Personal Communication Update Report: To determine the potential benefits of extending occupational therapy intervention to include process training in the rehabilitation of psychiatric clients with cognitive impairment

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Methodology

Each psychiatric consultant was asked to refer suitable clients according to the inclusion criteria

Inclusion Criteria

- Diagnosis of schizophrenia (DSM IV)

- Impaired cognition

- Involvement in an ongoing O.T. / rehab program

Exclusion Criteria

- Unstable mental state

- Inability to work in group setting

Each client was screened by an O.T. using the Allen's Cognitive Level Screen (ACLS) to determine their cognitive functional level in order to estimate the degree of facilitation required by the client in the learning process. Each client was screened using a self-rating scale to determine the presence (and their subjective experience) of cognitive difficulties. Each client was to be assessed using a battery of standardized assessments to determine the extent of their cognitive deficit in comparison to the normal/TBI population. Support from the Psychologist was to be given in reviewing the data.

Assessments included: TEA, LOTCA,DOOR&PEOPLE, RIPA-II, BADS

Process

In total, 10 clients were referred for the program, 8 from the Rehab service and 2 from the Acute service. 2 Rehab clients were rejected based on the exclusion criteria. All 8 clients indicated difficulties with attention on self-rating scales. Only one client undertook the full battery of assessments. It was found that at that level (ACLS) 4.6 scores were below the scales for the control groups (except on the RIPA-II and since the battery took 10 hours in total to complete it was decided to continue without standardized assessment of the other 7 clients at that time.

The 8 clients assessed with ACLS were found to be at the following levels

1 - level 4.0

2 - level 4.2

2 - level 4.6

1 - level 5.2

2 - level 5.4

Level 4 on the ACLS indicates 'goal directed activity', whereby cognition is moderately impaired and independent new learning does not occur. Therapist intervention and facilitation is required in new activities.

Level 5 on the ACLS indicates 'exploration and independent learning' whereby cognition is mildly impaired. Verbal instructions can be given without demonstration and standby assistance only is required.

In order to try to accommodate the different functional levels, the clients were split into 2 groups, a higher, level 5 group and a lower, level 4 group. It was necessary however to move the highest functioning of the level 4 clients into the higher level group to even numbers and allow sufficient facilitation to take place in the group.

The level 4 group needed to have the material adapted to include a three point rating scale, and less information on the page with simplified instructions. it was anticipated that they would require more facilitation with meta-cognitive components.

Schedule
Both groups were scheduled to run for 1 hour sessions, three times a week (mon/weds/fri)

Results
Lower, 'level 4' group

Speed of processing was slower in this group and it took longer than anticipated for the group to complete half of the first module. In total it took at least twice as long as projected to complete the 10 sessions. The groups attendance was sporadic and punctuality was a problem, for some clients, however, they did generally express interest and enthusiasm for the intervention. It was found that they did not sustain benefits, this was demonstrated by the poor use of feedback mechanisms within the tasks, their overly high estimates did not change and constant facilitation was needed to compensate for their difficulties with executive functioning. The

high ratio of staff to clients (1:2) was another negative factor and although they were able to keep up with the higher group in terms of progress, the length of the sessions to do so, extended to more than 1 ½ -2 hours towards the end of the 2nd block (2nd weeks exercises). There were also a number of other minor issues that were considered, such as the feedback process began to fuel one client's paranoia, for example, and it was decided to disband the lower level group, until further consideration of the suitability of the intervention could be undertaken.

Higher 'level 5' group

Attendance and punctuality reflected the high interest shown by the clients in this group. Most of the clients improved their meta-cognition, demonstrated by the improved use of self-awareness and feedback mechanisms to estimate abilities.

It was noted the ease with which challenges could be offered to higher functioning clients, an aspect which is difficult to achieve in the other rehab programs currently available. Some of the clients expressed more self-confidence and have continued to attend the process training group despite disengaging from other parts of the rehab/acute OT programs. It was also evident that some of the higher group, were able to make abstract links between group tasks and functional activities and their scores were maintained even though the challenge of the tasks over time were increased. The group has continued to date and other clients with an ACLS score of 5.0 and above (with diagnosis odf depressive illness) have been successfully integrated into the group. It should be noted that the client with an ACLS score of 4.6 has continued in the group but experiences more difficulty and requires more individual facilitation to keep up with the other group members as well as the pace of the group and his continued inclusion is not expected. It is envisaged that he will continue on a 1:1 basis or in a smaller group with other clients of similar cognitive level. This client is the one that the standardized assessments were done on and he scored very low percentiles in the TEA, D&P, Bads-impaired and was in the Moderate ranges mostly on the RIPA-II, Interestingly he tops out on the LOTCA.

It was also noted that these clients can use the the visual processing as a foundation module as well as attention as its usually one of their strengths, the use of visual cues by these clients is a hallmark characteristic, and they dont tend to have perceptual/visual processing difficulties. (most of those with positive symptoms tend to experience auditory interference, and actually find the attention module more difficult, when focusing on auditory selective attention. I suppose they spend half their time trying to block out auditory stimuli!!) I therefore used the first two weeks of the attention module and the first two weeks of the V.P. module. we have just finished the 3rd week of the attention

module which was really liked by the clients as it is getting more functional.

A couple of the groups original members have since gone on to sheltered employment, these were clients who had never engaged in OT before, and I believe the group was a catalyst for them (I now think they were underchallenged, in the activities we had previously offered!) and they were suprisingly highly competitive with themselves in the exercises/tasks. The clients also seemed to love the classroom atmosphere and guarded their workbooks with pride, in Bermuda many of these people have had limited education and are normally threatened by 'academia' type activities.

I am now in the process of sharing this information and techniques with the other OTs and a couple of them have started to use the Brainwave Material with individuals for short sessions, again these are clients we find hard to engage normally.

We also need to look at the use of assessments as the Standardized ones have given me a good understanding of what we need to assess but since the majority of our clients fall below the scales for normal controls we need to establish what the extent of impairment is in the impaired or psychiatric population (we already know they are impaired, its to what degree) like the RIPA-II, we need assessments like the Thames Valley Test Company ones.

Comments written by clients in the higher level group:

I have found this

"interesting"

"improves concentration"

"uses skills"

"fun"

"Competitive"

"makes me think"

"causes me to concentrate more"

"helps concentration"

"Puzzles very helpful"

"more confidence"

"it helps me to think of positive things"

'its been fun at times"