

Differences of thought-processes when Occupational Therapists and Occupational Therapy students do motion analysis.

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Introduction: Motion analysis does not stand alone, but is tied up with occupational therapists' overall clinical reasoning. The present study provides clues to the improvement of observation skills training in students by verifying differences in motion-analysis thought-processes of occupational therapists, who were considered to be proficient, and occupational therapy students, who were considered to be unskilled.

Objectives: To verify differences in motion-analysis thought-processes between experienced occupational therapists and occupational therapy students who are observing a motion picture of a disabled person occupational performance

Methods: Ten occupational therapists with more than 3 years of experience (1 male, 9 females) and ten 3rd grade occupational therapy students (university level, 5 male and 5 females) volunteered to participate. The students had finished motion analysis classes.

The seated volunteers watched a video of a man in his thirties walking 10 meters, doing a wheelchair-toilet transfer and putting on a shirt. He had impairments of the right leg, and dexterity in the left hand stemming from a traffic accident five years ago. Semi-structured interviews were conducted directly after the observation and the volunteers were asked to describe their thoughts during observing. Kinoshita's Modified Grounded Theory Approach was used to analyze the data.

Conclusion: The following concepts were generated: 1) Grasping actual situations, 2) Interpretation, 3) Pursuit of cause, 4) Comparison between normal and pathological movement, 5) Comparison with other occupations, 6) Questioning, 7) Relativity of environment and body, 8) Integration with the whole, 9) Treatment program.

The occupational therapists were found to consider most concepts interactively as if using alloys of concepts to arrive at a treatment plan. The students' thought-processes were limited to pursuing causes and interpretation based on a grasp of actual situations. They did not seem to consider integration of the whole and a treatment program.

Discussion: The experienced occupational therapists observed the client using multiple perspectives, picked up on movements important for treatment and considered the treatment program. It seems desirable that education of motion analysis endows students with a wider range of perspectives, notably relationship between movements and movements (pathological and/or in other occupations) and with the environment.