DETERMINING CLIENT EFFORT: UNDERSTANDING THERAPISTS' PRACTICES

by

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The undersigned hereby certify that they have read and recommend to the Faculty of Graduate Studies for acceptance a thesis entitled "Determining Client Effort: Understanding Therapists' Practices" by Nancy Boutcher in partial fulfilment of the requirements for the degree of Master of Science.

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DEDICATION

For Nicole

I could have done this without you, however it would have been so much harder, been much more stressful, taken longer, and the dog would have destroyed the house.

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ABSTRACT

For over 20 years occupational therapists have been using functional capacity evaluations to provide information about individuals' ability to work after a musculoskeletal injury. An important component of these evaluations is the determination of the clients' level of effort during the assessment. Only when a client puts forth high effort are the results considered an accurate measure of their work ability. This qualitative study explored therapists' perception of the process of determining effort. Consistent with the literature, the results show that effort is a complex construct that is not easily defined, understood, or consistently assessed in practice. The participants in this study spoke about their own struggles defining, explaining, and assessing effort within the medico-legal context of an insurance system. The study results suggest support is needed for clinicians to navigate multiple client contexts, and the term 'effort' needs to be conceptualized in line with current knowledge about disability.

LIST OF ABBREVIATIONS USED

WCE	Work capacity evaluation
FCE	Functional capacity evaluation
ECE	Estimated capable earnings

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Chapter 1 Introduction

What does it mean to be "able" to return to work after an injury? How does someone prove that a worker is or is not "able"? Who decides what counts as proof, and on what basis? This research addresses such questions, inquiring about the decision-making processes of occupational therapists when they are tasked with determining clients' ability to return to work. The central focus of this study is the evaluation of work capacity and how therapists determine whether clients are performing their best during evaluations of function.

Insurance companies, including workplace health and safety commissions, require information about their claimants' ability to return to the workforce after a workplace injury. This information helps insurers make decisions about appropriate rehabilitation programs, which medical services are appropriate, and the amount of financial compensation awarded to the injured worker. Often, the insurer and the claimant are unable to agree on the claimant's residual earning potential after an injury, particularly in cases of musculoskeletal injuries that result in chronic pain (Chappell, Henry, McLean, Richardson, & Shivji, 2006; Isernhagen, 2009; Lechner, Bradbury, & Bradley, 1998; Strong & Westmorland, 1995; Vanderploeg, 2001). As a result, the insurance industry turns to healthcare professionals, including physical and occupational therapists, to provide unbiased, impartial evaluations and information on their claimants' work ability. The insurer considers the results of such assessments, known as functional capacity evaluations (FCEs), as objective information that addresses concerns regarding the

workers' subjective self-reports (Strong, 2002). This thesis explores therapists' perceptions of the process of conducting such evaluations.

The first functional capacity evaluation was developed by Leonard Matheson, at the Work Preparation Centre at Rancho Los Amigos Hospital, California in 1975, followed by the first commercially available evaluation in 1983, the Polinsky Functional Capacity Evaluation (Isernhagen, 2009). Subsequently, many variations of FCEs were created into the early 1990s, including the most widely used systems by Blankenship, Isernhagen, Key, and Matheson (Isernhagen, 2009; Matheson et al., 2009).

Functional capacity evaluations—often called work capacity evaluations (WCEs)—have been described as adequately measuring an individual's work ability only when the evaluee exerts "sincere", maximum effort during the testing; therefore an important component of the evaluation is determining whether the individual demonstrated maximum effort during the assessment (Baker, 1997; Sindhu & King, 2009; Strong & Westmorland, 1996). There are numerous reasons why a person might perform submaximally, which will be discussed later; however the concern of the insurer lies with those individuals who might be intentionally feigning or exaggerating their disability to avoid work or maintain financial compensation (Matheson et al., 2009; Sindhu & King, 2009). For the people experiencing injury or disability, it is equally important to be able to accurately show when they are engaging with maximal effort, since a lot is at stake for the individual. Thus, accurate methods to determine level of effort are important to both the insurer and the persons being evaluated.

The methods used to assess effort have been questioned by clinicians and researchers in the field since the mid 1990s, a debate ongoing today; however as the

literature review will reveal, little has changed in clinical practice, despite the dearth of evidence supporting the validity and reliability of available and recommended methods. Further, few studies have been conducted from the evaluators' perspective with respect to determining client effort. From workplace anecdotes among therapists, at least some evaluators find this aspect of functional capacity assessment challenging.

The current research explored how therapists working in the province of New Brunswick, Canada, define and determine client effort when performing functional assessments. The analysis and interpretation of that data sheds light on whether there is consistent understanding of the construct, whether there are consistent methods used in practice, and what factors influence therapists' decision-making processes. The terms work capacity evaluation and functional capacity evaluation are used interchangeably throughout this thesis.

Chapter 2 Literature Review

Workplace injuries affect a large number of Canadians with an annual incident rate of 307,802 lost time claims reported by the Association of Workers' Compensation Boards of Canada in 2008. In 2010, payments issued by the workplace compensation board of New Brunswick (WorkSafeNB) to cover the cost of the wage portion of all long-term claims equaled $43,383,000. This number is deflated from the total claim cost as it includes only wage loss and does not include the injury-related medical expenses for services received by the injured workers (WorkSafeNB annual report 2010, p. 104). In parts of Canada, it is estimated that 80% of all workplace compensation claim costs are from the 20% of injured workers who are on long-term claims usually resulting from a soft tissue injury (Geary, 2006; Wickizer, Franklin, Plaeger-Brockway, & Mootz, 2001). An extended or long-term claim is one that has a loss of earnings for one year or longer (Croucher, 2007).

Given these high claim costs, insurers feel some urgency to have injured workers returned to the workforce as soon as possible. Insurers require accurate information regarding the injured workers' ability to return to their pre-accident employment, alternate employment, or in some cases, their overall estimated earning potential with some degree of remaining disability. In WorkSafeNB's compensation system, this potential is called estimated capable earnings (ECE) and is calculated to determine the amount of long-term disability payment that an individual will receive. Insured workers receive more compensation money if their ECE is low, whereas the insurers save more money if the injured worker's ECE is high. If a worker is evaluated as still having

significant earning potential, then they require less compensation to make up for the earning potential lost due to injury.

With the often-competing interests of injured workers and insurers, there is a significant responsibility for clinicians to be able to accurately determine and defend their conclusions about work ability, including level of effort put forth by the person during a work capacity evaluation. In this area of practice, objectivity on the part of the evaluation and evaluator is valued and considered best practice (Chappell et al., 2006; Isernhagen, 2009; Matheson et al., 2009).

Work capacity evaluations are typically paid for by the insurer and are performed by occupational therapists, physiotherapists, and kinesiologists. In New Brunswick, the provincial workplace compensation system requires that occupational therapists or physiotherapists complete the evaluations. In 2010, 364 WCEs were completed in the province (H. Murray, personal communication, February 22, 2012).

Before discussing client effort, the key focus for this research, the next sections will discuss WCEs to provide the context in which evaluators are assessing client effort.

2.1 Work Capacity Evaluation

2.1.1 Purpose of the WCE.

The main reasons insurers request WCEs are to provide direction and detailed information on physical abilities, workday tolerance, and restrictions, and to determine the worker's effort, attitude and compliance (Chappell et al., 2006; Isernhagen, 2009; Matheson et al., 2009; Strong et al., 2004b). In some cases the evaluation's purpose is to determine whether a worker is able to perform a specific job, while in other cases it might be a more general question of the worker's overall abilities unrelated to a specific type of

work. A general evaluation is used more often when determining estimated capable earnings for long-term disability benefits.

If clients do not want to or feel unable to return to their workplace, their motivation for doing the WCE might be to demonstrate their disability, showing that they are not a match to the work, and therefore require continued financial compensation. The insurer's motivation for having the evaluation completed is typically to demonstrate the claimant's ability to return to work, thus reducing the need for compensation. Insurers recognize the possible desire by claimants to not return to work, and as part of the assessment process, ask whether clients put forth their best effort during evaluations. An assessment of high effort implies that the evaluation results are representative of a worker's true and maximum ability. An assessment of low effort implies the client likely has more ability than was demonstrated during the evaluation. It cannot be assumed that full effort will be given when the evaluation takes place in the context of financial gain or loss based on performance (Blankenship, 1994; Matheson 1988). The concept of client effort will be discussed in detail shortly.

2.1.2 Methods of the WCE.

There are many types of WCE protocols and training tools currently in practice in Canada, Europe, Australia, and Asia (Gibson & Strong, 2001; James, 2009; Matheson et al., 2009; Strong et al, 2004b). Some include standardized testing and protocols, whereas others consist of "homegrown" assessments that vary between evaluations (James, 2009; McFadden, MacDonald, Fogarty, Le, & Merritt, 2010; Sandqvist, Kristina & Henriksson, 2005). For the purpose of this research, the WCE protocol used by therapists who

evaluate for the compensation board of New Brunswick will be referenced and discussed in detail.

The protocol used is a Matheson approach; each evaluator receives formal training and certification from Matheson and Associates, a company based out of Keene, New Hampshire, USA. A typical WCE occurs over two consecutive days in a clinical setting or over one day if being performed as part of admission to a treatment program. The goal of the evaluation is to provide information on the client's abilities in all or some of following areas: sitting, standing, walking, working at a low level, climbing stairs, climbing ladders, climbing inclines, maintaining balance, reaching, hand function, carrying, lifting, pulling, and pushing. In the case of a job specific evaluation, only those demands required of the job are tested, whereas in a general evaluation, all of those demands are tested provided they are safe for the client to do given the person's injury and overall health. The weight a client is able to lift, push, pull, and carry determines at which physical demand level the client is able to work. The physical demand levels include sedentary, light, medium, heavy, and very heavy. Each category corresponds to specific weights and frequency of handling those weights over an eight-hour workday (see Table 1).

Various testing equipment, some standardized and some non-standardized, is available to assess each of the physical demands in question. Standardized testing might include the Jamar Dynamometer grip strength test and the EPIC or PILE Lifting Test that have set administration and scoring procedures, whereas non-standardized testing might include any type of task the evaluator chooses to include to have their client performing the physical demand in question. For example, if therapists want to determine the client's

ability to perform reaching, they could have the client prepare a meal as part of the evaluation. The type of task and the length of time of the task are left to the discretion of the evaluator.

Table 1

Physical Demand Characteristics of Work (Matheson et al., 2009)

Physical Demand Level	Occasional 0-33% of the workday	Frequent 34 – 66% of the workday	Constant 67 – 100% of the workday
Sedentary	0 to 10lbs	Negligible weight (less than 5lb)	negligible weight (less than 5lb)
Light	11-20lb	Up to 10lb and/or stand, walk; push/pull of arm or leg controls	negligible weight (less than 5lb) and/or stand, walk; push/pull of arm or leg controls
Medium	21- 50lb	11 – 25lb	Up to 10lb
Heavy	51 – 100lb	26 – 50lb	11 – 25lb
Very Heavy	Greater than 100lb	Greater than 50lb	Greater than 25lb

An evaluator organizes the evaluation in such a way as to gather as much information as possible about the demands related to the compensable injury and required of the person at work. In the case of a general evaluation, the aim would be to determine what the person's maximum abilities are for the relevant physical demands. For example, if the evaluator wants to assess standing tolerance, the evaluator might choose to have the client complete the initial interview and paperwork at a high table where the worker has to stand, or the evaluator might group tests that are completed while standing to have the client working in a standing position for a sustained period of time. Once the entire evaluation is completed, the evaluator compiles the information in a detailed report to present to the insurer.

2.1.3 Results of the WCE.

The information presented in a written WCE report after the assessment includes:

- the purpose of the evaluation
- a statement regarding whether the client provided low or high effort during the evaluation
- a statement regarding the reliability of the client's reports of symptoms and function
- in the case of a general evaluation, the client's overall current physical demand level (the physical capacity demonstrated during the evaluation) which could be sedentary, light, medium, heavy, or very heavy
- the number of hours per day the client is able to work at the job in question or at a particular physical demand level. (e.g., Full eight-hour workdays working at the medium level)
- details about the client's ability in each of the physical demands. For example, how long the client is able to sit or stand and how much weight the client can lift or carry and how often or for how long.
- the client's reported symptoms and symptom management strategies

One of the most significant sections of the report concerns client effort, because it determines whether the results are perceived to be an accurate representation of the person's current maximum abilities and whether or not the referral source (e.g., case managers that act as liaisons between the insurer and the client) is going to be satisfied with the information as a valid indication of client ability/disability.

2.2 Client Effort

As mentioned, a common component in all types of WCEs is the determination of a client's level of physical effort during the evaluation (Chappell et al., 2006; Marmer, Edward, & Cifu, 2002; Matheson et al., 2009; Strong et al., 2004a; Strong et al., 2004b; Strong & Westmorland, 1996). There have been many terms used in the literature to describe client effort. Such phrases include malingering, sub-maximal and maximal effort, symptom magnification, sincerity of effort, high and low effort, validity of effort, and exaggerated pain behavior (Chappell et al., 2006; Strong & Westmorland, 1996). In a clinician's guide for administering WCEs, Chappell and colleagues advocate the use of the phrases "physical effort" and "behavioral presentation" as measurable items that do not give opinions about the client's intent or motivation, while other authors advocate a definition of effort referring to whether or not a client is trying their best during an evaluation (Chappell et al., 2006; Lechner, Bradbury, & Bradley, 1998). In their internationally used training manual, Matheson and colleagues (2009) define physical effort testing as "an individual's level of physical exertion during testing procedures" (Section 8, p. 3). For the purposes of this thesis, the phrase "client effort" will be used to capture the physical and behavioral nature of the term.

Since the 1990s, when the term effort starting appearing in WCE reports, there has been an ongoing debate about what constitutes effort and how it can be measured. Insurance companies are drawn to information that is considered objective and not skewed by the clients' or evaluators' subjectivity, however, client effort is a complex and elusive construct which is difficult to measure (Lechner, Bradbury, & Bradley, 1998; Lemstra, Olszynski, & Enright, 2004; Strong & Westmorland, 1996). Yet the

consequences of reporting low effort in a WCE report can be very negative for the injured worker, including loss of compensation benefits, loss of job, diminished medicolegal settlement, or inappropriate treatment (Lechner, Bradbury, & Bradley, 1998; Strong & Westmorland, 1996; Sindhu & King, 2009). The lack of consistent terminology and methodology to determine effort is concerning for therapists who are responsible for drawing conclusions about effort for their referral source. The terminology currently used implies a rather subjective construct, despite the attempts made to objectify effort. "Effort" implies a degree of motivation, which cannot be measured. Effort is inevitably affected by pain and other symptoms, which are by definition subjective experiences. The concept of determining physical effort has been particularly scrutinized and, in some cases, discouraged by clinicians and researchers (Chappell et al., 2006; Gibson, Allen, & Strong, 2002; Lemstra, Olszynski, & Enright, 2004; Strong, 2002), yet it remains integral to the WCE.

2.2.1 Effort measures.

Measuring client effort came into question by the Ontario Insurance Commission in 1996 when effort was being considered by the commission's designated assessment centers that were responsible for settling disputes between insurers and claimants, particularly about claimants' residual earning capacity. Strong and Westmorland (1996) completed a review of the practices being used to determine effort, which were found to be:

- Waddell's nonorganic signs
- Coefficient of variation in hand grip strength testing
- Bell shaped curve in hand grip strength testing

- Rapid exchange grip
- Correlation between musculoskeletal evaluation and functional capacity evaluation
- Documentation of pain behavior
- Documentation of symptom magnification
- Ratio of heart rate to pain intensity.

Strong and Westmorland's (1996) critique of these practices noted that biomedical models based on cause and effect do not adequately explain clinical variability. This is consistent with research findings that identify many psychosocial factors that predict performance (Geisser, Robinson, Quaintance, & Bade, 2003; He, Hu, Tak Sun Yu, Gu, & Liang, 2010; Lillefjell, Krokstad, & Espnes, 2006; Noonan & Wagner, 2010; Rudy, Lieber, Boston, Gourley, & Baysal, 2003; Wasiak, Young, Roessler, McPherson, van Poppel, & Anema, 2007). Strong and Westmorland (1996) argued that in order for the process of determining effort to be scientific, the approach must be driven by clinical reasoning and theory. Therapists who were identified as key informants in their study supported this argument, valuing reasoning over measurement tools, systems, or numbers. Their review concluded by critiquing the over-reliance on physical strength testing, the inappropriate use of labels, the need for a broad conceptual framework, the variability in approaches to testing, lack of standardization, and concern that quantitative data does not in itself ensure accuracy.

Like Strong and Westmorland, Lechner, Bradbury, and Bradley (1998) found that neither of the methods used to determine effort in FCEs were adequately studied to determine whether they indeed correlated with a particular outcome. They questioned

whether therapists even needed to be commenting on effort and encouraged instead alternate methods to address delayed recovery and to understand the biobehavioral factors affecting pain and disability in order to work toward functional restoration.

A study published by Lemstra, Olszynski, and Enright in 2004 suggested little had changed in the area of practice since the mid to late 1990s. Having randomly assigned 90 patients to exert 60% or 100% effort, they assessed clinicians' ability to accurately assess effort using standard procedures. The methods used to determine effort were based primarily on physical testing, including those tests identified by Strong and Westmorland (1996) and Lechner and colleagues (1998) as problematic. They found most tests used did not accurately distinguish maximal from partial effort; as a result 35% of subjects giving maximal effort were classified as giving submaximal effort. They suggest the current medicolegal context supports the continued use of measures that may be biased against workers (Lemstra et al, 2004). A possible reason for this is that the evaluations are being sought out by insurers who continue to work from a physical and medical frame of reference regarding disability. One could also consider that the evaluations and effort measures have maintained solid ground based on a successful business model that provides insurers with the "objective evidence" they are looking for to manage and suspend claims.

Lemstra and his colleagues (2004) identified one addition to the battery of effort tests that existed in 2004 that seemed to be an attempt to broaden the scope beyond the physical. Through observation, evaluators were to look for the presence of competitive test behaviors displayed by the clients, such as asking for clarification to instructions, adjusting the workspace to maximize performance, and asking to repeat a trial—in other

words, clear behavioral indicators of trying to do their best. The presence of these behaviors is questionably related to level of effort, as there is no way of knowing the intention behind a particular behavior.

The 2004 study by Lemstra and colleagues was one of the first to address the psychometric properties of the tests used to measure effort, examining sensitivity and specificity. The results showed that only 5 of 17 specific tests measuring effort were able to differentiate between maximal and submaximal effort. Again, the practice of determining effort came under question, highlighting the complexity of the process. The authors cautioned therapists on labeling clients in terms of their effort and called for more tests or a combination of tests to be developed and assessed.

Answering the research question of how therapists are defining and determining client effort in current practice will show whether therapists seem to have embraced the recommendations of previous studies to proceed with caution when discussing client effort, to avoid labeling clients, not rely so heavily on physical testing, and to have a consistent understanding and theoretical concept of the construct of effort. It will begin to examine how some clinicians are using clinical reasoning and what factors are influencing the process, contributing to a literature base that has been dominated by quantitative inquiry (Cronin et al., 2013).

2.2.2 Effort within WorkSafeNB.

As discussed, functional assessments performed for WorkSafeNB follow a protocol developed by Matheson and Associates. Matheson and his colleagues (2009) define effort testing as the "client's level of physical exertion during WCE testing procedures" (p. 3). This demonstrates a continued physical approach to performance,

discounting any of the other possible factors affecting effort and performance such as test anxiety, fear of pain, disabling pain, habitual disability behavior, desire to be believed, and malingering (Geisser, Robinson, Quaintance & Bade, 2003; Chappell et al., 2006; Strong & Westmorland, 1996). Many of these factors have been identified in the literature as significant influences on successful return to work (Clay, Newstead, Watson, & McClure, 2010; Eggert, 2010; He, Hu, Tak Sun Yu, Gu, & Liang, 2010; Keough & Fisher, 2001; Lillefjell, Krokstad, & Espnes, 2006; Schult & Ekholm, 2006); however "it is not within the evaluator's purview to state or hint at the reasons behind low effort, but simply to make clear that, at times, the client can do more physically than was demonstrated on the testing day" (Matheson et al., 2009, module 8, p. 5). When considering the complexity of performance and the many factors that influence it, whether a client has greater muscle strength or speed seems irrelevant in the big picture of how they will perform in the workplace. Yet, relating physical impairment to ability seems to be the basis for determining whether a client should have been able to do more during an assessment.

Using a Matheson WCE philosophy, effort should be measured using the following methods:

- Coefficients of variation using a five-position hand grip test. A person is said to be giving high effort on this test when there is demonstrated 10 to 13% consistency between three trials of a grip strength test.
- Bell curve patterns using a five-position hand grip test. A person is said to have given high effort on this test when the maximum strength in each hand position

forms a bell curve when the points are plotted on a graph. A flatter bell curve indicates low effort.

- Comparison of rapid exchange grip testing to maximum voluntary testing. A person is said to have given high effort when their rapid exchange grip strength is no more than 12lb force higher than that demonstrated on the maximum voluntary testing. The difference between the two tests is the time between the intervals of force application.
- Presence of objective signs of exertion. Evaluators are trained to look for signs of biomechanical overload indicating that a physical limit has been reached. Examples include decreased joint range of motion, increased muscle tone, accessory muscle use, and compensatory movements. An individual who demonstrates these signs during testing is said to be giving high effort on those tests.
- Determination of a task endpoint. There are four options for the evaluator to use:
  - Biomechanical: The presence of biomechanical changes in the client's performance suggesting muscle weakness or fatigue.
  - Psychophysical: The client requests termination of the task in the absence of any biomechanical change in performance.
  - Cardiovascular: The client's heart rate reaches the maximum allowable rate of 85% of their maximum heart rate.
  - Safety: The evaluator terminates the task due to a safety concern.
- Appropriate cardiovascular response to large muscle group activity

- Presence of competitive test behaviors. These are behaviors that occur which suggest the client's desire to perform well. For example, asking for clarification on instructions, asking to repeat part or all of the test, making postural adjustments to maximize their ability, and so on.
- Clinical consistencies. Evaluators are trained to consider whether a person is consistent in their presentation during the evaluation. A person is considered to be giving high effort when their performance is consistent during all testing situations over the evaluations.

Once a WCE is completed, the therapist considers the results of the effort measures and makes an overall statement about the injured worker's effort during the evaluation. This study explored evaluators' experiences implementing this protocol.

Similar to the critique raised by Lemstra and colleagues (2004) above, the validity and reliability of these measures of effort are unproven in practice. A recent internal audit of WorkSafeNB's functional assessment outcomes showed inconsistencies between the results of functional assessments of the same client performed by different therapists. The discharge functional assessment results were compared to the results of a work capacity evaluation when the two assessments were completed within a two-week period. One therapist completed the discharge assessment and a different therapist completed the WCE.

In all, data from 27 clients was available for comparison, taken from evaluations performed over a 12-month period. In 44% of the cases (N=12), the WCE rated the client's functional performance lower than the discharge functional assessment; in 40% of the cases (N=11) the WCE rated the client's performance higher than the discharge

assessment. In only 16% of cases (N=4) performance was rated the same in both evaluations. The floor to waist lift, waist to shoulder lift, and bilateral carry lift were compared across the two assessments because those tests weigh heavily into identifying the physical demand level that the client is deemed capable of meeting. In these cases, the difference in clients' observed abilities ranged from 7.8 lb to 16.9 lb. A difference of this degree could move a client from one physical demand level to another which would greatly impact the evaluation of the client's estimated capable earnings and employment potential.

For each of these strength tests listed above, the task endpoints were compared to show whether the therapist was stating that the client had reached their maximum ability and given high effort in the evaluation or whether they were determining that the client had provided low effort. A biomechanical endpoint indicated that a client was demonstrating sign of muscle fatigue or tissue overload and therefore lead to a high effort evaluation, whereas a psychophysical endpoint meant the client requested to terminate the test in the absence of signs of muscle fatigue or tissue overload.

In 12 of 27 cases (44%), there was a difference of greater than 5 lb in at least one of the strength tests outlined above, yet the endpoints for those tests were all biomechanical, indicating that in each case the client had demonstrated his/her maximum ability. In one case, a therapist had determined that a client had provided overall low effort in the evaluation, after lifting and carrying 40lb with psychophysical task endpoints while three days later a different therapist completed a second evaluation of the same client and reported the client had provided high effort, after lifting and carrying 40lb with a biomechanical endpoint for each task. This data was analyzed by WorkSafeNB for

internal auditing purposes and was not meant to be a full study. It does, however, suggest inconsistency between raters when determining the strength, physical demand level, and effort level of the same clients over a two-week period.

Within WorkSafeNB, effort is captured in the return to work policy at the case management level, which states that clients are expected to participate fully in their rehabilitation program and to give their maximum effort. Within the policy there is no definition provided to explain the concept of maximum effort. The case managers turn to the therapists who work with the clients in a functional restoration program to answer the question of whether the client is giving high effort, and thereby to define the term. Often, within the compensation system the terms "objective findings", "objective reason", and "objective evidence" are used to justify why a person is assessed as functioning at a particular level. Case managers request objective assessments and information to assure that a work restriction is justified, and ultimately compensation is justified. This research explores how therapists determine the level of client effort and how they experience the objectivity of that process. Among evaluators there also tends to be controversy regarding what in fact constitutes objectivity in WCEs. This research study provides insight into how evaluators view the WCE in the context of objectivity, and how they balance their own beliefs and the beliefs of insurance representatives in this process.

2.2.3 Objectifying the subjective.

One of the strengths of WCEs is understood to be their objectivity in that they provide accurate information about performance that is not influenced by the desires of the third party payer, the injured worker, or the evaluator. Evaluators are considered by the insurer to be objective when they are able to view the person from a physical and

medical perspective. Objectivity in assessment has become a gold standard when it comes to assessing work ability when there are multiple stakeholders with interests in the outcome. Interestingly, the concept of objectivity itself can be problematic, in this area of practice and elsewhere.

The objectivity of a WCE may be perceived very differently, depending on which party you ask—the insurer, the client, or the evaluator. The evaluator might argue that viewing the worker holistically and considering possible psychosocial influences on client effort achieves objectivity whereas the insurer might view this as being biased and subjective. What should be measured and how it should be measured are contested territory.

One hallmark of objectivity in research and practice is the use of standardized methods that yield the same results between raters. From Janack's (2002) view, the WCE follows a method of scientific inquiry that ensures intersubjective agreement and that will lead to absolute facts about individual performance. High inter-rater and test-retest reliability are valued in the compensation system because insurers believe that ensure assessments are indicative of claimants' true functional abilities. Any evaluator who uses the same standard methods should find the same results, because those results are true, pertaining to real facts. In return to work literature, debate surrounding the objectivity of WCEs calls attention to the lack of standardization, regulation, and the role of the evaluator's subjective interpretation of results (Chappell et al., 2006; Gibson & Strong, 2003; James & MacKenzie, 2007; Strong et al., 2004b; Wasiak et al., 2007). The suggestion is that if evaluations were sufficiently objective—standardized, replicable, restricted to observable facts—they would be able to accurately and reliably get at truth.

However, the idea that standardized procedures with high reproducibility equate with accuracy and reliability may not be the case. Hammersley (2010) critiques the notion that standard procedures will lead to more valid conclusions. He argues that adherence to standardization may increase consistency, particularly with multiple raters, but it may reduce accuracy if reliance on observational and interpretive skills is limited. In other words, partial and incomplete information—information that excludes important aspects of the field—may be consistently produced by any rater. In the field of WCEs, if more than one therapist comes to the same conclusion using particular procedures it is seen as evidence that the objective assessment tool must be accurate, approximating truth. Using Hammersley's argument, this would not necessarily be the case. If work ability is made up of many factors including physical, emotional, environmental, and cognitive components, yet evaluators continue to employ methods assessing only the physical component of the person, then their conclusions about work performance (while consistent) are only part of the story and not entirely accurate.

Another aspect of objectivity within the context of WCEs that provides comfort to insurers is the removal of judgment from the evaluator. The idea that tests are scored using a calculation enhances validity because it frees the assessment from any human interpretation. This is an emphasis on neutrality, impartiality and lack of bias, which is again problematic for assessing the complexities of human performance. It is the very skill of the evaluator to pull together all the known information about the person to form a conclusion or opinion of work ability that is key to assessment. The WCE is one part of the equation. Equally important in the decision making process is the evaluator's insight regarding the motivations of both the insurer and the client and how they influence the

outcome. Hammersley (2010) would argue that the distinctive capabilities of the part of the investigator (and informants) may be essential for producing the knowledge required.

Similarly, Williams (2006) describes how objectivity is achieved when investigators are able to consider all evidence, theories, and perspectives about a phenomenon both internal and external to the particular discipline. This triangulation of information is key for evaluators in providing an accurate, functional diagnosis of their clients. For example, if evaluators only consider the physical component of the person and the performance that was observed during a one or two-day evaluation, they may be missing important pieces that contribute to work ability such as environmental context, pain experience, and psychosocial considerations.

There is a need for evaluators to use trained judgment (Datson & Galison, 2007) when planning, administering, and interpreting their evaluations to get the most accurate representation of their clients' abilities. This idea goes against some of the very foundations of objectivity, yet potentially move the field toward a more real, more accurate picture of an injured worker's abilities and level of effort.

2.2.4 Client-centred practice.

Occupational therapists are first and foremost healthcare professionals with a commitment to client-centred practice. Since being named a foundation for the profession in 1983, client-centred practice has given rise to conceptual and practice models, as well as outcome measures (Sumsion and Law, 2006). These models and outcome measures include the Canadian Model of Occupational Performance (Canadian Association of Occupational Therapists [CAOT], 2002), the Canadian Occupational Performance Measure (Law et al., 2005), the Occupational Performance Process Model (Fearing &

Clark, 2000) and the Framework of Strategies for Client-centred Practice (Restall, Ripat, & Stern, 2003). Client-centredness has been a defining element of occupational therapy directing therapists to collaborate with clients to focus on their needs, values, interests and wishes (Sumison, T., & Law, M., 2006; Townsend & Polatajko, 2007). The literature, however, has acknowledged that this approach is difficult to implement in practice, and explored why this might be so (Sumsion & Smyth, 2000; Townsend, Langille, & Ripley, 2003; Moats, 2007; Wilkins, Pollock, Rochon, & Law, 2001), particularly where medical models are the driving force for decision-making (Restall & Ripat, 2008). This study explores Moats' argument that being unable to use client-centred practice is not exceptional and that it is a reality of the day-to-day experiences of clinicians. In this instance, the ability of therapists conducting WCEs in the context of an insurance system to adhere to principles of client-centered practice is examined through their own words about their experiences and perceptions.

Chapter 3 Methodology

3.1 Research Design

The goal of this qualitative study was to gain a better understanding of the processes used by evaluators to determine client effort in functional assessments. The research question is: **How do therapists define and determine the level of effort a client puts forth during a functional assessment/work capacity evaluation?** Subquestions explored how participants understand the construct of effort, how they measure it in practice, what factors they believe influence client effort, and what factors affect their own assessment processes and decision-making. The primary question explored the practice experiences of occupational therapists in New Brunswick in measuring an inherently subjective and multi-faceted construct, in a context where their assessments have complex and significant ramifications. Qualitative methods allowed me to draw on the participants' experiences and knowledge about this complex topic. A qualitative approach provided rich descriptions of how therapists make decisions and shed light on the existing influences over those decisions.

Borrowing from institutional ethnography (IE), the everyday experience of the therapists was the starting point of the study, asking what they experience and how those experiences are determined (shaped) by factors external to them (Grahame, 1998; Mykhalovskiy & McCoy, 2002; Yin, 2002). A full institutional ethnography was beyond the scope of Masters level research. Creating descriptions of everyday experiences and drawing on phenomenology's interest in the meanings of events to people, this study provided insight into what shapes the understanding, decisions, and practice of therapists

in their everyday work.

A partial IE framework was chosen to guide the research because my experience as a clinician, my review of the literature, and anecdotal evidence from colleagues informed me that there was inconsistent interpretation and use of the term "effort" by user groups (healthcare professionals, case managers, employers, clients) and that there were multiple factors influencing therapists' decision making. In keeping with an IE approach, the goal of this research project was to look at how the decision-making process is happening (Yin, 2003) in the context of functional assessments within an institutional framework.

IE has been particularly attractive to researchers with interests in fieldwork and institutional processes (Grahame, 1998, p. 347). Pioneered by Dorothy Smith (1987) as a new form of feminist sociology, institutional ethnography aims to explicate tensions that are produced by the social organization of knowledge (Grahame, 1998; Mykhalovskiy & McCoy, 2002; Townsend, 1996). Based in critical theory, IE considers issues of power and oppression and aims to shift the power imbalance between groups to create social change. In pragmatic terms, it asks what external institutional influences—such as funding arrangements, program mandates and the like—shape the everyday experiences of people like frontline workers. It assumes that the everyday struggles people encounter in their lives are the starting point of inquiry. In this project, the values and beliefs of therapists regarding injury, recovery, and work ability, and the tensions they may experience doing functional assessments, are shaped by the policies and demands of compensation systems. I initiated this study from the experience-based belief that the compensation system requires a "black and white" view of client effort in order to

manage claims and "do business", which is inconsistent with what is shown in the literature to be a multi-faceted construct. I hoped that by examining therapists' decision-making, and how those experiences are shaped, therapists might gain insight into what drives their practice and decision-making, ultimately empowering them to adjust (or affirm) their practice in such a way that it is consistent with their beliefs and values.

3.2 Research Sample & Recruitment

The study population included occupational therapists and physiotherapists in the province of New Brunswick who were current providers of functional assessments for WorkSafeNB. Being a current provider meant they had to have performed at least one assessment in the year prior to the date of data collection. Because there are many assessment protocols used in the industry, narrowing the therapist population to one province and to those who meet the same standard of practice set by a single compensation system ensured a sample homogenous on the key point of interest. Therapists were included regardless of their amount of experience performing functional assessments. The number of possible participants who met these criteria was 25. This included therapists who provide two-day work capacity evaluations and one-day functional assessments. The one-day assessment is a miniature version of the WCE where the evaluators follow the same protocol for the parts administered and are required to comment on client effort.

Linking to the population was done through my own knowledge of and connection to this group, of which I am a member. These professionals were recruited to talk about their work as individual therapists, and were not representing a particular organization. Initial contact was made with the therapists via e-mail with a clear and

concise outline of the research purpose and data collection method. (See Appendix A for content of the initial e-mail.) WorkSafeNB awards contracts annually to clinics/therapists to provide WCE services; therefore if the research was seen as being driven by WorkSafeNB as an organization, therapists might have felt obligated to participate in order to ensure contract renewal. The e-mail was sent from a personal email address and not my WorkSafeNB account to minimize any potential pressure on therapists to participate, and I made clear that this was an individual graduate study, not a WorkSafeNB study. Using e-mail as a recruitment method might also have reduced the pressure a therapist might feel from receiving a phone call from me, an employee of WorkSafeNB.

The recruitment e-mail highlighted the purpose of the research, the process of the interviews, the risks and the benefits of participating, along with my contact information (telephone and e-mail). Interested participants were asked to contact me for further information. Potential participants were sent a confirmation package by e-mail, which contained the time and location of the interview, per the participants' request, and the consent form (see Appendix C). The consent form outlined the purpose, procedures, involvement, benefits, risks, and the participant's rights. The participants were asked to read the consent form prior to the interview and contact me if they had any questions. Prior to beginning the interview, the consent form was reviewed, and all participants were asked if they had any questions regarding the proposed research study. It was highlighted that the interview had no bearing on their work status or performance appraisals. They were then asked to sign the consent form if they were willing to proceed.

The recruitment e-mail was sent out to groups of four to five potential participants at a time to allow for timely scheduling of interviews. The groups of therapists were selected first by physical proximity to me, to reduce travel time and costs. For the first two rounds of recruitment emails, the therapists were chosen randomly from those who performed functional assessments as part of admission to a rehabilitation program. The third round of recruitment emails included all the therapists who performed functional evaluations on a full time basis. A total of 13 therapists were contacted of which 11 agreed to participate. This response suggests a high level of interest in the research, indicating it is a topic of concern to clinicians. The first 10 therapists who expressed interest were selected for the study. The therapists included both females and males. Their experience performing functional assessments ranged from two months to thirty years. In this thesis, I have altered genders to protect the confidentiality of participants; given the field is female-dominated, I have assigned feminine pseudonyms to all participants, regardless of gender.

Interviews were scheduled at a time and location convenient for participants. Nine of the participants chose to have the interview held in a small meeting room after working hours at their place of work. One participant chose to have the interview at a quiet coffee shop near her home. Interviews were only conducted in English due to the language proficiencies of both the researcher and the supervisor. As a token of appreciation, participants were provided with a 30-dollar VISA gift card after completing their interview.

3.3 Data Collection

A data collection tool refers to the instrument or strategy used to gather the data within a particular research method (Kielhofner, 2006). In this study, a semi-structured interview guide was the strategy used to gather information from the participants about their experiences of assessing work ability and determining the client's level of effort in those evaluations. (see Appendix D). I used a written set of questions and probes to elicit responses from the participant. A guide that uses primarily open-ended questions is more likely to elicit narratives, interpretations, and elaborations from the participants rather than using a structured and specific line of questioning that might force them into quick answers that provide little reflection on individual experience, perspectives, or opinions (Kielhofner, 2007). The primary theme for the interview guide was to examine how therapists define and determine client effort. The questions were developed from my clinical experience and the current literature on work capacity evaluations and client effort. The goal of the interview guide was to generate information rich data that helped answer the question: How do therapists define and determine client effort during a work capacity evaluation?

Data was collected from each participant during one individual in-person interview. The length of the interviews ranged from 44 minutes to 2 hours, with an average time of 1 hour. In order to capture the depth and accuracy of the participant's responses the interviews were audio-recorded with a digital recorder. The recordings were transcribed by a private transcription service. The transcription service provider was asked to complete a confidentiality form prior to receiving their first interview (Refer to Appendix E for transcriber's confidentiality form). I covered all costs of the study. Once

a transcript was received, I listened to the recording and read the transcript simultaneously to correct any errors or fill in any blanks.

Each participant in the study was provided a copy of the transcript of their interview within two months of their interview, and was asked to provide any comments, questions, concerns or additional information by e-mail, mail or telephone. This method of member checking was intended to improve the trustworthiness of the data and any feedback provided was considered in the final analysis. I received feedback from one participant clarifying a point that she had made. The other participants confirmed with me that they agreed that the transcript was representative of their views expressed during the interview.

3.4 Ethics and Consent

3.4.1 Risk.

One potential risk with this project was that as a result of examination of their decision-making, participants might feel stress or anxiety if they did not favor the research outcome. For example, they might not have been aware of any institutional impact on their decisions and begin to feel inadequate if they perceived they have not been totally independent in their thinking processes. Another risk was the potential loss of privacy if anyone figured out they were a study participant. Finally, participants needed to be very aware that they were revealing practice processes to a colleague/manager, and they should be conscious of that social risk. All risks were made clear to participants and they had the opportunity to withdraw at any time until preliminary analysis was complete.

The estimated probability of these risks was low. The participants were therapists who are trained in the understanding of confidential situations and it was anticipated that they were fully capable of saying no to participating in the study. They were also fully in control of what they shared. The topic of this study (client effort) is a topic that is already part of an ongoing discussion amongst therapists and thus it was anticipated that the participants would not feel uncomfortable discussing this topic.

3.4.2 Protection of rights.

The following strategies were used to protect the participants' rights. The right to self-determination was protected by the statement in the recruitment e-mail and in the consent form that they could opt out of the study at any time. Having the interview in a location chosen by the participant ensured their comfort. All efforts were made to ensure the location had a closed door to protect the participant's right to privacy. The right to confidentiality was outlined in the recruitment e-mail and the consent form.

It was clearly stated at the beginning of the interview that all perspectives were welcome, as no correct answers existed. Participants were given the opportunity to provide their comments during member checking. To ensure confidentiality, during the interview the participant was asked if they would like their results sent to their home or work address. They were assured that the research was being conducted outside of the context of any working relationship and their participation or responses would not result in any disciplinary action. I have encouraged therapists who work with me to think about and be critical of the processes we use, therefore I hoped this would enable them to speak freely without concern that they were doing something "wrong" in their practices. It was also made very clear that I was not assessing their practice *per se*, but rather assessing

their perceptions and experiences of practice and the practice context. The participants were advised that they could stop the interview at any time and any data collected at that point would be destroyed if they wished, until the point when preliminary analyses were complete. No one withdrew from the study.

The data that was collected from study participants is self-reported information about their current practice when performing functional capacity evaluations. It is a topic that is already discussed among therapists during their workday. It was not anticipated that the information shared by the study participants was going to be of a personal or sensitive nature. It was clearly stated in the consent form that the study participant was under no obligation to answer all the questions.

Each study participant was assigned a pseudonym that was associated with their name and contact information. The interview transcripts only used these pseudonyms to identify the participants to protect their confidentiality. The file linking pseudonyms with participants' actual information was stored in a locked file, separate from the actual data. Interview notes, diaries, and audio files were password protected and stored on an encrypted external hard drive, stored in a separate locked file in my home office. All electronic information was backed up in password-protected files on an encrypted external hard drive and stored in locked storage. Only myself and the transcriber had access to this information. My thesis supervisor only saw transcripts after identifiers had been stripped. The transcriber signed a confidentiality agreement (Appendix E) and all data transcribed was returned to me at the end of transcription. No data remained with the transcriber. The data is reported here in the form of cross-case themes, none of the

participants are identified, and the names of the participants and identifying features such as their workplace and gender have been changed to protect confidentiality.

As the proposed research study involved face-to-face interactions, the study participants were known to me and therefore were not anonymous. However, all efforts were made to ensure the confidentiality of the study participants with regards to their participation. In cases where the participant worked in the same place as I did, I made it clear that I would not discuss their participation in the study in front of anyone else. The location of the interview occurred away from any clinical areas. Any identifying information was removed from transcripts.

The study participants were asked to consent to possible quotations being used in this thesis and related presentations and publications. All identifying information was removed and quotes are identified using the study participant's pseudonym. The consent form had a separate place to indicate permission to use quotes in the results and any presentations. This consent was obtained at the conclusion of the interview so that the participant was aware of the type of information that could be used as quotes.

Before recruitment began for this study, approval was sought and received from the Research Ethics Board at Dalhousie University.

3.5 Data Analysis

The analysis of the transcribed interviews followed the responsive interviewing model outlined by Rubin and Rubin (2005). This approach is designed to encourage reflective engagement with the participant's story and takes place over two phases. The first step of reflective engagement is to prepare transcripts; find, refine, and elaborate concepts, themes and events; and then code the interviews to be able to retrieve what the

interviewees have said about themes (p. 201). Next, the concepts and themes were compared and contrasted across interviews to answer the research question. During data collection, each interview was read carefully before preparing for the next one to maintain a working idea of what important themes and concepts might be arising (Rubin & Rubin, 2005).

First I attempted to code the data line-by-line looking for themes. This did not work for me and I got stuck in the analysis. I shared some of the codes and themes with my supervisor who encouraged another way of working with the data, which was to look for broader themes first and then pull the text from the transcripts that fit those themes. I reviewed each transcript separately, writing a one-page summary for each to outline what each person was saying. From those summaries, broad themes emerged and I was able to then code the transcripts according to those themes. Each transcript was read several times and new documents were generated for each of the themes found.

3.5.1 Rigor.

The foundation of qualitative inquiry, including its emergent nature, attention to context, and use of the researcher as the primary research instrument make the criteria used to frame and evaluate quantitative research (i.e., validity, reliability, and objectivity) inappropriate for qualitative approaches (Landry, 2002; Whalley-Hammell, 2002). The issue of concern in qualitative analysis is the trustworthiness of the data or how certain one can be that the data reflect social, cultural, and lived reality (Kielhofner, 2006; Whaley-Hammell, 2002). Kielhofner identifies several methodological actions to enhance the trustworthiness of data including interviewer training, prolonged engagement in the field, reflexivity, triangulation, stakeholder checks, and audit trails. Some of these

strategies were employed in this project. As mentioned, transcripts were returned to participants for their feedback and further input; this is a form of member checking or stakeholder checking for verification. This increased the trustworthiness of the data because it gave the participants opportunity to confirm that their opinions and experiences were accurately captured and reflected in the data.

Reflexivity refers to a deliberate and systematic process of self-examination to consider how the research process shapes the results and the position of the researcher as the main research instrument (Kielhofner, 2006; Landry, 2002). My experiences, feelings, and reactions had the potential to color the research process, ultimately influencing the results. My own coursework in research methods highlighted the importance of this component of qualitative inquiry and my experience with the research topic was something I remained very aware of in all stages of the project. Before beginning interviews, I had someone interview me using the same interview guide to ensure my biases were brought out into the open. It allowed me to see clearly my own responses, which helped increase my awareness of what I might have been expecting from the participants. It allowed me to consider whether my interpretation of the data was accurate or whether it was being influenced by my own opinion.

I implemented journaling as a way to document my attitudes and reactions and used this as another data source to check against bias in the development of my conclusions. At the end of each interview, I wrote my initial impression and feeling of the interview and participant—whether I was excited, disappointed, or frustrated by what they said. I was able to reflect on why I was experiencing that emotion and when coding the data, I then had a way to check that my emotional response was not colouring the

analysis. Checking my journal accounts against my methods, analyses, and conclusions also provided an audit trail, making my decision-making throughout the process transparent for others to scrutinize (Kielhofner, 2006). I also 'triangulated', using multiple analysts and peer debriefing wherein other researchers—in this case my research supervisor and another colleague—simultaneously but independently analyzed the data to highlight any areas of controversy (Kielhofner, 2006). The transcriber who signed a confidentiality agreement was readily available to debrief with me. She had no prior knowledge of the topic and therefore provided a neutral sounding board for me to make sure that my work was not overly influenced by my biases. She listened to and read each of the transcripts multiple times, read my interview summaries, and my codes and themes. We discussed what I was pulling from the data every time I was discovering something new. At times, she and my supervisor challenged me to see something differently than I was hearing it. This was very important to me to ensure that the data and analysis were trustworthy.

My experience working in this area of practice made me far from a neutral investigator on this project. In many ways, that experience and insight benefited this project. The research question itself was one that I knew was of interest to the therapists, which was reflected in the 85% recruitment rate of the project. I knew the topic and the therapist's practices very well, therefore I was able to create and use an interview guide to effectively draw information from them to answer my research questions. I was able to present opposing views during the interviews and get the participants thinking about the topic in a way that would have been more difficult had I had limited knowledge on the topic. Because I had already had many conversations with the therapists about client

effort, they already had experience and a certain level of comfort discussing it with me prior to the interview. During the interview, I never presented any information as my belief or opinion, rather I simply presented different viewpoints so the therapists would not feel as though they were agreeing or disagreeing with, at that time, a manager in their workplace.

I have a strong opinion on this topic and came into the research believing that therapists had different understandings of the construct of effort, different processes for decision-making, and were being influenced by factors within the compensation system. I was careful when analysing the data that I did not look at the data as a way to prove what I already thought. As I interpreted the data I constantly asked myself whether I was reading the responses in a neutral way without trying to prove my own point. Eventually, I found I was forgetting about my own viewpoint and it became more interesting and a focus to see what the participants were saying. Debriefing with my colleague/transcriber was helpful to ensure I was not simply gathering bits of data that supported what I was hoping the research would show.

I believe that my knowledge, experience and passion for this topic gave the research depth; I am aware, however, that who I am in the research also posed detrimental influences. My participants already had a relationship with me and some of them reported directly to me at the time of their interview. I emphasized at the beginning of the interviews that this study was an independent one and had no bearing on their work. I asked them to speak as though I knew nothing on the topic and that I was not a manager in their organization. To encourage an open exchange of information and minimize the power dynamic between us, effort was made to build rapport and create a

supportive environment for the participant during the interview process. Open body language and a comfortable environment at a location of the participant's choice, and simple questions to start the interview were used to help to ease participants into the process and encourage them to speak openly.

One of the first participants stated toward the end of the interview that she was surprised that she had felt nervous during it and that she was aware of whether she was "saying the right thing". I talked her through that a little asking her why and encouraging her to say whatever she was feeling. I reviewed some of her responses with her to give her a chance to elaborate if she wanted before the interview was completed. A couple participants made comments in a joking way about "getting my knuckles slapped" for making a particular comment or that this (the interview) "wouldn't come up in my performance appraisal". Another participant was a therapist who I had worked closely with for many years and I was very surprised and frustrated with her interview because to me she was being evasive and not discussing the topic in the same candid and clear way that she and I had done at length many times previously. At one point, I remember thinking it was a pointless interview because nothing she said was helpful or was the same as what I knew she had said outside the context of the study. In order to avoid the impact of those feelings on the data, I waited until I had done another two interviews before I completed her summary. I approached her interview not as something that I needed to be helpful for anything in particular, but just to take from it what was there. I also made a deliberate attempt not to frame her responses in a way that reflected past conversations that we had.

My knowledge, experience and enthusiasm—as well as my ongoing relationship

with participants—were both positive and negative for this project. I had a heightened awareness of my relationship to my participants and how that could influence the study. Of all the steps and factors to consider when doing a research project, I was most concerned that my own strong views on client effort would decrease the trustworthiness of the data. During the interviews, I was very aware of not leading the participants to answer questions as I would have answered them or in a way that supported my own beliefs. During data analysis, I was always asking a third person for an interpretation of a text before I disclosed my own. I discussed the transcripts, codes, and themes at length making sure what I was hearing and reading was also apparent to someone with no knowledge or investment in the topic.

Chapter 4 Results

This chapter outlines the following major themes that emerged from the data: understanding client effort, determining client effort, the process of therapists' decision-making, and objectivity *versus* subjectivity. For the purpose of analysis, these themes have been teased apart to better understand the therapists' experiences, though they often coexisted in participants' talk.

4.1 Understanding Effort

All of the participants spent some time during the interviews explaining how they defined and understood the concept of effort. Each stated that in the documentation of evaluation results, a client is reported to have provided either high or low effort during the functional evaluation. There was variation in how the participants qualified clients' abilities or performance. Some therapists emphasized accuracy and validity, others focused on maximum physical performance, while some spoke of clients not self-limiting due to safety or pain.

If a client provided high effort during an assessment, it meant to some participants that the results were an accurate representation of the client's 'true' abilities. For example, Amanda explained that a high effort evaluation is a "valid" one where the client's demonstrated abilities are accurate or "a true representation of who that person is and what they can do on a day-to-day basis". Similarly, Gisele said that if an evaluation is low effort then the client's actual abilities are unknown and the results are "not trustworthy":

> If it's low effort, it means that we really don't know what the person is capable of. They're simply demonstrating to us what they want to demonstrate. So, we don't know what their real capacity is or what their true potential is.

Gisele's statement about the client demonstrating "what they want to demonstrate" implies that the clients may be motivated toward a particular outcome for the evaluation and that she as an evaluator is aware of that possibility.

Other participants were more explicit in their description of effort, speaking to whether the client demonstrated maximum physical ability. For example, when addressing a concern about a client demonstrating low effort during a strength test, Amanda reported she would say to the client, "I'm not seeing physical signs that this is too much for you and that doing another 5 pounds is going to be too much". Like Amanda, Amie said she expected the client would do "as much as they are physically capable of doing in a safe manner". So maximum physical ability, within the bounds of safety, was seen as high effort, allowing a 'true' assessment.

To some participants, a high effort assessment meant that the clients were doing more than their normal or safe abilities during the evaluation. Elizabeth described this as a client who has performed "a bit beyond their full abilities"; similarly, Jane said she encourages clients to "challenge" themselves so she can see signs that tasks are pushing the client to a physical limit. Hannah said this expectation is explained to the clients as "trying your best" during the evaluation.

Adding to the notion of the importance of trying hard and not holding back, participants identified clients who gave high effort as ones who were not limited by their symptoms. For example, Barbara stated that high effort clients do not "limit themselves

because of pain". Similarly, Donna said that she looks for clients to get to what she would call a safe assessment despite their experiencing pain:

> Effort in my mind is somebody who is, despite their symptoms, continuing to try to demonstrate an accurate level of performance … so demonstrating that despite their pain, and despite their symptoms that they do have, getting past that point and saying 'it hurts but I can still keep going' and getting— Especially during the functional testing when it comes to the point where, as the administrator of the assessment, I feel as though they're getting close to the end of a safe assessment.

To Donna, it is more important that she is determining what constitutes the clients' safe abilities rather than the client themselves. This example shows how the philosophy of client centred-practice is lacking here as the client is not being viewed as the expert and there is a clear power differential between client and their therapist.

4.1.1 Complexity of defining effort.

Determining effort is something that each participant does multiple times a week, yet they admitted that defining and understanding effort is challenging. As Donna said, "I find it kind of tricky to identify what effort is with different people". Like Donna, Gisele reported the task as "challenging" and not "something we like to do". The conceptual complexity of effort was noted in the data, particularly with respect to how it may be understood by those who will use the functional assessment reports. For example, Barbara said, "Case managers might want to look at it in a different way and say that it has to do with participation, maybe". Donna spoke more in-depth about differences in how effort may be understood by differing groups, suggesting the assessor's understanding of effort is "lost in what we mean by effort and what case management or that side of employer— Those things— What they think the definition of effort would

be". Further, Donna spoke about how the term effort is used synonymously with participation within the work and compensation environment:

> I guess, in the system here where some, either it's case managers, regional occupational therapists, so anybody who works with this client— If you hear that this person gave low effort, they look at that as a participation issue. So maybe they're not participating in the program or assessment. They're seeing low effort as being 'Oh they just didn't try hard.'

Donna seems to suggest here that a report of less than high effort is often read as the client not wanting to perform well and gives them a negative label.

In contrast, the data showed that the participants did not equate "low effort" with "lack of participation" in a functional assessment or treatment program. Amanda stated clearly, "You can be participating giving full participation, but not giving your full effort". Frances differentiated the two in that she saw "effort as more physical and participation more …behavioral". Gisele provided a description of a client who was participating with low effort:

> Doing the minimal that you can get away with. It's the (pause) sort of going at a snail's pace, ambling through the evaluation, you know sort of doing it in a very lazily, (pause) sort of low effort manner. Making, no objective signs of trying. They're there because they have to be. They take their time doing the assessment. They don't bother bringing their chair in close and then they tell you that they can't continue. That sort of thing. So there's nothing that would suggest to me that they're really interested in this. They're there because they have to be. But they're not there because they want to do a good job and they want to see what their level of function is.

Gisele seems to define participation as a client being present during the evaluation and going through the motions of what they are being asked to do compared to effort, which she distinguishes as alluding to the quality of the participation.

A high effort evaluation is the desirable outcome of functional assessments for the evaluators in order to know what their client's accurate and safe physical abilities are

with respect to work. While effort is important to reassure case managers that the information about the client's performance is accurate or "true", the participants identified a disconnect between their use of the term effort compared to the case managers' from whose vantage point effort is more aligned with participation.

4.2 Determining Effort

When considering a client's effort during a functional assessment, participants reported they use a number of factors, often referring to an effort checklist, to guide their decision-making. The markers of effort identified by participants included the following:

- heart rate monitoring
- objective signs of effort
- presence of competitive test performances
- task endpoints—biomechanical versus psychophysical
- clinical consistencies
- Jamar dynamometer handgrip—coefficients of variation and rapid exchange grip testing

When describing these markers of effort, the participants explained that some of the individual effort tests might show high effort and others might indicate low effort during the evaluation; however the evaluator is responsible for making a final conclusion on the client's overall effort for the evaluation as a whole. Elizabeth described how the markers of effort are weighted differently in the decision:

> So you would take all of those subtests and there may be some that all of them would be positive or all of them would be negative, but there could be a variety of ones where there's some that are positive and some that are negative. So then you yourself would have to use your best clinical judgment to decide which ones are heavily weighted in what directions.

The weighting of various test components varied significantly among participants.

Amie described how two commonly used markers of effort, grip testing and heart rate, usually give her an initial sense of how high a client's effort might be but that she saw them as less of an overall indicator of a person's physical ability and overall effort:

> I wouldn't use it (heart rate) alone, for example. I would use it in conjunction with the others, same as the grip strength, just because those things might be fine, but the person may be stopping themselves at 20 pounds without any sign of struggle or without any change in how they look from doing five pounds, for example. And that is a better indicator of— I think it is anyway, of whether someone can do more physical activity than their heart rate.

In contrast, Jane identified heart rate monitoring as a more central factor for her in determining effort:

> I think physiological signs, so increased heart rate (pause), you might see sweating and stuff, but I would say increased heart rate for sure. And that's only going to come if you do the proper test for that. You're not going to see it with carrying. You may not see it with— Well, you might see it with stairs. So, sometimes even if someone doesn't do stairs [in their job], I still get them to do it. I still get them to walk the hallway because that might get their heart rate up. So I try to get the heart rates.

Biomechanical endpoints, competitive test performances, and clinical consistencies were cited as the primary deciding factors in whether a client was deemed as giving high or low effort. With each functional task performed by the client, the evaluator has to state why the task ended. The endpoint options, as described by the participants, include biomechanical and psychophysical endpoints, safety and completed task.

A client would be given a *biomechanical endpoint* if the evaluator saw "signs of overload" during the performance of the tasks, such as changes in posture and movement that indicate the task is getting physically harder. Cassie described "seeing tissue overload" in the form of muscle shaking or loss of balance during a task as a

biomechanical endpoint. When considering biomechanical changes, Amie provided some questions she asks herself to guide decision-making:

> What I use to help me determine that is are there changes in the way they look when they're doing tasks? Are there biomechanical changes? So, are they, for example, if someone is lifting a crate from the floor, do they come up in one smooth movement, put the crate on the shelf that they're supposed to put it on and bring it right back down or are they struggling in some way? Are there ways that they're moving that indicate that this is getting heavy for them? For instance, do their hips come up first before they bring the crate off the floor? Are they having to recruit muscles that they wouldn't typically need to do if that was an easy task for them in order to complete the task? So, there's the biomechanical side of that.

Cassie stated that a *psychophysical endpoint* indicates that the client stopped the test despite the evaluator not noting any biomechanical changes or reason that the client was not able to do more weight or continue with the task:

> In psychophysical, I guess, is where you don't see those things [biomechanical changes]. Where you see them very faintly and the client actually stops that part of the assessment because of how much pain they're experiencing and you're left not knowing what their actual function is because you couldn't get past that pain to see it.

Consistent with other participants, Cassie stated that if she did not see tissue overload with a lifting, carrying or pushing/pulling test, then she would "consider it a psychophysical endpoint". Donna provided further insight as to why she thought a client might not continue with a task, resulting in a psychophysical endpoint:

> The psychophysical endpoint is when the client reports that they're unable to go any further with this assessment and citing whatever reason it may be. Maybe they don't feel safe. Could be that their pain is too much. Sometimes it's that they're scared of what their pain will be either after the next rep or tomorrow.

Here Donna elucidates some of the psychological aspects of a client's relationship to their physical capacity and experience of pain.

Safety and *completed task* endpoints elicited the least discussion from the participants. A task has a safety endpoint if it is contraindicated due to a medical reason

or if a client's heart rate exceeds the allowable range. "Completed task" was chosen if the client had met the job demand in question or completed the requested task, yet not demonstrated, through biophysical indicators, that they had reached their maximum ability during the task. Based on the data, an evaluation with mostly psychophysical task endpoints is considered a low effort evaluation because the client stopped the majority of the tasks before the evaluator saw or was in agreement that the client was unable to perform at a higher capacity. Interestingly, if all of the endpoints are *completed task* then the effort result for the evaluation would be high even though none of the biomechanical indicators had been met. In this case, because the client has demonstrated meeting the job demands, the biomechanical factors become less weighted. This seems contradictory to the notion that high effort means that a client has demonstrated their maximum abilities during an evaluation, which was cited by all the participants.

From the interview data it was clear that the participants rely heavily on empirical observations during the evaluation. Confidence in their decision about high effort is dependent on being able to see evidence that the client's body is struggling or changing as the physical demand being tested is becoming harder. As Elizabeth said, even in less obvious situations, she looks for physical shifts or postural changes:

> Again, it probably depends on the task that I'm assessing, the kind of things that I would see. So, if it's something, so if you think of things like even postural tolerances—so, sitting or standing or walking—there would be signs that would indicate that a client is struggling to be able to maintain those postures. And of course, you're going to have to tease out what's a true physiological response versus a behavior. Which again is very grey, touchy area. You would generally see specific things with each of those postural tolerances when someone's getting close to being able to no longer sustain that position. So, for example, even standing, a client might start to weight shift, they might start to lean against an external support, they might start limping around slightly when they're trying to stay on their feet. So there's things that you see, depending on their injury as well, some signs that they're reaching their abilities to sustain whatever.

Elizabeth's description above of deciphering between a "true physiological response versus a behavior" is noteworthy. She seems to imply that the clients are being purposeful in their performance during the evaluations and provide an example of how therapist's interpretation comes into play. Gisele also spoke in depth about needing to see signs of physical struggle as well as signs of discomfort/increased pain in order for her to make a determination of high effort. She emphasized inability to continue due to pain as a marker of high effort only if the report of pain coincided with observable decreased function:

> For me, if someone truly cannot continue a task because of pain, there should be something that I can see. There should be either signs of discomfort. Because that's normal. If you are in such severe pain that you cannot continue, most people will hold the injured arm, or they'd at least, touch it while they're discussing it or something. Or I should see some decrease in their performance. Slowing down. Either slowing down the speed of movement or slowing down because they're taking more breaks. If it's something involving productivity, so it's the number of pins they can put in a board, then I should see a decrease in the number. I should see a decrease in the fluidity of movement. I should see something. I always think, if I walked into the room, would I have any idea of what the person's diagnosis was, and would I think "Oh, that person is having problems" if they truly cannot continue a task. I just, I know people have different levels of pain and I know some people tolerate pain more than others, but if it's so severe that you cannot continue, I find it difficult to believe that you can sit there calmly and show nothing. No facial signs. Nothing.

Gisele's emphasis above is on empirical, observable evidence, as well as physical inability to continue. Without those she did not trust that full effort was being put forward.

The participants identified *competitive test performances* and *clinical consistency* as important markers of effort that weigh heavily in the decision. Amanda provided a summary of what she meant by clinical consistencies:

> Are they favouring the same limb? Are they moving the same way when you're observing them versus when you're not? So, I guess that's it. Distraction-based versus— that would fall under clinical consistencies. So, when I ask you to bend are you showing me the same amount of movement as if I ask you to do a task that requires bending. If I ask you to walk and I see you walking in the parking lot of in the cafeteria and you're moving differently or better than what— when I overtly asked you to do it, that would be considered a discrepancy.

Amanda seems to be saying that there is an element of trying to catch the clients in the act of faking during the evaluation. At minimum she tries to organize the evaluation to make sure she would know if they were underperforming.

Overall consistency among the client's injury, their function and symptom reports, and their performance was important; participants asked themselves whether "everything made sense" to them as the evaluator. Elizabeth explained that during evaluations she found herself considering whether a client's performance is what she would expect it to be, given what is known about the situation:

> So, I want to see that the person's performance is consistent throughout the two days. I want to see that there's a line of reasoning between their diagnosis, their reports of pain, their signs of discomfort, and their actual functional performance. So, it should all make sense. And it should all be clear. So, that's what I'm looking for. When I talk about clinical consistency that's what I mean.

Although none of the participants stated explicitly that they are looking to catch clients faking or deliberately limiting themselves during an evaluation, Amanda and Elizabeth are describing this concept when they speak about looking at clinical consistencies. Amanda describes trying to trick a client into completing a movement when the client is unaware that the movement is being assessed to make sure the client is not holding back when they are being formally assessed. It matters to Elizabeth that the client's performance and reports make sense to her, implying that there are instances when they might not make sense, which suggests deliberate performance and reports on the part of

the client. As noted previously, when discussing a low effort client, Gisele commented that this type of person was "simply demonstrating to us what they want to demonstrate", which implies the client intention and motivation.

Competitive test performances is a standard term in the Matheson and Associates Functional Capacity Training (Matheson, 2009) and was described by the participants in this study as behaviors exhibited by the clients that suggested they were "working hard", "trying their best" or interested in performing well during the evaluation. To illustrate, Cassie provided an example of someone who "is getting frustrated if they're not doing it correctly or not doing it the way they think that they should be performing that task or someone who is really adapting their posture and getting into it and losing themselves in it". Amanda added that for her competitive behaviors include, "Asking to redo something if they feel they didn't do as well as they could. Clarifying with you what you want them to do. Things like wiping your hands on your pants, getting ready…like facial expressions". Here, Cassie and Amanda provide examples of more empirical evidence of what the therapists see and hear during the evaluation to help them build a case for a low or high effort result.

4.2.1 High, low and 'grey' levels of effort.

There was consensus among the participants that there are three types of clients when it comes to their level of effort during functional assessments. Some clients were described as clearly demonstrating high effort or clearly demonstrating low effort, with a considerable amount of discussion surrounding a third group of clients who were labeled as being "grey" or as Jane put it, "50/50" when it comes to their level of effort and the

final decision of effort could "go either way". Frances summarized the clinical judgment required when client effort is not clear-cut:

> That can be tricky because sometimes people are clearly high effort and they give me high effort on pretty much everything, and some people aren't necessarily—They give me high effort on some things and not others or they give you low effort on everything. What does that mean? How do you figure this out? That's when clinical judgment comes in. What do you put more emphasis on? Is it the JAMAR? Is it the heart rate monitoring? Is it the CTPs? What do you pull together, especially if it's not all one side or all on the other side to make that determination?"

Like Frances, when asked how they make the decision about level of effort with those more difficult clients who are "tricky" and could go "either way", most participants quickly responded that it comes down to their own clinical judgment. For example, Cassie said, "So, it really is that that little checklist that you have for effort. Some of them really are half and half and it really is just your call. At the end, it is all up to you and your impression of them".

The participants identified many markers of effort that must be observed during the evaluation. The markers are weighted differently, with the top three being biomechanical endpoints, clinical consistencies, and competitive test performances. The participants agreed that clinical reasoning and clinical judgment come into play to make their final decision, particularly in those cases where clients are not clearly demonstrating high or low effort. Table 2 presents the three 'types' of clients and the effort markers for each as evident in the data.

Table 2.
Types of Client Effort demonstrated in functional assessments

High Effort Client	Low Effort Client	Grey "tricky" Client
Consistent performance	Inconsistent performance	Some inconsistencies noted
Seeing tissue overload	No biomechanical changes in performance—no muscle exertion, change in posture, pace or fluidity of movement	Mild biomechanical changes, no tissue overload
Biomechanical task endpoints	Psychophysical task endpoints	Mixed endpoints
Many competitive test performances	No competitive test performances	Few competitive test performances
Specific pain reports	Vague, global pain reports	Some pain reports
Not focused on symptoms	Focused on symptoms and declining to do tasks	Focused on symptoms, but agreeing to continue with tasks "if the evaluator wants" them to
Reports few, specific functional difficulties	Reports many functional difficulties	Variable reports of functional difficulty
Focused, attentive behaviours	Not focused or attentive—"no eye contact"	Not overtly attentive or inattentive
		Told by case manager that they have to give high effort or they'll be cut off—these clients say that they are willing to do whatever the evaluator asks, will never say 'no' to anything; however their behavior indicates otherwise.

4.3 Influences on Decision Making

When discussing particular cases, participants revealed sources of influence on the decision-making process and final effort outcome of a functional assessment. This

section will present their ideas concerning understanding of chronic pain, evaluation context, triangulation of information, policy and consequences, and client-centered practice.

4.3.1 Therapist's understanding of chronic pain.

The presence of pain reports from clients during functional evaluation adds complication to the process of assessing work ability and determining effort. In some cases, the participants acknowledged that a person could be limited due to pain or fear of pain, however when it comes to the evaluation there has to be corresponding and observable effect on performance for it to be considered acceptable, leading to a decision of high effort. As was shown above, Gisele highlighted this when she argued that pain should be physically observable, through expression, attention to the injury, decreased speed or fluidity: "For me, if someone truly cannot continue a task because of pain, there should be something that I can see".

Similarly, when asked whether an assessment in which a client was limited by their pain could lead to a high effort conclusion, Amie initially stated "At this point I would say no"; however after reconsidering she offered circumstances where this might occur saying how "fatigue, signs of decreased speed and fluidity of movement—those could be considered signs of effort. Signs of overload, *per se"*. She went on to question the validity of concluding a person was giving high effort in the absence of biomechanical endpoints (overload):

> I can see where that could possibly come up in someone who has had chronic pain for many years and doesn't— never does anything. They're at the sedentary level anyway. They really are at that level. They believe that's all they can do. And they don't do any more than that. So, I could see how you could maybe (pause) maybe say, "Okay, well, they've done as much as they can do or are ever going to

> do, so". But I don't know that that's really (pause) I don't know that that's really giving high effort.

Amie's example alludes to a different set of rules or lenses through which the evaluators view performance for clients with chronic pain and the difficulty deciding whether pain limitation is acceptable during a functional assessment.

There seemed to be a common understanding among the participants that pain does impact a person's functional performance, however the evaluators are looking for the clients to work past their comfortable pain thresholds for the purpose of the evaluation. Elizabeth described how chronic pain affects the evaluation, given people's experiential knowledge about ceasing tasks before they exacerbate pain:

> I think it's the client who has been living with chronic pain for an extended period of time and you're not going to see those physiological responses to activities like you typically would because the client themselves has ingrained to know when they can tolerate something and when they can't. And so the tasks are terminated at those points when they know and it's hard to get them out of that mind frame that it's okay to go a little bit beyond to show me because chronic pain people are learned and taught that when the pain starts, you stop. So, it's really difficult to coax or coach them on that—that it's okay for the purpose of this assessment to go slightly beyond. So, I think those are probably the most challenging ones because I can probably see (understand) exactly what they're saying but because it's objective I need them to show me what they're saying.

Elizabeth provides a valuable insight here, suggesting people may stop short of effort that exceeds a pain threshold because they have learned that this strategy serves them well in day-to-day occupations. Further, Elizabeth demonstrates how despite an understanding of the impact of chronic pain on performance, she cannot allow clients to use those management strategies during an evaluation because that would mean she is relying on subjective client reports rather than observable data. Jane noted that clients who have chronic pain may need more encouragement to go beyond usual pain thresholds:

> You kind of have to give them the whole talk about pain and how it's okay to challenge that pain a little bit, and in most cases you can get them to do a little bit more. They may still not reach that high effort point, but at least they can do a little bit extra than what they had been doing.

Donna stipulated that she, as the evaluator, needed to see that clients were moving past their safe abilities:

> Demonstrating that despite their pain, and despite their symptoms that they do have, getting past that point and saying "it hurts but I can still keep going" and getting— especially during the functional testing when it comes to the point where, as the administrator of the assessment, I feel as though they're getting close to the end of a safe assessment.

Donna provides a glimpse into how the evaluation approach in this context is less client-centred than a typical occupational therapy one where the client's report of pain limitation might carry more weight than the administrator's opinion of whether the client's pain should be limiting them at all.

Overall, the participants were aware of how pain influences a person's ability to perform during an evaluation, however pain in the absence of observable signs of functional decline was not considered enough to support a determination of full effort. Although pain is known to be a subjective experience (Butler & Mosely, 2003), evaluators try to make it objective to support their effort conclusions.

4.3.2 Context of the evaluation.

The context of the assessment was also key to how therapists approached client effort. The participants understood and addressed effort differently when the functional evaluation was administered as a stand-alone evaluation or as part of a treatment program admission and discharge process. As part of the admission process for a treatment program, effort seems to be less important or consequential than when it is considered

during a discharge assessment or stand-alone work capacity evaluation. Amanda differentiated that "it's a little bit different than a work capacity evaluation where you essentially need that person to give full effort for the assessment to be considered valid. So I think sometimes in the baseline we tend to let it go a little bit more". Because the clients being admitted for multi-disciplinary treatment have been identified as having possible psychosocial issues, there was a sense among participants that therapists should expect clients to perform with low effort during their admitting functional assessments. Barbara attributed this to "just the environment we're in".

Donna spoke about how identifying low effort in a functional assessment before a client is in a treatment program helps him to identify the return to work barriers and treatment goals:

> With the assessment that we do, because it's not a functional capacity assessment, it's not on their file, it's not the end-all be-all of their— the next decision in the claim. They're here for six weeks, if they're a low effort assessment from the get go, that just kinds of molds the treatment plan.

In a sense, Donna is suggesting that low effort initially indicates something for the treatment team to work on, rather than presenting a problem. Frances added that she prefers to lean toward the low effort side with an admission assessment where psychosocial factors are at play:

> I tend to fall on the low effort side of things and then be able to build them up and say "Well, it was looking bad at day one but we're actually making some improvements" *versus* on paper saying "We were doing good" and suddenly we're down here.

Essentially, Frances considers how the label of effort on a client at the onset of the treatment program will impact whether the outcome of treatment appears to have been positive or negative.

The consequence of effort is different depending on the context of the functional assessment, therefore evaluators take different approaches to addressing and using effort as a tool to develop treatment. In the case of a stand-alone work capacity evaluation where there is possible loss of benefits to the client or in a functional assessment at the end of a treatment program which determines whether a client returns to work, the therapists pay particular attention to determining effort, especially teasing out the "grey" clients, where achieving high effort is far more important for the client.

4.3.3 Triangulation of information.

The participants recognized that they are making an important judgment when deciding on the level of effort a client is deemed to be exerting, thus they try to remain impartial when performing functional assessments, certainly at the onset. Cassie stated:

> I really try not to let those things [other professional opinions or reports] persuade me. I try to go into the baseline functional assessment with a clear slate. Even sometimes if there is an OT report, sometimes I will purposely not read it until after. Just for that reason—so you don't go in there with preconceived notions about this person.

Many of the participants commented that they will refer to medical files—x-rays, physician notes, MRI reports—prior to beginning an assessment, however they tend to avoid doing a full review of all the file information so not to have clouded judgment. Amie described this in detail:

> I'll be honest; I don't look at a lot of it. If they've been here on treatment, I typically will look at the history and physical of the doctor that saw them on their team and if in that they've seen any specialists or had any surgeries or x-rays and that sort of thing. I typically don't look at the discharge summary from the treatment team until after I've seen the client. At least for the first morning because I don't want to be— I want to make my own judgments about how the person is engaging in this process.

Amie sees medical information and tests as being less influential on her than other treatment reports that are more judgmental than lab or medical reports. Like Amie, Amanda talked through how she incorporates a review of what she considers the objective file information into her determination of effort:

> It would also be medical or physio reports regarding his injury and his actual objective, physical findings would potentially come into play. Would you expect somebody with this type of injury and history and findings to present this way or not? Is it consistent with the medical information on the file? Or is presenting differently than you might expect? And if they are, does that make sense?

Donna pointed out the danger in reviewing files and having an impression of the client before having the chance to meet him/her, noting that when she had prior information about a client she sometimes needed to disprove preconceptions:

> Sometimes I'll read up as to what their treatment plan looked like, what they did while they were here, or what their discharge plan was—if it was return to work. So, looking at all those different aspects of what their treatment looked like before going to assess them. Which I think might paint an unfair picture of the client. On discharge assessment if they're still demonstrating psychophysical endpoints during their function then I would probably start "okay, that's where I'm going to start and if they can show me that they're not a low effort" whereas somebody coming in, I wouldn't say they're low effort and they have to prove to me otherwise. You know, guilty until proven innocent.

Donna's final statement captures a suspicious tone that seems to be underlying the process of evaluating function within a compensation environment. The very fact that effort comes into question at all suggests that there is reason for the therapists to believe that clients would be purposefully limiting themselves.

While the participants were explicit about their efforts to remain neutral in their assessments, they frequently referred to "flags" that would suggest to them that a client might not perform with high levels of effort. Amanda explained that while the flags

might not be something that gets documented formally in the assessment results, it is something that is always on the evaluator's mind:

> Verbal reports of job dissatisfaction, conflict in the workplace, verbal reports of gains that they might be getting from being off of work—whether it be in their personal life or otherwise—assuming that disability role. I guess we're thinking about it all the time, really.

Here, Amanda offers reasons that the therapist should consider for why the client might be underperforming. These flags could be the guiding factors in clinical decision making for those 'grey' clients who require more thought and consideration.

Frances offered other examples of "flags" when she described the two ends of the effort continuum. She explained that high effort clients are "clear and linear" in the way they discuss their situation. There's "no vagueness", she said. She described personality and disposition, saying that she "gets nervous" if there's a lack of eye contact from the client. She provided some insight to her thought process and interpretation, as she identified how a lack of eye contact could be because the client is simply shy, or because something is "going wrong" with their level of effort.

The participants were adamant that they try to begin their assessments without having an impression of the client by avoiding the influence of other sources such as of other professional reports. Nonetheless, they recognized that they are mindful of "flags" that indicate that a client might provide low effort during the assessment.

4.3.4 Policy and consequences.

A major influence on therapist decision-making concerning effort is the consequences of the decision. Receiving compensation from WorkSafeNB means that benefits are awarded to the client only in relation to their workplace injury. If a person's

functional abilities are impacted by other factors, it is considered non-compensable and a client's benefits can be discontinued. Hannah spoke about how this complicates the process of assessing function and effort:

> Because I just find in this system (pause) the only responsibility that WorkSafe has to this client is that particular injury and not anything else that might be affecting them in terms of the process, so (pause) that's really what you have to focus on as opposed to anything else that might not be compensable with their claim. And it's hard to separate that out.

Thus the therapist needs to discern not only what capacity the client may have, but also what any impaired capacity may be due to.

Having a low effort report from a functional capacity evaluation can impede the overall claim process for the client and case manager. The participants explained that typically if clients receive a low effort evaluation result then their claim is suspended and they are sent back for another evaluation until it results in high effort. Benefits are then reinstated once a high effort evaluation is obtained, and work capacity is deemed authentically impaired. Gisele described it as a "huge, huge thing that greatly impacts the client's future" and captured the responsibility this imposes on the evaluator:

> We all understand and appreciate the results of low effort which is having your benefits cut. And we don't want to see that and we will do anything we can to try and get this person to give us high levels of effort. I've seen the therapists and I see myself, go over and over and over, having the person doing the same task and perhaps even having them do a blind test to try and get them to give their maximum.

Here Gisele expresses a strong sense of responsibility for ensuring a high effort outcome.

Participants were not only aware that a low effort determination could result in elimination of benefits, but they also noted that having the "label" or "tag" of low effort can paint a negative picture of the client that will follow them through the rehabilitation and claim process, as Cassie highlighted:

> They're labeled as low effort—the team is aware of this, the case manager becomes aware of this and it's just this vision of this person who doesn't want to— doesn't have the motivation to get better and might be abusing the system or whatever. And they could potentially be discharged or not have— have their benefits taken away from them and things like that for that label if things go wrong along the way. So, it sets the tone, I think.

This point illustrates again how effort becomes synonymous with client intention and motivation within the context of the compensation environment.

Gisele discussed how the policy of having a client return to complete additional evaluations can result in her leaning toward a high effort conclusion because it's "more beneficial to the client to say that they gave overall high levels of effort because I've felt that you could do something with that information versus just having them cut off their benefits". She provided an example where a client was meeting their job demands despite giving low effort in the evaluation. In that case, Gisele reported the client giving high effort so that the result would be toward a return to work plan rather than a claim suspension.

Hannah described a particular circumstance where she contacted a case manager regarding a low effort report and the case manager asked, "What am I supposed to do with this now?" Hannah explained that she was encouraged by the case manager to "call it high effort":

> I ended up giving her full effort. She did a little bit better on the second day, but after talking with her case manager, he pretty much said he didn't expect much to come out of it anyway, so it was one of those kind of "write up what she did and...call it high effort".

This demonstrates a significant influence on the decision making process from the case managers who are requesting and buying the occupational therapists' services. As she discussed her experiences, Hannah recalled another situation where she did not consult

the case manager before submitting a low effort report. Hannah described it as "a big mistake" that resulted in her having discussions with her own manager. She stated that subsequently she rarely calls anyone low effort and tries to write up her reports so they read as high effort whenever possible.

Similarly, Gisele recalled a situation where she called a case manager to discuss how psychosocial factors were impacting performance and the case manager was advocating that this situation was "low effort and non-participation" and directing Gisele to write up the report reflecting that conclusion.

The participants are required to make a decision about a client's level of effort within a system that uses the label of "low effort and non-participation" to decide whether a client maintains compensation benefits. This consequence to the client and responsibility on themselves is not lost on the evaluators, and seems to direct their decision making away from stating clients are giving low effort when the evaluations are being used in the context of directing claims.

4.3.5 Client-centred practice model.

Occupational therapists work from a framework that advocates a holistic, client-centred approach to function, recognizing that performance is a result of multiple interrelated factors. The participants recognized that a client's ability to provide high levels of effort during a functional assessment is dependent on several factors beyond an individual's physical impairment or capacity. Frances, for example, spoke about multiple factors that could affect a client's ability to perform during an assessment:

> Sometimes they're concerned about what their case manager had told them, "You've got to go in there and you've got to give you best or I'm going to cut you off" so I often try to— Clients come in here with all kinds of rumors about this

> place (rehab centre) about being— "You're going to go down there and get cut off" or "You're going to go down there and they're going to not listen to you" or whatever happens. So, they come in here and they're stressed out anyways. Being stressed out, of course, will pump up your adrenaline levels. With adrenaline levels, you don't sleep very well. Most people come in here with terrible sleeps—sleeping at the hotel for one night or two nights, or they haven't slept since their injury. They're just tired and they're fatigued. They're mentally fatigued. They're drained. That all impacts the effort side of things.

Also speaking about a client-centred model, Elizabeth called effort something that is "individual to the client"; she believes that "you have to take into consideration a lot of other factors when you're assessing someone's abilities". Hannah experienced conflict working from a client-centred, holistic model in a context that she does not perceive to share the same view:

> I think as an occupational therapist, we're taught to also look at the whole person and not just the physical, so that's why I find effort a hard thing. Because you can see all these other factors coming into play but you can't really address them with respect to effort because it's more of a physical thing.

Donna expressed frustration with trying to maintain a client-centred approach with what she described as multiple clients with different goals:

> In school it's "you've got to be client-centred, you've got to be—" That's the big thing—client-centeredness is huge in OT and sitting here you really have multiple clients. We've got the referral source, which in a business world you have to make happy if you want to get the bills paid. So, we've got the case manager giving us the referral. So we've got a— almost, they're our client. But then you've got the employers paying the assessment fees to have the insurance on their workers. So the longer that their clients are on claim the more they have to pay, so it's like, they're really our clients. But then you've got the client sitting in front of us, who is presenting however they are and you're like "jeez this is our client". It is tough.

Here Donna provides an example of the difficulty of applying a client-centred approach in a real practice setting.

When trying to decide on the "grey" clients, those for whom determination of degree of effort was most complex, the participants turned to a holistic frame of reference

to help guide their decision-making. Amanda demonstrated this as she talked through assessing such a client:

> If it's consistent with their objective medical findings, and the clinical consistencies are there, and you don't believe that this person's perfor— you believe that this person's performance is as good as it's going to get or it's as good as they can do based on their— who they are…I would say in that situation you'd give them full effort.

Amanda seems to be saying that she considers all the influences on performance and if she believes their performance is the best they can do based on all those factors, then she can argue high effort. In contrast, Amie spoke of a holistic way of thinking about a client that might lead to a low effort conclusion:

> Sometimes people who have been out of work for a long time and have maybe even been on long term disability or partial long term disability, and come in to do an evaluation and have been out of work for a couple of years or two or three or more years, some of those people are not used to doing anything so any little thing that they do causes them to have some increase in symptoms. And they're used to not doing a whole lot and so I think their impression of what effort is is different. And I think more of those people end up with low effort. Particularly if they're not interested in going back to work. If they've been out of work that long and are in sort of a disability mindset, they don't (pause) in some case, I don't think they see the point of even going through an evaluation.

Amie seems to be suggesting that people who have been receiving compensation benefits and not been working are used to disability and therefore would not be motivated to perform well in an evaluation that would potentially deem them as able to work.

Determining effort within the context of a compensation system wherein benefit elimination may depend on the results goes against holistic, client-centred values of occupational therapy. The participants identified a disconnect between what they know about functional performance and the reality of working in a system that expects them to view performance as an outcome of physical strength and endurance. While they referred

to clinical judgment and consideration of psychosocial influences in determining effort, they tended to fall back on physical, observable data when making a final decision.

4.4 Subjectivity versus Objectivity

As was discussed in Chapter 2, in the industry of vocational rehabilitation, functional assessments are valued as objective tools to provide accurate information on work ability and client effort during functional assessments. Participants spoke about what they believed to constitute objective measures within the context of their functional assessments. This section will discuss the participants' thoughts on objectivity and subjectivity and how each applies to their practice of assessing work ability.

Many of the participants referred to "objective findings", "objective measurements", and "objective signs of effort" when speaking about their clinical work. Objectivity was defined by Amie as something that was observable during the assessment: "The objective things are for sure those physical things—the biomechanical changes that you're seeing that you would typically see in anyone reaching, for example, weighted tasks that are getting too heavy for them. That's objective".

Hannah also stated that for her being objective meant focusing on physical factors affecting a person's performance:

> I think that it's just being objective in the work capacity evaluations is like just looking at the person physically and being able to say— not letting all those other confounding variables get in the way and just looking at what they can do. Are they doing their best and (pause) see, to me, it's hard not taking into consideration all the other things...

As Hannah notes, there is conflict in applying what she knows about functional performance when working from a purely physical approach. In trying to be objective in her assessment approach, Hannah tries to think of function as a result of physical ability

and impairment. Knowing that actual performance is a result of a combination of several factors, Hannah is swayed from that belief and tries to use the approach advocated by the compensation in which she works.

Despite the frequent use of the term "objective", the participants also used the term "subjective", "clinical judgment" and "clinical reasoning" just as often when explaining how they made their final decisions about effort. Gisele noted that, "objective signs of effort are subjective" suggesting that there is interpretation involved in identifying signs of effort. Similarly Donna thought even the use of physical evidence was highly subjective:

> Commenting on someone's biomechanical endpoint versus psychophysical endpoint still is subjective. If you see that sign that somebody else may not see or if you tend to push your clients a little farther or something like that. That's still subjective.

Donna also mentioned how different therapists might make a different call on an endpoint for the same task: "Certainly something that I could feel even might be a psychophysical endpoint, somebody might decide that, 'Oh, there was that little biomechanical change that I can consider that biomechanical'" or that for a "really friendly client" might be harder to call low effort. This shows how, whether conscious or unconscious, the therapists engage in a process of interpretation of their empirical observations, and even perceptions of client disposition can influence the outcome.

Frances spoke very clearly about her opinion on whether effort was an objective or subjective construct:

> I believe it's a clinical judgment. I often believe, because we're seeing— well, we see what the person is doing just from a sensory perspective. We're taking it in. I don't believe there's really any objectiveness. Really. From anything that we see. I think it's all judgment. I think it's all subjective. The very basis of it. Certainly you can argue that there's objective signs that you can base things on. Certainly,

> the checklist is meant to help out with that for effort. But I think at the end of the day it has to be— it is clinical judgment.

Many of the participants suggested that they know something is true because they saw something happen. Frances disagreed with this idea that observations are objective, because what we see involves some level of interpretation and judgment.

While the participants agreed that, ideally, evaluators would be consistent in their assessments, critical thinking, and results, there was acknowledgement by most that this ideal does not exist. Interpreting the client's behaviour, being better able to address issues regarding effort, and considering factors outside the context of the evaluation make the likelihood of identical evaluations from different evaluators very low. Elizabeth illustrated the typical thinking involved:

> I think sometimes that can be a bit overwhelming and then to tease out the client's reports of their discomfort and what you're objectively seeing and all of those other things. I find sometimes that can be a lot of information to take in and analyze and be able to provide an overall perspective of what this client's able to do. I think it's a lot of analyzing. More analyzing than a lot of people realize and understand. And I think that's why maybe I think about it a little bit more than others who might just be doing the assessment, looking at the endpoint and moving on. It's an overall general perspective of what a client is functionally able to do day-to-day…

Here Elizabeth highlights the interpretive aspect of the assessment, like Frances, arguing that it is rarely purely objective.

Clients may demonstrate true signs of effort or physical exertion or they may exhibit behaviors to make a task look more effortful that it is. It is up to the evaluator to determine which is occurring and how that factors into assessment of the client's effort. Elizabeth referred to this above as having to "tease out what's a true physiological response versus a behavior. Which again is very grey, touchy area". Similarly, Frances stated that determining effort is "all about interpretation and perception".

Hannah explained her perception of how evaluator interpretation comes into play when analyzing the information:

> Some people are more lenient than others. I just think that some people are able to be more black and white whereas other people aren't. And I have a hard time with that black and white. High effort/low effort. One or the other. I always get mixed up in the details. I think that a less lenient evaluator might have a better ability to be more objective with the whole thing and just be looking purely at the physical part of the evaluation. I think that my problem is that I always think about all the other things. Like "Oh, they have this going on in their life and this is happening and they have this compounding everything else" and it's hard for me to say. (Pause) I don't know. It's hard for me not to look at those other things too, even though I know they're not really what's going to help me make that decision.

Hannah seems to be equating the clinical judgment, the interpretive or analytic process, with greater leniency. Referencing the ideal of a consistency among evaluators, Elizabeth also seems to suggest that therapists use interpretation to 'go easy' on more challenging clients:

> There should be a general consistency among therapists when it comes to assessing and I know everyone uses their clinical reasoning and judgment, so not everyone's going to rationalize things the exact same way, but if you have a client who is a bit difficult and may be a bit challenging from a personality perspective, sometimes therapists may be a little bit— just to get them through the doors, they may perhaps have them determined at being a particular level or whatnot. Whereas another therapist may have expected them to go a little bit higher or something like that. And didn't want to be controversial.

Here Elizabeth draws on notions of consistency among raters, a hallmark characteristic of objectivity. Frances seemed to support the notion of subjective influences on judgment, arguing that at times the effort decision could be swayed one way or the other depending on the evaluator's level of understanding of "where the client is coming from".

While Gisele and Hannah disclosed that they rarely have low effort results, Jane described herself as a less lenient evaluator, again seeming to equate leniency with a focus on the less objective elements of the evaluation:

> I think that I'm almost a little more strict with that part than some people. Like I've heard people say it always seems like this person has high effort when this person assesses them and maybe they do, but I find with me, maybe it's 'cause I am so objective, I a lot of times have pretty low effort. Recently it seems that way. And I don't know if it's because it became a lot more objective just from doing the jobsite thing, but I know I a lot of times I say "they have low effort".

At face value, then, effort is identified as an objective component of a functional assessment; however, in more detailed discussions, the participants spoke at length about the interpretation, judgment, and clinical reasoning that takes place in the analysis of information to make a final effort conclusion.

4.5 Summary

The findings illustrate that there are differences in how therapists understand and determine the level of effort put forth by clients during functional assessments. The participants described three types of clients related to effort—clearly high, clearly low, and "grey" clients who could go either way. The compensation policies and consequences to the client weighed heavily on the therapists' decision-making, along with their own client-centred practice beliefs and understanding of occupational performance. Trying to maintain objectivity in their assessment approach was important, yet challenging for the participants. The next chapter will discuss these findings considering why the therapists practice the way they do and what the implications are for the profession of occupational therapy.

Chapter 5 Discussion

This chapter discusses the varied conceptualizations of client effort among therapists and their struggle to maintain client-centred practices within a compensation system. It explores the fundamentals of objectivity in science and how therapists aim to uphold standards of objectivity when assessing complex constructs of work ability and effort.

5.1 Effort

5.1.1 What is it?

One of the fundamentals of measuring health outcomes is having a clear conceptualization of what one is evaluating. Before therapists can effectively measure a complex construct such as client effort, they need a solid grasp and well-defined understanding of the construct. Much of the terminology in return to work literature is confusing (Shaw & Polatajko, 2002). This was evident in this study in that the participants were unsure and inconsistent concerning what is meant by "client effort". In some instances, participants changed their own definition and concept of effort the more they tried to explain it. When beginning to explain what effort means, all of the participants immediately referred to physical strength or muscle exertion. They talked about using strength testing to see muscle recruitment, biomechanical changes in the body, and posture changes that assured them that the client was demonstrating maximum physical exertion, which was equated with high effort. When the concept of effort was understood to be the amount of physical exertion put forth by a client, then the

participants spoke confidently about what they looked for and how they decided whether a client was giving high or low effort.

According to the therapists' narratives, the concept of effort seemed to change when they were faced with clients who were not demonstrating maximal physical exertion or signs of biomechanical struggle or overload. For example, those clients who were nervous, angry, frustrated, emotional, or limited by pain or fear were reported by the participants to typically present with fewer physical signs of exertion during testing. When discussing these clients, the therapists explained effort as more about whether the person was performing in a way that would be expected given everything known about them. Effort was now understood to be a more holistic concept and as a result the participants drew on non-physical factors to decide whether a client's performance was accurate based on "who this person is" (Amanda). The therapists acknowledged that the psychosocial issues that influence a person's performance are real and have an influence on function during an evaluation. Sometimes the psychosocial limitations to performance were seen as acceptable, leading to a high effort conclusion, and other times they were seen as unacceptable, leading to a low effort conclusion. The acceptability of limited performance seemed to vary among therapists.

One participant seemed grounded in her belief that effort was entirely about physical exertion and described having fewer challenges defining and determining effort compared to the other participants. She stated that because of this physical approach, she considered herself to be a more objective evaluator with a tendency to have more low effort conclusions than her colleagues. Interestingly, she wavered less than the other participants in her understanding of effort or what she was looking for to make her final

determination. Whether her physical approach makes her more or less objective is an important point, which will be discussed later in the chapter; however it does illustrate that having a clear understanding of a construct, with clearly defined parameters, makes it more straightforward to assess and draw conclusions.

Also important in defining effort is the conceptualization of performance. The understanding of occupational performance has changed since the use of functional capacity evaluations and effort testing began in the 1980's. At that time, a biomedical approach to health predominated, wherein impairment was considered the driving factor in disability (Chappell et al., 2006). In the case of functional assessments, a person's performance was thought to be a result of their physical strength and endurance. In order to know whether a person was performing at their maximum ability, therapists measured both strength and endurance to comment on whether the client was giving full effort. Initially, there was a strong reliance on grip strength testing and isometric strength testing to determine effort (Lechner, Bradbury, & Bradley, 1998; Strong & Westmorland, 1996), whereas the participants in this study reported relying less on those tests in their own practice and more on observations and clinical consistencies.

In the 1990s there was a significant shift in the understanding of occupational performance, and occupational therapy in Canada had its first practice model that clearly outlined the dialectic relationships among the person, occupation, and environment (Townsend, 2002). With this model came a commitment to a client-centred approach to practice. The understanding that disability was not solely a direct result of impairment changed the understanding of occupational performance and indirectly, the concept of client effort. Furthermore, knowledge about pain mechanisms, particularly with chronic

pain, has shifted from understanding pain as directly related to tissue damage to pain being controlled by the central nervous system, therefore not necessarily linked to a particular tissue or presenting in a typical anatomical pattern (Butler & Mosely, 2003). This perception of pain means that client performance and pain reports may be different than anatomically expected. The participants in this study represent a group of therapists who are trying to understand and assess a construct (effort) whose meaning has changed over time. The foundational concepts that guide effort assessment may no longer be in line with the fundamentals of their profession or knowledge about pain experiences.

5.2 Client-centredness

There was a definite sense of conflict from the participants as they tried to navigate a practice context that did not reflect their professional values concerning client-centred practice. Sumsion and Smyth (2000) have identified three barriers to client-centredness related to goal setting: the therapist and client have different goals, the therapists' values and beliefs prevent them from accepting the clients' goals, and the therapist is not comfortable letting clients choose their own goals. The therapists in this study described how their interactions with clients are dictated by system-level policies and rules that have little allowance for individuality or client influence. In this context, client engagement is only welcome if it moves the treatment or assessment toward an outcome that is aligned with the needs of the case manager for claim management. Advocacy for the client can be seen negatively in terms of the therapist not remaining objective and impartial in their assessments and recommendations. One participant in particular spoke about her struggle to identify who her client even was—the injured worker, the employer, or the case manager. In navigating multiple clients with different

goals, it appears near impossible to stay true to client-centred practice for all. In meeting the needs of one client, the needs of another may go unmet.

Adding the layer of a third party payer to healthcare complicates the very concept of client-centredness. This thesis shows how applying many of the fundamental strategies of client-centredness and enablement—respecting client's views, experience, safety, and power sharing (Townsend and Polatajko, 2007)—is nearly impossible to do in more than a superficial way in this setting. The power differential between therapist and client is one that is obvious and looming as the therapist's decisions can directly impact the client's reputation and control receipt of healthcare and financial benefits. Much of the literature on understanding and implementing client-centred practice draws on and is applicable to the public health care system, where issues of secondary gain and trust, and immediate financial implications, are not as relevant they are for the therapists in this study.

The participants' discussions of client-centredness reflect those of many occupational therapists, who often "claim that their client-centred intentions are thwarted by those hierarchical, restrictive and policy-bound institutional environments in which they have chosen to work" (Whalley Hammell, 2007, p. 264). This research is consistent with the arguments of Townsend (1998) who concluded that attempts to enact a client-centred philosophy may be subverted by organizational processes and practices that impose conflicting demands. Pushing the debate further, however, Whalley Hammell (2007) argues that therapists are not victims of oppression, rather we are part of it. She challenges therapists not to be complacent in trying to serve the client and the institution, rather to acknowledge and confront this reality and either practice in a truly client-centred

way or change our code of practice to reflect the reality of what we do. The participants in the current study seem to view themselves as having their hands tied by the policies that guide their practice in the institutional setting. Rather than confronting this reality, as Whalley Hammell suggests, many of the participants in this study appeared to be silent advocates for their clients. They 'talk the talk' of the insurer to get the desired outcome for their clients, subverting or manipulating the process in the interests of injured workers This was evidenced clearly by the participant who described how she rarely determined a client gave low effort and just made sure to write the report in a way that supported and used the language of a high effort result.

At the same time, this thesis demonstrated how some therapists struggle to manage multiple clients with competing interests. Despite clear direction to the profession regarding the importance of a client-centred approach, and despite some skill in subverting the process, many times the therapists abandoned client-centred values in favor of the priorities internal to the insurance system in which they work. Much of the literature on understanding and implementing client-centred practice references public health care practice settings. This study offers a different context to examine client-centred practice where there are multiple, competing clients, and where there is a concern about secondary gain. The immediate financial implications for both injured workers and insurers establish a very particular context in which therapists performing work capacity evaluations are caught in a constant double bind. Not surprisingly, they rely heavily on the art of clinical reasoning.

5.3 Clinical Reasoning

Clinical reasoning is more than just providing a reason for a decision or outcome. It is a multifaceted process that includes not only scientific and narrative reasoning, but also the pragmatic reasoning that is concerned with the contextual issues affecting clients; it is also concerned with the personal context of the therapist and the culture of the practice environment (Schell & Cervero, 1993). Gilette and Mattingly (1987) described two paradigms that appear to be in operation when occupational therapists assess and treat their clients—the mechanistic paradigm and the phenomenological paradigm. The mechanistic paradigm is characterized by a biomedical focus on physical impairment and its relation to disability, while the phenomenological paradigm sees the client as a whole person—not as someone with an injured part: "Such a phenomenological view requires an understanding of motivation, behavior, life-styles, values, and roles that extends far beyond the constraints of a medical diagnosis" (Gillette & Mattingly, 1987, p. 400). The authors noted that these two lines of reasoning seem to conflict, and that therapists appear to struggle with the implications of adhering strongly to either of them. This was evident in the findings of this study as the therapists discussed how they were conflicted in how to assess work ability—either from a physical or psychosocial approach.

The participants demonstrated an awareness that they relied on their clinical reasoning skills to integrate standardized measured with their own multifaceted knowledge and clinical observations in order to make a statement about client performance and effort. The participants all discussed how the evidence used to determine effort was weighed differently depending on the situation. They spoke about how the injured workers they deal with are influenced by multiple psychosocial factors

that affect function; yet when it came to deciding a tricky call between high and low effort the therapists fell back on physical, observable evidence to decide one way or the other. Participants described biomechanical endpoints as the most valid marker of effort as it was something observable that showed muscle fatigue. This seems counterintuitive coming from a profession that so emphatically practices with a holistic understanding of performance, and counter to what many of the study participants themselves said at other points in the interviews. The therapists discussed at length the different influences on function—pain, anxiety, job satisfaction, stress, coexisting health conditions. The process by which the participants weigh the evidence begs further explanation to understand why they rely so heavily on physical, observable evidence, especially in complex instances.

5.3.1 To see is to know.

As discussed in chapter two, Strong and Westmorland (1996) argued that in order for the process of determining effort to be scientific, the approach must be driven by clinical reasoning and theory. Their review and the subsequent studies by Lechner, Bradbury, and Bradley (1998) and Lemstra, Olszynski, and Enright (2004) identified an over-reliance on physical strength testing, the inappropriate use of labels, the need for a broad conceptual framework, the variability in approaches to testing, lack of standardization, and concern that quantitative data does not in itself ensure accuracy.

One of the questions this thesis aimed to address was whether practice has embraced the recommendations of such previous studies to proceed with caution when discussing client effort, to avoid labeling clients, to not rely so heavily on physical testing, and to have a consistent understanding and theoretical concept of the construct of effort. It seems as though the therapists in this study are aware that they use clinical

reasoning and interpretation, they are cautious about labeling clients and are aware of the negative consequences of doing do; there is still, however, lack of a clear and consistent concept of client effort and a continued reliance on physical testing. The question remaining now is why has there not been more change in these areas?

The context of functional assessments within an insurance industry lends itself to conflict and controversy. The participants' services are being paid for by a third party and they described a responsibility to the insurer to provide information that was beneficial for claim management. Examples provided by the participants demonstrated that the insurers challenged their clinical judgments and conclusions if the outcomes of assessments were not favorable to them. This idea that therapists will need to defend their reports provides a possible explanation of why they rely more on observable evidence over their own clinical reasoning—observable evidence is less refutable. There is little room for argument when the basis of a conclusion is that something was observed and is therefore "true". It is easier to argue with and challenge conclusions based on clinical interpretation and triangulation of information. Not having to engage in an interpretive clinical reasoning process to determine effort also alleviates a sense of responsibility on the part of the therapists, particularly when the stakes are high and the evaluation results may mean suspension of benefits or a return to work against the disabled worker's own goals—or potentially, best interests.

There was a sense from at least some participants that relying on both the observations made during the evaluation and the physical components of performance made them less lenient and therefore "better" evaluators. This type of evaluator was described as not having "clouded" judgment or being influenced by the other

psychosocial factors that might be present. At the same time, the participants recognized that even observable, physical evidence can be subjective. One participant in particular was clear that she did not believe there was anything objective about the process at all, saying "it's all interpretation". Why then is there so much emphasis on being objective and providing objective evidence through the use of functional assessments in this setting?

5.3.2 Objectivity as the gold standard of assessment.

The value and high priority placed on objectivity in the area of functional assessment is part and parcel of its place in scientific investigation in general. To be objective in science is to gather and interpret data in such a way that the values, beliefs, and experiences of the investigator do not influence the creation of knowledge about the topic. Datson and Galison (2010) call this "blind sight", seeing without interference, interpretation, or intelligence. This definition fits well with the participants' descriptions of how they try to remain unbiased going into their evaluations, often avoiding reading any existing information about the client, or discussing the client with other people. It also fits well with the insurer's desire for FCE results that have not been skewed by the evaluator's subjective judgment. In this case, an objective assessment tool rids the insurer of any concern about error due to the evaluator's thinking process.

In science there have been different criteria promoted for achieving objectivity. For example, in some cases it has meant emotional detachment, in others it means automatic procedures for data collection, and in some it involves recourse to quantification of information (Hawkesworth, 1996; Datson and Galison, 2010). The general concept is the presence of neutrality and value freedom in investigation that

provides knowledge about the external world. The issue that exists, particularly in scientific investigation with humans, is whether knowing the world outside of the values and beliefs of individuals is necessary, or even possible or desirable. Human values, beliefs, and cultures are the driving forces behind our choices, behaviors, and realities. Arguably, investigation that suspends or evades values and beliefs would result in knowledge of something that is utterly artificial. In the case of FCEs, the very choices made by the evaluator of how to interact with and present the tests to the client are based on the evaluator's experiences with social norms, human values and beliefs, and personal interactions. Several participants stated that throughout the functional assessment they were frequently asking themselves whether their clients' presentation, performance, medical history, and pain reports "made sense" as a whole picture. Trying to understand and quantify human behaviour, as the therapists are required to do in a WCE, is influenced in innumerable ways by the evaluators' own experiences, perceptions, and knowledge.

Although objectivity has been a benchmark of good practice in the biomedical sciences, in the social sciences the confusing history and meaning of the concept have led to avoidance and repudiation of the term (Hammersley, 2009). Arguably, occupational therapy stands at the intersection of biomedical and social sciences, drawing from both. Hammersley has coined the term "objectivism" as a "particular conception of the nature of scientific inquiry, how it should be pursued and what it produces" (p. 2). By objectivism he means that objectivity has a single sense, in which all the different meanings for objectivity are combined. It implies a kind of reverence for objectivity as an end in itself. The priority of objectivism is to avoid being led into error by personal and

social beliefs, particularly through restriction to what is directly observable and restriction to specific procedures for assessment and measurement. He argues that while error can occur from individual and social factors, we should not assume they are the only sources of error. Further, he highlights that the human factors that objectivism aims to eliminate can be essential in uncovering valid answers to questions. This was evident in the current study, when therapists spoke of relying on biomechanical markers as safe, objective, reliable, and accurate indicators of effort, even while they acknowledged that in reality effort is far more complex.

In a related critique of the concept of objectivity, Janack (2002) refers to the "instability of the concept of objectivity due to the hodgepodge of ideals that it encompasses" (p. 275), highlighting multiple competing meanings embedded in what appears to be a single concept (p. 275). Objectivity is interpreted as meaning value neutrality and absence of bias, including bias due to preferences and desires, personal attachments, political aims, interests, emotions and ideological commitments. It entails impersonality, impartiality, factuality, and universality—and therefore, inter-subjective agreement. Objectivity is also understood as rationality and disinterestedness, best exemplified by adherence to the scientific method. The common message seems to be that objectivity is physical, explicit, absolute, true, unbiased, universal, and fixed. This idea of unbiased truth is what both the insurer and the evaluator strive for with the FCE. However, conflicts between the two groups appear to arise due to different ideas of what the 'truth' is for the injured worker. From a holistic point of view, the truth for a worker might be an acceptable level of disability that occurs due to many factors in his/her life. From a physical perspective, the truth about a worker's abilities might be that the level of

disability is too great to be acceptable to the insurer given the nature of the physical impairment.

From Hammersley's (2009) perspective, the unwelcome introduction of personal biases, or partiality, is curtailed through restriction to what is directly observable and restriction to reproducible procedures. From Janack's (2002) perspective, objectivity relies on use of the scientific method, with its emphasis on observable facts. These ideals are reflected in the participants' approach to functional evaluation, where observation-based assessments follow standardized testing procedures. Using observation-based tools suggests that the results are not influenced by personal bias, are value neutral, and are factual, thereby rendering them objective and worthy for use in evaluating performance where secondary financial gain is a concern. Although the participants rely heavily on their observations to support their assessment conclusions, several of them allude to how they have to interpret even those empirical observations to know what is meant by what they are seeing. For example, they must decide whether a particular client behavior is due to pain, a true physical fatigue or weakness, or intentional act to convey a particular message. This judgment put forth by the participants in analyzing empirical data negates the idea that observations are entirely free of subjective influence.

Social philosophers like Hammersley (2009) and Janack (2002) question not only the possibility of objectivism, but also whether it is even desirable. Similarly, in his article questioning whether scientists can be objective, Williams (2006) endorses the idea of objectivity as a socially constructed value in science, suggesting that value-freedom is impossible and unhelpful. In the current study, all but one of the participants spoke to their belief that the assessment of work ability and client effort is inherently a subjective

process, supporting the idea that value-freedom is impossible. The interpretation of information depends on the experience and skills of the investigator, which are value laden and hardly reflect neutrality and suspension of beliefs. Yet Williams also argues that some version of objectivity is essential for science, and goes on to suggest that objectivity takes different forms according to the context in which it is being used. This point of view parallels one of the study participant's comments that "effort can mean something different" depending on the client being assessed. Williams calls this "situated objectivity", which is achieved based on the experience and perspective of the investigator, and is grounded not only in the rigor of method, but also in relationship to the contextual values of the community of practitioners: "Objectivity in one science [or field of practice] might look a little different to objectivity in another... There will be discipline-specific manifestations of the relationship of objectivity to other values" (Williams, 2006 p. 75). Williams specifically highlights that the *purpose* of an endeavor will influence the contextual values operating.

When conducting a FCE, the evaluator draws on all of his or her skills, knowledge, experience and reasoning to reach a conclusion about effort that comes as close as possible to the 'truth.' Procedures are part of that, but so are contextual values, including professional values and relationship to financial implications. Whether objectivity will be seen as having been achieved depends on which party you ask—the insurer, the injured worker, or the evaluator. As noted in chapter four, therapists presented different ideas about what it meant to be objective, pointing out that the evaluator might argue that viewing the worker holistically and considering psychosocial influences on client effort is an achievement of objectivity whereas the insurer might

view this as being biased and partial. The contextual values surrounding FCEs are complicated by arising from multiple 'communities of practice'.

The very notion that FCEs are objective is debatable and depends on what definition is being used. From the perspective that objectivity means using standardized methods that yield the same results between raters (Janack, 2002), the FCE would be a method of scientific inquiry that ensures inter-subjective agreement and will lead to the facts about individual performance. High inter-rater and test-retest reliability is valued in the compensation system because insurers believe that it is indicative of their claimants' true functional abilities. Any evaluator who uses the same standard methods should find things that are true, pertaining to real facts. Some of the therapists in this study endorsed that view when they expressed that the ideal would be that they would each arrive at the same conclusions about work ability and client effort if assessing the same person; however they were quick to point out that this does not happen in practice, nor were they certain it is enough to ensure a realistic assessment of effort.

In return to work literature, debate surrounding the objectivity of WCEs highlights concern regarding the lack of standardization, lack of regulation, and the presence of the evaluator's subjective interpretation (Cronin et al, 2013). The suggestion is that if evaluations were just more objective—standardized, replicable, restricted to observable facts—they would be better able to get at truth. The idea that high reproducibility equates accuracy or truth may not be the case, as Hammersley (2010) suggests the notion that standard procedures will lead to more valid conclusions is based on faulty reasoning. He states that adherence to standardization may increase consistency, particularly with multiple raters, but it may reduce accuracy if reliance on observational

and interpretive skills is limited. If the assessment tool being used is not capturing what is intended, then the results between raters or trials might be consistent, however they will also be consistently flawed. Reproducibility is important in investigation to determine whether change has occurred after an intervention, however if it is not capturing the construct in the first place, then it will not capture the effect. In the field of WCEs, if more than one therapist comes to the same conclusion using particular procedures this is seen as evidence that the objective assessment tool must be accurate, approximating truth. In the findings of this thesis, the participants hinted at having a heightened level of confidence if their assessment findings were comparable to those of their colleagues; however based on Hammersley's view, this confidence may be misplaced as it is not an indication that the findings are accurate, rather that they are merely reproducible. They may consistently produce artificial conclusions concerning effort.

If work ability is made up of many factors including physical, emotional, environmental, and cognitive components and evaluators continue to employ methods assessing only (or primarily) the physical component of the person, then their conclusions about work performance are only part of the story and not the 'truth' at all. The results of this study illustrate how the evaluators rely heavily on physical performance components of a person, methods of distraction to get their clients to perform, and their own opinion of when a client should or should not be able to do more. The study participants are not necessarily getting at the truth about their clients' work abilities, rather they are discovering what clients are willing to do in a clinical environment, under the threat of loss of compensation benefits.

Another concept of objectivity within the context of FCEs that provides comfort to insurers is the removal of judgment from the evaluator. The idea that tests are scored using a calculation enhances perceived validity because it frees the assessment from any human interpretation. Again this is an emphasis on neutrality, impartiality and lack of bias, which is problematic for assessing the complexities of human performance. This same notion was highlighted in the findings from this study in which therapists described the complexity of understanding, defining, and determining client effort. It requires the skill of the evaluator to pull together all the known information about the person to form a 'valid' conclusion or opinion about work ability. The FCE is one part of the equation. Equally important in the decision-making process is the evaluator's insight regarding the motivations of both the insurer and the injured worker and how they influence the outcome. The participants provided examples of this insight when they discussed how they maintained an awareness of the underlying influences on their clients' performance such as job satisfaction, relationship with coworkers and supervisors, and relationship with the case manager. One participant commented that she was "thinking about it [motivating factors] all the time". Others described direct messages from case managers about the desired outcomes of WCEs.

The majority of the therapists in the study expressed a perspective on objectivity in line with Hammersley's (2010) notion that the "distinctive capabilities of the part of the investigator (and informants) may be essential for producing the knowledge required" (p. 7). Similarly, Williams (2006) describes how objectivity is achieved when investigators are able to consider all evidence, theories, and perspectives about a phenomenon both internal and external to the particular discipline. When the participants

in this study described the 'grey' clients for whom it was most difficult to determine level of effort, they explicitly discussed the importance of relying on their clinical reasoning abilities, an interpretive process. While some of the therapists disclosed that they avoided using information outside the context of the evaluation, in order to remain neutral, it could be argued that this approach makes them less informed to fully understand their client's abilities. Triangulation of information is key to evaluators' providing an accurate, functional assessment for their clients. For example, if evaluators only consider the physical component of the person and the performance that was observed during a two-day evaluation, they are missing important pieces that contribute to work ability such as environmental context, pain experience, and psychosocial considerations.

As described throughout the thesis, the determination of the level of client effort is significant in FCEs, as it is often the tipping point for the client in terms of benefit suspension. Therefore, it is important that evaluators make sound decisions in that regard. The study participants' comments about how the markers of effort are weighed differently show how evaluator's judgment and interpretation skills may direct different effort conclusions. This method of analysis highlights the need for evaluators to use trained judgment, rather than blind sight (Datson & Galison, 2007), when planning, administering, and interpreting their evaluations to get the most comprehensive representation of their client's abilities. This idea goes against some of the very foundations of objectivity, yet arguably provides a more 'true' picture of the injured worker's abilities. Evaluators need to become better critical thinkers and interpreters more than they need to be 'more objective' by limiting those factors. The therapists in this study demonstrated that they have this intuition, however they need confidence and

permission to move in that direction. When in situations of doubt, their confidence still comes from observable data with a focus on physical impairment and they "will do anything" to get the client to show high levels of physical effort or reach biomechanical endpoints during an evaluation. If evaluators continue to choose to view performance and effort only from a physical perspective to meet the insurer's wishes, then they are in fact being biased in their assessments toward the third party payer, and violating one of the fundamentals of client-centred practice in the context of multiple clients.

Coster (2008) encourages occupational therapists to challenge the assumptions that are inherent in the current use of measures. She advocates that the client's full story cannot be represented by standardized tests and protocols, which is evident in a one-dimensional view of the FCE. Further, as she cautions, the philosophy and approach that predominates in measuring work ability is not compatible with occupational therapy values, beliefs, and theoretical models. The participants in this study have no accepted method of capturing the full array of factors contributing to their clients' work ability and no means of articulating why a person's level of functioning is the way it is, beyond discussing the physical performance components of the person.

To add to the professional conflict, there is a question of accountability to the 'other client'. The therapist is responsible to use best practice methods to capture a true representation of the client's work ability. Arguably as important in this area of practice, is a responsibility to the third party payer who is requesting the FCE. If the insurer or case manager works from a perspective that their domain of concern rests only with the physical aspect of disability or performance, then are therapists accountable to provide them with only the physical information for which they are looking?

The therapist can be further challenged to consider whether it is the responsibility of the insurer to consider the non-physical components of the worker's abilities or whether limited responsibilities of insurers justify a one-dimensional view of work ability. Stepping outside of the occupational perspective, one is compelled to consider whether it is the insurer's responsibility to compensate beyond the normal time of tissue healing and physical recovery. It could be argued that if a person's recovery and level of function have been limited beyond expected tissue-healing time, other issues such as psychosocial factors are likely at play. The insurer may challenge that these issues were already part of the individual, existing before the injury occurred or exacerbated by the injury, which present complicating factors and a level of disability that is beyond the scope of compensation. And this argument seems valid from within the perspective of insurers.

With so much challenge within the system and a long-standing use of FCEs in this area of practice, it seems the options for therapists are to either leave the field for work that fits better with their values (which many do) or, unfortunately, submit to meeting the referral sources' needs and perspective. A third option might be the development of an approach to measuring work capacity and client effort that does not intend to exclude so much of the clinical reasoning of evaluators. A research-supported tool that has low utility and practicality is of little benefit in maintaining and developing occupational therapy jobs in return-to-work settings, if the valuable perspectives and skills therapists have to offer are routinely marginalized. An instrument is needed that fits and is accepted in the current system, yet is different enough to direct new, positive thinking (Coster, 2008, p. 750).

5.4 Strengths and Limitations

The strengths of this study were the knowledge base and experience that I brought to the project as the principal investigator, the high interest from the sample population indicated through very rapid recruitment, a homogenous sample population, and the use of qualitative investigation of client effort that considers decision-making processes.

As a therapist with a keen interest in this topic, I was able to develop and use an effective interview guide to draw perceptions from the participants that would answer my research questions. Having 11 of the 13 people contacted express interest in participating demonstrates that this topic is important and relevant to therapists' clinical practice. Having all occupational therapists providing service to the same organization ensured that they were coming from a similar perspective and were performing their work under the same set of parameters. The advantage of qualitative inquiry is that it allowed me to document the thinking processes that are so often invisible in routine return-to-work practice, as well as in quantitative studies of the outcomes of work capacity evaluations.

The main weakness in this study was also a strength, which was my role as a manager with the same clinical background as participants, within the same organization where the participants practice. Because I was a manager, the participants may have knowing or unknowingly restrained what they told me for fear of being judged on their professional competency. There was a power differential between us that was impossible to remove entirely. My similar knowledge base to that of the participants might have resulted in unexplored ideas because neither of us thought to consider a different view. Finally, the homogeneity of the study limits its application to other therapists using different assessment protocols or to organizations that might have different policies and

procedures. The results pertain to these therapists using this WCE protocol; the extent to which the findings apply to therapists using other protocols cannot be known. Because the participants were all occupational therapists, transferability to other professionals engaged in work capacity evaluations is also unknown.

Chapter 6 Conclusions and Implications

Determining the level of client effort in a functional assessment is a complex process with significant responsibility on the part of the evaluator. The participants in this study spoke about their own struggles defining, explaining, and assessing effort within the medico-legal context of an insurance system. The therapists' recognized and tried to apply their client-centred practice and occupational performance beliefs, however these appear to often be abandoned under the influence of external factors, including the priorities of the insurers and the policies within the compensation system.

What does this mean for the occupational therapy profession and its role in work rehabilitation? On one hand one could argue that it is a simple misfit that will never be reconciled—the insurance industry is medically and financially driven and will never accept a holistic view of performance or a truly client-centred approach to rehabilitation. Another view is that reconciliation could come with more support to the therapists to navigate such systems while maintaining their practice values.

At the training level, student occupational therapists should be better prepared to defend and maintain their own practice approaches and recognize when and why they are adapting to outside influence. Further education and support on how to navigate contexts where there is a dual client responsibility is crucial. More complex understanding of objectivity and subjectivity may also benefit occupational therapy students, so they can better understand the limits of purist versions of objectivism.

Not surprisingly, this study showed that external factors influence evaluators' decision-making on client effort during functional assessments. In order to minimize

these factors, clinicians need training and mentoring to become more skilled in observation, triangulating data, and interpreting information from multiple and competing sources. More value needs to be given to the judgment and clinical reasoning skills of the clinician when it comes to making conclusions about the complex construct of work ability and effort, along with training in how to present these clinical judgments in ways that carry authority and are less subject to scrutiny. Professional associations may have a role to play here to advocate for and improve the profession's credibility. At a system level, policies regarding client effort and participation need to be investigated further to ensure a common knowledge base and application among all the stakeholders involved. Consideration of whether a subjective construct such as "client effort" in a functional assessment should direct claim suspension is important as it is significantly consequential for the both the injured worker and the insurance company.

Many of the studies on FCEs suggest the need for further psychometric testing to ensure valid and standard procedures for assessing work ability and client effort. I am not convinced this recommendation is the best next step. This study suggests the need for further work on better conceptualizing effort to align it more with current knowledge about the complexity of disability and chronic pain, as well as the biopsychosocial model of health and rehabilitation.

FCEs have a stronghold as the objective tool of choice when it comes to assessing work ability, however the nature of objectivity is variable and depends at least in part on who is claiming it, what their understanding of the concept is, and which parts of the concept are most important to the creation of accurate data or the use of that data. In some respects, it is the FCE philosophy that fosters critical thinking and promotes the

judgment of the evaluator that results in more accurate information about an injured worker's abilities to perform work. This approach allows for consideration of the many factors that influence performance and is more in line with holistic values of occupational therapy, yet is contradictory to some notions of objectivity that claim that thinking, judgment, and interpretation are the very things that cause error and reduce objectivity.

With multiple understandings of the both effort and objectivity, is it worth systematically critiquing the use of those terms and trying to demonstrate their inadequacy? Perhaps a change in language should be considered. "Objective information" could be replaced with "physical" or "medical" information to better identify those pieces of information that are being coined "objective" in the industry. Commenting on a person's level of effort has a negative connotation and implies intent regardless of how much that is denied in the industry. Rather than spending time and energy on trying to get clients to do what therapists want them to do, it might be more valuable for therapists to increase their ability to identify what is influencing or limiting a client's performance—a physical impairment (strength, endurance, tissue based problem), a different medical condition (for example high blood pressure, another injury), fear, or pain. With that information, the insurer could make the decision about whether those reasons were acceptable and whether they entitle the injured worker to benefits. Occupational therapists would be free of the burden of proving whether a client was "trying their best" or could or should be able to "do more" and they could focus on their professional domain of assessing occupational performance and identifying occupational performance issues within a truly client-centred context.

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APPENDIX A Recruitment Email

Your participation is requested

You are invited to participate in a qualitative research study on

"**Client Effort in Functional Assessments: Understanding Evaluators' Practice"**

Are you an occupational therapist or physiotherapist working in New Brunswick who has provided functional assessment services to WorkSafeNB within the past year? Would you be willing to engage in a 60-90 minute one-on-one confidential interview about your experiences of evaluating 'client effort'?

This study is exploring how therapists experience making assessments of client effort, how they understand that process, and what factors they think influence it. This study is being conducted by Nancy Boutcher as part of her Master of Science (post-professional - Occupational Therapy) degree through Dalhousie University. Though Nancy works with WorkSafeNB, this study is NOT being carried out by that organization. Only a summary final report, in which no one is identifiable, will be made available to them.

As a token of appreciation, you will be given a $30 VISA gift card after completing your interview.

Please contact Nancy Boutcher directly by telephone: (506) 652-1357 or e-mail: Nancy.Boutcher@dal.ca.

APPENDIX B Telephone/Email Script

Thank you for expressing interest in the qualitative research study: "Client Effort in Functional Assessments: Understanding Evaluators' Practice". I'd like to tell you a bit more about the study.

Purpose:

The purpose of this study is to gain a greater understanding of the experiences of therapists performing work capacity evaluations, specifically related to determining client effort.

Inclusion Criteria:

In order to participate, individuals must:

- be an occupational therapist or physiotherapist
- perform WCEs/FAs for WorkSafeNB, and have conducted at least one in the past year
- comment on client effort in their WCE/FA reports
- be able to converse in English.

If you meet all of these criteria you are eligible to participate.

Time Commitment:

You would be required to take part in a 60-90 minute in-person interview in English that would take place at a time and location that is convenient for you. Within one month of your interview, you would also be provided with the opportunity to review the typed transcript of your interview to ensure accuracy if you wish to do so.

Risks and Benefits:

This research study poses minimal risk to you, as you only have to provide information during the interview that you are comfortable sharing about your practice of work capacity evaluations. There are no direct benefits to you, however we may gain insight on areas of practice that require change. As a token of appreciation, you will be given a $30 VISA gift card after completing your interview.

Participation:

All participation is completely voluntary and has no bearing on your current work status. Any participant can withdraw from the study at any time.

Confidentiality:

Confidentiality is taken seriously and all efforts will be made to ensure the confidentiality of your participation and of your input. This research is being conducted through Dalhousie University and not by WorkSafeNB. WorkSafeNB will not have access to any raw data or information about study participants. They may access a summary report in which no one will be identifiable.

Questions:

Do you have any questions?

If interested, schedule interview and get contact information to send consent documents.

APPENDIX C Consent Form

STUDY TITLE:
"Determining Client Effort in Functional Assessments: Understanding Evaluators' Practice".

PRINCIPAL INVESTIGATOR:

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Introduction

We invite you to take part in a research study being conducted by Nancy Boutcher who is a graduate student at Dalhousie University, as part of her Post-Professional Masters Degree in Occupational Therapy. Your participation in this study is voluntary and you may withdraw from the study at any time without consequence to yourself. The study is described below. This description tells you about the risks, inconvenience, or discomfort that you might experience. Participating in the study will not benefit you directly, but we might learn things that will influence the practice of therapists working in the industry. As a token of appreciation, you will be given a $30 VISA gift card after completing your interview. You can discuss any questions you have about this study with Nancy Boutcher.

Purpose of the Study

The goal of this study is to gain a greater understanding of the experiences of therapists performing work capacity evaluations, specifically related to determining client effort. The insights gained will not only add to the understanding of the decision-making process therapists use in determining client effort, but may also illuminate areas to improve practice.

Study Design

This study is a qualitative exploration of the experiences of therapists who administer work capacity evaluations for WorkSafeNB. Individual interviews will be conducted with 8-10 participants to better understand their experiences and decision-making.

Who can participate in the Study?

You may participate in this study if you are an occupational therapist or physiotherapist working in New Brunswick who provides work capacity evaluation services for WorkSafeNB and has completed an assessment during the past year. If you do not meet all the above-mentioned criteria you need not sign up for participation in this study.

Who will be conducting the Research?

The principal investigator in this research project will be Ms. Nancy Boutcher. She will be the main person you will be in contact with for this research project. The supervisor for this study is Dr. Brenda Beagan who holds an appointment with the School of Occupational at Dalhousie University.

What you will be asked to do

This study will invite you to participate in one audio-recorded, in-person interview lasting between 1 to 1½ hours. The interview will take place at a quiet space of your choosing. There is no preparation needed to participate. The interview questions will explore your experiences of determining client effort during a work capacity evaluation. You will be provided with a copy of your transcript no more than one month following the interview asking for your feedback. If you choose to provide feedback, this will take between 20-30 minutes.

Possible Risks

This research study poses minimal risk to you, as you only have to provide information during the interview that you are comfortable sharing about your practice of work capacity evaluations. If you feel any emotional or psychological distress due to any of the questions, please feel free not to answer. You may ask to withdraw from the study at any time and for any reason, with no need to explain to the researcher. If you withdraw, please indicate to Nancy whether or not it is okay to keep and use the information you have already provided, or if you would like it erased. After the interviews have been transcribed, and a preliminary analysis conducted, it will no longer be possible to withdraw your information from the analysis.

Possible Benefits

There are no direct benefits to you from participating in this study. Indirectly, there may be benefits by generating new knowledge and insight that could assist in changing and bettering practice.

Compensation / Reimbursement

Participants will be given a $30 VISA gift card after completing the interview as a token of appreciation. No direct expenses for your participation are being reimbursed.

Confidentiality and Anonymity

All data collected from you will be treated in a confidential manner. Each study participant will be assigned a false name that will be used to identify you, the recording of your interview, and the typed copy of your interview. The file that links your pseudonym with your real name will be stored in a locked file, separate from your actual interview. Interview notes, research notes, and audio recordings will also be stored in a locked file. All electronic data will be stored on a password protected encrypted external hard drive. The only people that will have access to this information are Nancy Boutcher, her supervisor, and the person who types up the interview (transcript) who will have signed a confidentiality agreement. No data will remain in any form with the transcriber. All identifying names and places will be removed from the transcript of your interview. Any quotes used from your interview will not disclose your identity. Your name will be changed to the pseudonym, and any identifying information such as your workplace will be removed or altered. All data associated with this research study will be retained securely after the thesis is finished for 5 years. The data will then be discarded. All paper copies will be shredded and all hard rives will be erased

Questions

If you have questions about this study you can contact the primary investigator, Nancy Boutcher at (506) 652-1357. You will receive a copy of this consent form for your records as well as for the contact information for the primary investigator.

Problems or Concerns

If you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact Catherine Connors, Director, Research Ethics, Dalhousie University for assistance at (902) 494-1462, *ethics@dal.ca*

SIGNATURE

I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I hereby consent to take part in this study. However I realize that my participation is voluntary and that I am free to withdraw from the study at any time until preliminary analyses are complete.
I understand that this interview will be audio recorded, and portions of my interview may quoted in the thesis, presentations and other writing, without identifying me (this will be re-confirmed after the interview).

Name of Participant (Please print)

_____

Signature of participant

_____

Date (d/m/y) _____

Signature of primary investigator

_____

Date (d/m/y) _____

_____ Having participated in the interview, I confirm my consent to have portions of it quoted in the thesis and any presentations or other writing emerging from this study. (please initial)

You will be given a signed copy of this consent form

APPENDIX D Semi-Structured Interview Guide

As a reminder, you can decide not to participate in this interview. If you choose to participate, you are free to withdraw at any time without prejudice. Similarly, if you choose to participate in this interview, this information will be maintained in confidence.

Interview Questions:

1. Please tell me a bit about your professional experience such as where you obtained your degree, where you work, and how long you have been performing functional assessments/work capacity evaluations.

2. Tell me about your understanding of work capacity evaluations/functional assessments – what they are, who requests them, and how they are used.

3. Tell me about client effort during the evaluation – What is it? What does it mean? Why is it part of the evaluation process?

4. Give an example of how you explain effort to a client. What do you say to them? When do you discuss effort with a client?

5. Provide examples of things you use to make your decision regarding physical effort? **Probes:** Do you use any information outside of the evaluation in considering the client's effort?

6. I am going to read a case example. You can read it along with me.

A 45-year-old male is undergoing a work capacity evaluation. He has a soft tissue injury to his low back that occurred three years ago, with radiating pain over his left leg. His most recent physiotherapy reports indicate decreased leg strength and decreased balance. During the evaluation, he consistently reports increased symptoms when he extends his trunk, performs any squatting or prolonged walking. He takes blood pressure medication. He presented and reported being anxious about the evaluation because he was informed that if he didn't do his best, his benefits would be terminated. The results of the effort testing completed are as follows:

- Coefficients of variation using a five-position hand grip test – His results had more than the allowable difference between his test scores.
- Bell curve patterns using a five-point hand grip test – Presence of a bell curve.

- Comparison of rapid exchange grip testing to maximum voluntary testing – He showed 69lb force on rapid exchange and 59lb force on the maximum voluntary testing.
- Presence of objective signs of exertion – During the carrying, lifting, pushing, pulling tests, the evaluator observed increased muscle tone, increased respiration, and noted that the client did not demonstrate signs of tissue overload when lifting to shoulder level, lifting from the floor, and performing two hand carry. Client reported increased low back pain and numbness in his foot during these tasks.
- Inappropriate cardiovascular response to large muscle group activity – His heart rates did not reach the expected levels with stair climbing and low level lifting.
- Presence of competitive test behaviors – The client asked for clarification on instructions, and asked to repeat two trials.

What is your impression of the client's effort in this case? What led you to that conclusion?
Probes: Is there additional information that would help you make your decision?

7. Think of an example of a client you have assessed recently where physical effort was a concern. How did you know it was a concern?
Probes: Was effort part of the reason for the referral? Were there discussions or documents reviewed regarding client effort prior to the evaluation? If so, tell me about them.

8. With what kinds of clients is physical effort the greatest concern in doing WCEs?
Probe: Why? What other concerns surface with particular kinds of clients?

9. What are some of the challenges you've experienced in determining physical effort during a WCE? (If you do not experience challenges, please talk about why you think that is so? How would you respond to other evaluators who do find challenges in this process, such as.....?)

10. How do you document your conclusions about effort in your report?

Probes: Is the documentation the same for each client? Where do the statements on effort come from? Do you give reasons for low effort, why or why not?

11. What happens to the client/claim when you conclude that the client's level of effort was low? Can you give an example of a client who you concluded was demonstrating low effort and you followed up on the outcome of your conclusion?

Additional
Is there anything else you consider important about performing functional assessments/work capacity evaluations and determining client effort that you would like to share with me?

APPENDIX E Confidentiality Agreement Transcription Services

I, _____, transcriber, agree to maintain full confidentiality in regards to any and all audiotapes and documentation received from Nancy Boutcher related to her study on "Client Effort in a Work Capacity Evaluation: Understanding Evaluators' Practice".

Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents;

2. To not make copies of any audiotapes or computerized files of the transcribed interview texts, unless specifically requested to do so by Nancy Boutcher;

3. To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession;

4. To return all audiotapes and study-related documents to Nancy Boutcher in a complete and timely manner.

5. To delete all electronic files containing study-related documents from my computer hard drive and any backup devices.

I am aware of the ethical obligation to hold all research information confidential, and of the harm possibly incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Transcriber's name (printed) _____

Transcriber's signature _____

Date