interests and/or similar views of the social environment.
- May be antagonistic or critical of those with different views of the social environment, or
 - May perceive suggestions for improvements as a personal attack, or
 - May alienate co-workers through a failure to collaborate or consider the rights of others, or
 - May relate through an inflexible view of work role as defined by the table of organizations, or
 - May modify work role in a way that does not directly impinge on others but does jeopardize the overall function or reputation of a work unit.
6. Cooperates with co-workers through a flexible fulfillment of work roles to achieve the overall function of the work unit.

E. Following Safety Precautions/Responding to Emergencies

3. Unable to recognize the need for safety precautions.
4. Can be trained to followed fixed safety procedures to prevent emergencies.
- May require several months of repetition to follow procedures consistently, or

- May not see an existing hazardous situations, or
 - May not be able to follow designated emergency procedures, or
 - May require assistance during any emergency, or
 - May not use hazardous materials or tools safety.
5. Learns demonstrated safety precautions and follows procedures in most instances.
- May deviate from safety procedures in an impulsive manner without considering the consequences, or
 - May not see a hazardous situation developing, or
 - May react to emergency in an impulsive manner without considering consequences or judging priorities, or
 - May require assistance to identify hazardous situations and establish safety procedures, or
 - May not meet standards of consistency necessary for jobs at high risk for serious accident or injury.
6. Anticipates hazards, plans safety procedures, and prioritizes actions during an emergency.

F. Planning Work/Supervising Others

3. Unable to plan work or supervise others.
4. Established personal goals and gives orders.
- May not establish personal goals that are relevant to the work situations, or
 - May not distinguish between personal goals and job requirements of subordinates, or
 - May give orders to authorities or co-workers who do not report to him/her, or
 - May demand immediate and unquestioning compliance with orders that seen unreasonable to co-workers, or
 - May avoid planning and supervisory activities.
5. Plans inductively and negotiates through trial and error with subordinates.
- May not analyze, evaluate, or synthesize data objectively, or
 - May not recognize significant details or over value selected information based on personal prejudicious, or
 - May not be able to influence subordinates through negotiation, explanation, or persuasion, or
 - May not be able to anticipate changes in work conditions, or
 - May attack or ignore subordinates who offer evaluation or criticism.
6. Plans objectively via inductive and deductive reasoning and influences subordinates and is influenced by subordinates.

Table 1: RTI Research Summary

RTI version	Method	Population	Results	Reference
RTI original 2 areas ADL, IADL Caregiver report	Establish psychometric properties	Psychiatry Dementia	Reliability: high inter-rater, test-retest and internal consistency	Allen, 1985 Heimann et al 1989 Wilson et al, 1989 Allen et al, 1992
RTI expanded 4 areas				Allen, 1989 Unpublished
Only IADL scale Self report during interview	Group comparison and prediction of IADL performance	Elderly with depression (n=31) healthy controls (n=30)	RTI & LACL r=.70; & MMSE r=.63; & GDS r=-.60 Sig differences between groups	Ziv et al, 1999
Only items that have parallel tasks on CPT Caregiver report and therapist observation	Group comparison and correlations of RTI and CPT	Dementia (n=30) and elderly healthy (n=30)	Sig differences between groups for both caregiver & therapist High correlations r=.72 to .94 with therapist; moderate with caregiver r=.29 to .56	Bar-Yosef et al, 1999
Only IADL scale Self report during interview	Sub-groups comparisons and correlations of RTI and KELS	Elderly in the community (n=92) 3 group according to living situation Community, sheltered, day care	Sig correlation between RTI and KELS r=.89 p<.000 Sig difference on RTI between groups F=30.09 p<.000 Scheffe post hoc: day care group differs from the other 2 groups	Zimnavoda et al, 2002
3 areas except for work scale and safety item Self report during interview, and Caregiver report	RTI in elderly stroke population, correlations with CPT	Elderly post Stroke in the community (n=30)	Sig moderate to high correlations between self and caregiver report on RTI areas except safety Sig correlations between RTI and CPT	Wachtel, 2003
All areas Therapist observation	RTI as outcome – correlations and explained variance by basic cognition and executive functions (EF) BADS & EFPT	Adult chronic schizophrenia (n=31)	EF (BADS) explains RTI IADL & Communication variance beyond basic cognition (Cognistat) Sig correlations with EFPT components	Tadmor, 2004 Katz et al, revised 2005
3 areas: IADL, communication, work readiness Caregiver report	OGL: EF treatment effectiveness RTI as outcome	Schizophrenia acute phase in day hospital (n=17) pre (n=11) post		Keren, in progress
RTI-2 (1992) 4 areas				Allen et al, 1992
All 4 areas Self report during interview	ACL-90; RTI-2 Time I discharge Time II follow-up	Adult psychiatric inpatients (n=40)	ACL & RTI Time II: IADL r=.38 p<.016 ADL r=.20 NS R=.45 for psychotic subgroup	McAnanama et al, 1999
All 4 areas Self with caregiver report during interview	Treatment effectiveness study: experimental CD ADM tasks vs control sheltered workshop	Schizophrenic post acute experimental (n=11); control (n=8)	Sig change pre-post within group; sig difference between groups post; RTI & BPRS r=.50 p>.01	Raweh & Katz, 1999
Not clear what areas were used Self report during interview	Correlation with WCST	Adult men with schizophrenia (n=33)	Sig correlation WCST & RTI perseveration r=-.59; categories r=.68 p<.01	Secrest et al 2000

RTI: Physical scale- ADL; IADL; caregiver scoring

RTI-2: Self-Awareness disability; Situational awareness disability; Occupational role disability; Social role disability; Scoring options: S=self-report; C=caregiver report; O=observation of performance (therapists)

RTI Expanded: Physical scale-ADL; Community scale-IADL; Communication scale: Work readiness scale;
Scoring options: S= self-report; C=caregiver report; T= therapist observation of performance

In the following Table 2 a summary of means and standard deviations of the above data from the studies presented in Table 1 is presented. This summary is intended to give an idea about the range of means of the various populations tested and comparisons between the sources of the data (S, C, T). However, as the RTI is not a norm referenced test and the samples are not large, the data maybe used only to get a general idea of your expectation.

Table 2: Means and standard deviations

Populations	* Mean (SD)	Reference
Elderly with depression (n=31) healthy controls (n=30)	S 4.72 (.98) S 5.82 (.33)	Ziv et al, 1999
Elderly with dementia (n=30) elderly healthy (n=30)	T 3.43 (.90), C 3.02 (.66) T 5.23 (.48), C 5.34 (.35)	Bar-Yosef et al, 1999
Elderly in the community (n=92) 3 groups	S 5.77 (.40) 5.46 (.73) 4.0 (1.0)	Zimnavoda et al, 2002
Elderly post stroke in the community (n=30)	S 3.84 (1.18)	Wachtel, 2003
Adult chronic schizophrenia (n=31)	T 4.07 (.51)	Tadmor, 2004 Katz et al, revised 2005
Adults with schizophrenia acute phase in day hospital (n=17) pre (n=11) post	C 4.35 (.82) pre C 4.63 (.86) post	Keren, in progress
Adult psychiatric inpatients (n=40)	S 4.81 (.45)	McAnanama et al, 1999
Schizophrenic post acute E (n=11); Control (n=8)	C 5.16 (.69) 4.53 (.73)pre C 5.41 (.50) 4.67 (.72) post	Raweh & Katz, 1999
Adult men with schizophrenia (n=33)	-- no data	Secrest et al, 2000

* S= self report, C= caregiver, T = therapist

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