WORKERS COMPENSATION COMMISSION

CERTIFICATE OF DETERMINATION

Issued in accordance with section 294 of the *Workplace Injury Management and Workers Compensation Act 1998*

Matter Number: **2563/19**
Applicant: **Diane Detloff**
Respondent: **Ritchies IGA Pty Ltd**
Date of Determination: **20 August 2019**
Citation: **[2019] NSWWCC 278**

The Commission determines:

FINDINGS

1. I find that as a result of the traumatic injury on 13 November 2015:

    (a) traumatic brain injury, and
    (b) primary psychological injury.

ORDERS

1. The matter is remitted to the Registrar for referral to an Approved Medical Specialist assessment according to the following:

    (a) Date of Injury: 13 November 2015

    (b) Purpose: assessment of whole person impairment arising from injury.

    (c) Body Systems:

        (i) The Central and Peripheral Nervous Systems (traumatic brain injury); and

        (ii) Primary psychological injury.

    (d) Documents to be provided to Approved Medical Specialist (with attachments unless excluded):

        (i) Application to Resolve a Dispute and attached documents (except the documents on pages 183 to 151 (inclusive));

        (ii) Application to Admit Late Documents dated 16 July 2019, and

        (iii) Reply (except the reports by Professor Kiernan dated 6 April 2016 and 11 April 2016).

A brief statement is attached setting out the Commission's reasons for the determination.

Gerard Egan
Arbitrator

I CERTIFY THAT THIS PAGE AND THE FOLLOWING PAGES IS A TRUE AND ACCURATE RECORD OF THE CERTIFICATE OF DETERMINATION AND REASONS FOR DECISION OF GERARD EGAN, ARBITRATOR, WORKERS COMPENSATION COMMISSION.

A Sufian

Abu Sufian
Senior Dispute Services Officer
As delegate of the Registrar

STATEMENT OF REASONS

BACKGROUND

1. Diane Detloff (the applicant) claims lump sum compensation for injuries sustained at work with Ritchies IGA Pty Ltd (the respondent) on 13 November 2015 when a shelf containing glass bottles fell onto her. She claims injuries to her head, brain and neck. She also claims that as a result of the incident, she suffered a primary psychological injury. Consistent with various authorities, the applicant claims lump sum compensation for the physical injuries, or in the alternative, for the primary psychological injuries, but not both.

2. In the Dispute Notice dated 12 February 2019, the respondent denies that the applicant suffered a primary psychological injury but accepts that she suffers from a secondary psychological injury as a consequence of the effects of the physical injuries. The extent of impairment from psychological injury as also disputed. The respondent also denies that the applicant suffered a "brain injury" and raises both aspects of s 4 of the *Workers Compensation Act 1987* (the 1987 Act) as well as s 9(a) of that Act.

3. The applicant's injury to her neck is not disputed, however without impairments from the other physical injuries, her claim of five per cent whole person impairment (WPI) would not entitle her to compensation.

4. The injury to the brain is claimed pursuant to the *NSW Workers Compensation Guidelines for the Evaluation of Permanent Impairment, 4th* ed 1 April 2016 (the Guidelines) as a result of emotional and behavioural disorders, according to Table 13-8, Class 2, p 325 of *American Medical Association Guides to the Evaluation of Permanent Impairment,* 5th ed (AMA 5).. That chapter of AMA 5 relates to the Central and Peripheral Nervous Systems including traumatic brain injury.

ISSUES FOR DETERMINATION

5. The parties agree that the following issues remain in dispute:

    (a) Whether the applicant suffers a primary psychological injury. If such an injury is found, the matter must be referred to an Approved Medical Specialist (AMS) for assessment of impairment.

    (b) Whether the applicant suffered a brain injury when the bottle fell on 13 November 2015. If such an injury is found, the matter must be referred to an AMS for assessment of impairment.

    (c) Depending on whether both physical and psychological injuries are referred, or the assessments that arise from them, the matter will then need to be dealt with to determine which entitlement, if any, the applicant presses.

PROCEDURE BEFORE THE COMMISSION

6. The matter proceeded to hearings in Coffs Harbour on 9 July 2019 and again in Sydney on 13 August 2019. On both occasions the applicant was represented by Mr Inglis of Counsel, instructed by Mr Langler. Ms Goodman of Counsel appeared for the respondent.

EVIDENCE

Documentary evidence

7. The following documents were in evidence before the Commission and taken into account in making this determination:

   (a) Application to Resolve a Dispute (ARD) and attached documents (except the documents on pages 183 to 151 (inclusive));

   (b) Application to Admit Late Documents dated 16 July 2019, and

   (c) Reply (except the reports by Professor Kiernan dated 6 April 2016 and 11 April 2016).

8. There was no oral evidence

BACKGROUND AND THE EVIDENCE

9. At the beginning of the hearing in Sydney on 13 August 2019 I provided to both counsel a copy of pages 216 and 249 of *Gould's Medical Dictionary* containing medical definition of the terms "concussion, brain concussion and brain injury" and signalled my intention, if necessary, to rely upon these definitions.

The applicant's statement evidence

10. The applicant has filed two statements, the first dated 2 February 2016 and the second dated 23 May 2019. In the first statement she describes working for the respondent for a total period of over 11 years. She denies ever having a neck or head injury before the injury in question. She denies any previous neck pain.

11. When describing the day of injury, she says her last memory that day is arriving at work in the car park and then "waking up" at the Coffs Harbour Health Campus. She said she "mainly remember the pain in my head like an overall headache and that I had a huge lump just below the top of my head on the right side". She underwent scans there which will be dealt with in the contemporaneous material below.

12. She underwent investigations at the hospital and was referred to the Mid-North Coast Brain Injury Clinic that day (brain injury clinic). She also attended her usual general practitioner who was located at a medical centre on the campus.

13. Her description of the accident and her reaction immediately at the time is therefore second hand due to her lack of memory of anything occurring prior to arriving at work.

14. The applicant then goes on to describe visiting the store with her daughter Alexa "at a later time" when she said a colleague greeted her loudly and introduced himself. She said this really upset and embarrassed her and she burst into tears.

15. The **applicant** attended the brain injury clinic over subsequent periods.

16. The statement in February 2016 describes the applicant as having trouble sleeping and needing medication for it. She was constantly feeling anxious and on edge, had become extremely emotional, which was not her pre-accident nature. She said she cried for unknown reasons, became easily angered and at times confused.

17. She also said that she become really anxious and emotional when thinking about the workplace and the accident and had a fear of attending the workplace. She describes difficulty recalling simple things and retaining information.

18. The applicant also described another visit as a customer at the respondent's store when another colleague approached, said hello and asked how her memory was. The colleague apparently said, "we got our asses kicked because of you" (there was some disquiet about staff at the scene of the accident not calling an ambulance immediately, the applicant having been transported to the hospital only after going home). In any event, this comment said to have upset the applicant in other materials.

19. The applicant also described suffering blurred vision in her right eye "which comes and goes".

20. In the second statement on 23 May 2019, the applicant describes her subsequent treatment under the care of Yvette Greenhalgh, clinical psychologist through 2016. She continued to see her general practitioner, Dr Lu, Hoy's Physiotherapy for her physical injuries and Dr Kahn, consultant psychologist in June 2016. She was also reviewed on behalf of the Brain Injury Clinic by Corinne Roberts, clinical psychologist in July 2016 and was referred by the Brain Injury Clinic to see Latasha Helliwell, occupational therapist. She also saw Dr Neil Pegun, clinical psychologist who she remains consulting weekly.

21. The applicant recounts attending examinations arranged by the respondent upon Dr Devina Singh, consultant psychiatrist on 5 April 2016 and again on 12 November 2018; Professor Matthew Kiernan, neurologist on 6 April 2016; Dr Vigay Panjratan, orthopaedic surgeon on 22 November 2018 and another neurologist, Dr Ross Mellick on 8 January 2018. (As can be seen from the materials submitted on behalf of the respondent above, the applicant has not elected to rely upon the later opinion of Dr Mellick as the forensic neurologist in preference to Professor Kiernan who saw her in 2016.)

22. The applicant then describes her ongoing problems with neck pain, headaches and continuing problems sleeping. She has difficulty recollecting simple things like recipes which have never occurred to her before. She continually describes difficulty organising thoughts and becoming confused. She finds she writes things down or she will forget. She can no longer care for her granddaughter and feels as though she is letting her daughter down. She describes remaining highly emotional which is out of character. She is frequently tearful and upset and easily angered, finding herself yelling and screaming at her partner or family, which was out of character. She lacks motivation for keeping her home clean and tidy and cooking, something which she previously took great pride in. She recalls her license was suspended immediately following the injury for about seven months but has since regained it but only uses it for short essential journeys.

23. The applicant describes attempted post-injury work on a graduated basis from 29 August 2016 until being certified for pre-injury hours work on 18 May 2016. She had restrictions in lifting, repetitive work and stressful situations and said she was coping well within these limits. However, employment was terminated on 23 March 2018 due to her inability to return to full duties.

24. Since then, she has worked in a casual situation in a kiosk in a sports stadium but becomes stressed, and loud noises affected her headache. An attempted return to work on 13 May 2019 at a café three doors down from the respondent's premises was short lived because the proximity to the respondent's shop made her anxious and nauseous.

25. She also describes a trial as a waitress at a local resort having worked four shifts. She had difficulty completing one because she was confused which she says was due to the pain in her head and neck.

Documents and medical evidence

26. An "early report of injury" completed by "David and Shaun" identified as "duty manager" describes the injury as "glass bottle fell from display and hit her in the head". Describing the worker's injury or condition, they described "bump on head and was a little confused".

27. It appears the applicant was taken home by a colleague following the accident and then to the hospital by her husband. Upon admission, the following notes were made of her presentation:

> "60yr old lady presents following head injury at work
>
> Patient unable to remember events- thinks something fell on her head, but keeps asking same question over and over again 'what happened?' and 'did something hit me on the head?'
> Patient remembers going to work this morning at 7am and remembers marking down bottles of juice at work (thinks they were glass bottles, one litre)
> Patient unsure about time of events
> Does not remember anything hitting her on head. Her husband tells me that her work colleagues called him at 12.30 to advise that she had been hit on the head with juice bottles or ?shelf with juice bottles
> Her work colleague then drover her home (she does not remember this)
> Her husband then drove her to ED
> She does remember sitting in passenger seat in car with husband en route to hospital
> Does not remember taking paracetamol in the emergency department
> Patient keeps asking same questions over and over and cannot remember that her daughter in on holiday (asking where she is and why she is away) [sic]"

28. Diagnosis of "traumatic head injury with anterograde and retrograde amnesia" was made. The applicant's presenting Glasgow Coma score (GCS) was 14/15.

29. A CT scan of the brain failed to indicate any intra-cranial pathology.

30. Amnesia persisted over the subsequent hours of observations at the hospital and a medical certificate for WorkCover purposes was issued by Dr Barrow, the emergency physician. The diagnosis quoted in that was "head injury with ongoing amnesia". After several hours at the emergency clinic, the applicant was discharged with a referral to the Brain Injury Clinic.

31. On 15 November 2015, the applicant saw Dr Lu, her general practitioner. He noted the injury and the attendance at hospital and observed mild tenderness on the right-hand side of the head and right shoulder and neck. He also noted the applicant was "teary, blaming self that it's her fault" although the security camera was said to establish otherwise. He noted the applicant was "orientated in person and place, and to month and year, but not to day and date". He diagnosed work-related head injury/amnesia and said she needed "urgent referral" to the Brain Injury Clinic.

32. In that referral he referred to the applicant's "brain problem (amnesia)".

33. On 16 November 2015, the Brain Injury Clinic completed a "Rivermead post-concussion symptoms questionnaire" which, doing the best I can seemed to establish continuing post-concussion symptoms.

34. On 16 November 2015, Dr Lu completed the first WorkCover medical certificate. In that he diagnosed "acute head injury, brain concussion/amnesia".

35. The Rivermead questionnaires conducted by the Brain Injury Clinic over the following month or so continued to demonstrate existing post-concussion symptoms with some improvement. In a letter dated 4 December 2015 by Latasha Helliwell and Cassie Carswell, both occupational therapists from the Brain Injury Clinic, the applicant was noted to continue to report severe neck pain but also significant fatigue having 11 hours sleep overnight and then three or four hours sleep during the day. She easily rises at 4.30 am. She was also having difficulty sleeping because of pain and worried thoughts. She was reported to be unable to drive at present (but the reason was not expressed), to be evaluated by the general practitioner in four weeks. The assessments conducted on 20 November 2015 describe the post-concussion questionnaire as demonstrating moderate problems “headaches, noise sensitivity, sleep disturbance, feeling depressed or tearful” and mild problems of “dizziness, fatigue, forgetfulness, taking longer to think”. There were also difficulties of recall and concentration.

36. Also, on 4 December 2015, Dr Lu again noted attendance for “brain concussion”. He noted the applicant’s daughter reporting short-term memory loss, forgetfulness (such as forgetting where the car was parked or not remembering where to meet).

37. Dr Lu described the applicant’s presentation on 21 December 2015 for “concussion of brain” and neck issues. He also recorded, consistent with the applicant’s evidence, the onset of blurred vision. He said, “Saw optometrist recently who says her blurred vision will settle”. He also noted the applicant was “very emotional” and describes the applicant being told by a colleague she does not know, having terminal cancer, bursting into tears and emotional, crying for an hour. The applicant’s daughter reported improvement in memory “not constantly over saying things again and again”.

38. On 24 December 2015, the applicant underwent an MRI scan of the brain. This did not disclose any intracranial pathology. The history provided to the radiologist was “traumatic brain injury at work. Concussion. Forgetful, change of personality. Tender neck pain, lower C-spine”.

39. During January 2016, Dr Lu describes difficulty in getting a neurologist appointment, and an occupational therapist “IPAR, Prashan” became involved in the applicant’s rehabilitation.

40. On 15 February 2016, a post traumatic stress disorder (PTSD) questionnaire noted the applicant was then not having nightmares about the incident but was trying hard not to think about it and went out of her way to avoid situations that reminded her of it. She described being constantly on guard, watchful or easily started. The notes indicated “avoids workplace and particularly the area where injury occurred, ‘onguard’ when crossing roads etc - not occurring pre-injury”.

41. In a report of Latasha Helliwell on 15 February 2016, it was also noted that the applicant continued to be teary and described being teary and upset at her workplace approaching the area where the injury occurred, and that she avoided going there. She had a general feeling as if “something is not right” and needed her hand to be held when crossing the road. The sleep difficulties and daytime fatigue continued but neck discomfort was said to be the cause. It was recommended that she discuss with her general practitioner whether a referral to a clinical psychologist was indicated.

42. On 25 February 2016, Dr Lu noted an attendance with the applicant, her daughter and Prashan, the rehabilitation consultant. The reason for the visit was “anxiety/depression, PTSD” and she was described to be “still anxious, guarded, crying, swearing a lot the last few days”. In addition, she was described to have been “worsening mentally” after going back to the respondent’s store, being criticised by one of her colleagues. Approval to see a neurologist was noted and an arrangement to see a psychologist for anxiety, depression and PTSD was also noted.

43. On 6 March 2016, the applicant was noted as still having to hold her daughter's hand when crossing the street. Exposure to a new store opened by the respondent caused the applicant to be "a little bit tense" with no breakdown or crying and the applicant thought she may be able to return to work there.

44. On 10 April 2016, Ms Greenhalgh, treating psychologist reported to Dr Lu. By then Ms Greenhalgh had seen the applicant twice and described the applicant presenting as follows:

> "…. quite distressed and reported increased fatigue, low motivation, increased irritability, low mood, which she rated 4 out of 10 (where 10 is cheerful), increased teariness, feelings of anxiety and panic and a general sense of feeling overwhelmed. She also reported poor concentration and attention and complained that her memory was not as good as it used to be. She was also experiencing nightmares and flashbacks of an injury she had sustained at work on the 13th of November 2015."

45. Ms Greenhalgh also recorded reports of out of character behaviour, such as swearing at her husband and getting irritable and angry more easily, crying in response to stories being told to her about people being unwell, which the applicant found confusing because she did not know those involved and would not normally experience that level of distress. She then provided the following opinion:

> "Although some of these symptoms are also related to mood and anxiety, my sense was they were directly related to her head injury, which meant it was important for Diane to pace herself in terms of any activities she undertook and to sleep when she felt fatigued. As the Head Injury Centre and I have explained sleep is good for brain recovery and that fatigue can often be a reflection of pushing herself too much. It is expected that these symptoms will resolve as her brain recovers.
>
> There was also no doubt Diane was suffering from mood and anxiety symptoms in addition to those that can be contributed to a head injury. Diane's flashbacks and nightmares about the incident were particularly troubling to her."

46. Ms Greenhalgh thought the applicant needed a few months to "allow her brain to recover a bit more and for psychological treatment to commence to reduce her anxious and depressive symptoms". She diagnosed Adjustment Disorder with mixed anxiety and mood and also noted that "a number of post-traumatic stress symptoms that may make her eligible for this criterion as well".

47. A report dated 11 July 2016 by Corinne Roberts, senior clinical neuropsychologist with the Brain Injury Clinic was provided for clinical purposes and "not intended for medico-legal use". Ms Roberts reviewed records from the hospital emergency department noting various entries therein including the applicant's presentation with amnesia and asking repeated questions, being tearful and upset, and slightly diminished. She described her GCS as "14/15 (confused)". She also noted the absence of acute intercranial abnormality of CT of the brain. Ms Roberts then tracked the observations on the day of presentation including improving retrograde amnesia and persistent short-term memory difficulties, noting she was discharged and advised to return if experienced any post-concussion symptoms.

48. The subsequent attendances on the clinic were also noted in November, December and again in February. She noted the persistence of the various symptoms generally outlined above, with the persistence of symptoms through to February 2016. Noting tearfulness, with a primary concern about feeling uneasy and upset regarding the recent visit to the workplace. Ms Roberts noted the PTSD brief screen referred to above and the possible avoidance and increased arousal. Ms Greenhalgh's report was also noted, as was Dr Kahn's.

49. The applicant had by that stage resumed driving and feeling increasingly confident.

50. Ms Roberts interviewed the applicant's daughter, Alexa, noting the description of the applicant as "a totally different person" with preservation of long-term memory and impairment of short-term memory. There was easy agitation, frequent crying which was not like her. The applicant was fidgety, often made errors cooking and was more irritable, anxious and less self-confident.

51. She performed numerous psychological testing in the categories of intellectual ability; attention, working memory, processing speed; memory; executive functioning; and validity of performance.

52. After reviewing the summary derived from the clinical notes, Ms Roberts concluded the description of the initial injury as follows:

> "Ms Diane Detloff was seen for neuropsychological assessment 8 months after an accident at work in which a shelf with full glass juice bottles allegedly gave way and struck her on the head and neck. The available medical reports suggested that there had been no loss of consciousness, but she remained confused and amnesic for the event for at least several hours, and she had a few hours of retrograde amnesia. Her initial GCS in ED was reported as 14 improving to 15 later in the day. However, by 6.30pm (approximately 7 hours post-accident assuming that her reporting of the time of the accident is accurate) she had still not reached criterion on the Abbreviated Westmead PTA Scale. CT brain scan did not reveal any acute intracranial pathology. This history is consistent with a mild traumatic brain injury.
> ……
> Although any TBI sustained by Ms Detloff as a result of the work accident is likely to have been mild, the available research suggests that in older individuals' recovery from even very mild TBI can take longer than a comparable TBI in younger individuals. While the brain is recovering the person has to exert extra mental effort to maintain an optimum performance and this often results in overwhelm and mental fatigue. In addition, the presence of chronic pain, and psychological factors such as elevated anxiety, low or fluctuating mood, and reduced self-confidence (particularly in individuals who have tended to be perfectionists), can interfere with the person's ability to utilise the cognitive abilities that they do possess in an efficient manner resulting in problems with attention, forgetfulness, and difficulty making decisions."

53. There are no further relevant treating reports in evidence thereafter for some period, and those add little to the principal issue, namely the existence of a primary psychological injury, or traumatic brain injury.

54. The applicant was referred by Dr Lu to see Dr Bruce Kahn, psychiatrist. Dr Kahn reported on 4 June 2016 to Dr Lu. Dr Kahn examined the applicant alone and interviewed her partner, Peter Webber independently and separately. He noted the absence of any prior psychiatric symptoms and then noted the following:

> "Consequent to the accident, she experienced considerable difficulties with mood, appetite, sleep, energy, fatigue, motivation. Interests, ability to enjoy things, concentration", memory, decision making, irritability, loss of sex drive, and feeling massively guilty as if she had done something wrong (even when there Is video-graphic evidence that she did not do anything wrong). She even occasionally felt like giving up or wishing that she wasn't alive, but she did expressly deny any type of suicidal intention, desire or plan."

55. He noted the range in the applicant's affect from euthymic to serious to tearfully dysphoric on a number of occasions. He noted elements of considerable anxiety when discussing the incident and how it affected her life and that "she continues to have recurrent recollections nearly every day of the accident and it sequelae and finds it 'highly distressing… I don't want to think of it…'". She avoids any reminders of the accident from TV shows or movies of injured people, particularly head injury.

56. Dr Kahn noted the absence of recall of the accident or anything after until she was at the hospital and feels cranky when she thinks about how they did not take her to the hospital immediately (although nobody says that would have altered the outcome). He notes the applicant easily startles whereas she never used to. There were problems with memories, being considerably more forgetful such as with knitting patterns or cooking ingredients.

57. Dr Kahn's conclusions were:

> "Diagnostically, Di has suffered from a closed head injury (i.e., an acquired brain injury), resulting in the onset of a major depressive episode associated with considerable anxiety; and also resulting in an acute stress disorder (with many similarities to a posttraumatic stress disorder, but absent the life-threatening trauma that would be required for the technical diagnosis of PTSD).
>
> Importantly, there is absolutely no evidence whatsoever that Di is malingering, exaggerating or trying to 'gild the lily'. She comes across as highly credible, honest and without any to avoid or evade questioning."

58. He made a number of recommendations including neuropsychological testing to "better define the nature and scope of the cognitive impairments that she clearly has suffered as a result of the industrial accident", particularly for the efficacy of treatment from that time on.

Forensic reports

59. There are a number of forensic reports in evidence of varying specialities. I will not deal with opinions of an orthopaedic nature as they are not relevant to the issues for me to determine. The specialities overlap somewhat when considering, on the one hand, the nature of an existing psychological or psychiatric injury, and on the other whether or not there is a traumatic brain injury. I will deal with the reports as follows.

60. From an independent psychiatric perspective, the applicant has been examined by Dr Davina Singh on behalf of the respondent twice, producing reports dated 25 May 2016 and 21 December 2018. At the request of the applicant's solicitors, Dr Parsonage has produced a report dated 11 July 2018, and Debbie Anderson, clinical neuropsychologist, has provided a report dated 28 September 2018.

61. In her report of 25 May 2016, Dr Singh records that she was provided with various materials. These included earlier reports from Dr Lu, Coffs Harbour Health Campus records noting retrograde and anterograde amnesia, repeated questioning and crying constantly but "no obvious physical brain injuries at the time". Also, early letters from the Brain Injury Clinic were noted.

62. However, Dr Singh did not set out a detailed recounting of the observation reflected in those notes and material. Dr Singh recounted the current psychiatric symptoms consistent with the description of irritability, crankiness, being argumentative, swearing and verbally abusive, sleeping difficulties, nightmares and fears, being easily startled and tiredness and exhaustion. Dr Singh also recounted the return to work when she was accused of causing trouble because an ambulance was not called, an incident which was described by Dr Singh as leaving her feeling extremely anxious, guilty, shaky, upset and confused. Dr Singh also recounted the incident where the co-worker attempted to introduce himself and the applicant could not remember the person "no matter how hard she tried".

63. Dr Singh recorded that this left her feeling frustrated with herself and incompetent compared to her pre-injury self and "that seemed to be the underlying psychological reason for not being able to cope with the impairment she has since the injury". Dr Singh diagnosed "Major Neurocognitive Disorder due to traumatic brain injury":

> "Diane presents with symptoms of post-concussion syndrome that occurred immediately following her head injury and continues since. She has irritability, headache, fatigue, anxiety, depression, poor attention & concentration, emotional withdrawal, delayed verbal & motor responses, mood dysregulation, uncharacteristic lewdness, inability to understand effects of her behaviours on others, difficulty communicating appropriately, and amotivation. There was both retrograde & anterograde post-traumatic amnesia, disorientation, and confusion. Both Diane and her daughter, Alexa, are particularly concerned by her significant decline in psychosocial functioning and inability to manage her escalating anxiety. These symptoms interfere with her independence in everyday living."

64. Dr Singh also noted the monthly follow ups at the Brain Injury Clinic and said she "presume(d) this should continue as appropriate". She also recommended weekly psychological interventions.

65. As for barriers to recovery and return to work, Dr Singh said:

> "The only barriers are her recovery from symptoms of concussion following head injury and severe anxiety coping with her impairments since. I note the timeframe for recovery from these symptoms are uncertain and varies for each individual."

66. In a further report of 21 December 2018, Dr Singh reviewed additional material including the reports of a number of other specialists including as set out below, Dr Milder, neurologist, Dr Parsonage, psychiatrist, Debbie Anderson, psychologist, Corinne Roberts, Dr Pegram, Yvette Greenhalgh and Dr Kahn.

67. On this occasion, she recounted the list of ongoing symptoms which were not as severe when initially seen in 2016. She continued to diagnose "Major Neurocognitive Disorder due to traumatic brain injury" and additionally "Depressive Disorder due to another medical condition associated with anxious distress".

68. Dr Singh was then ask to address the legal distinction between primary psychological injury and secondary psychological injury and responded in the following terms:

> "I do not consider the worker to have sustained a primary psychological injury as related to the incident at work dated 13 November 2015. Her psychological symptoms are directly related to a sense of shame worsened by being self-critical and having difficulty accepting her physical impairments from the injury sustained on 13 November 2015. Therefore, she does not have a primary psychological injury as defined by the WorkCover legislation in my understanding.
> ……..

> ….. the workers psychological symptoms are secondary to her primary work-related likely traumatic brain injury on 13 November 2015. Her psychological symptoms of poor concentration and attention with mildly compromised working memory and intact executive functioning skills are directly related to pre-existing preinjury personality traits of being a perfectionist where she was hard working in long hours and overly responsible. Since the injury, there is intense difficulty and shame accepting the person she has become: from being unable to function in the manner she was used to in her self-image. Therefore, any psychological symptoms experienced have developed since the head injury on 13 November 2015 as a consequence of her physical pain symptoms and psychological distress."

69. Dr Singh applied the Psychiatric Impairment Rating Scale (PIRS) criteria to the assessment of the psychological impairment and arrived at an impairment of 5% WPI. When explaining her difference to the approach taken by Dr Parsonage and Dr Anderson (see below) she said she believed that the assessment of Dr Parsonage and Dr Anderson "has not elucidated the individual contributions of the physical injury, the impact of a pre-existing personality traits, and her current psychological symptoms…".

70. Dr Parsonage, consultant psychiatrist, examined the applicant at the request of her solicitors on 11 July 2018.

71. Dr Parsonage was not provided with the early clinical notes from the hospital and Dr Lu, however, he took a history of the onset of symptoms generally consistent with that set out above. These included the onset of amnesia and her complete inability to recall the accident itself. He described memory problems which the applicant was uncertain had improved, got worse or stayed the same. He recounted the incident where the colleague told her they had got in trouble because of the applicant, which Dr Parsonage said, "this reinforced (the applicant's) fear that she was to blame for the accident". The loss of memory regarding cooking and knitting was noted, as well as her emotional volatility of becoming cranky, abusive and uncharacteristically swearing. He noted the applicant had hit her husband on two occasions. He said, "in the context of ongoing feelings of being to blame for the accident she became increasingly depressed in early 2016 and since then has been depressed more often than not".

72. Dr Parsonage reviewed the documentation including the first statement of the applicant and video footage. He described the video footage as showing the applicant not to fall to the ground but "appears dazed". He noted with references by Dr Lu to "whiplash" and "brain concussion" and the reports of the Brain Injury Clinic. He also noted the report of Dr Kahn, specifically his opinion that there was a "closed head injury (quiet brain injury)" resulting in the onset of Major Depressive Disorder which was similar to PTSD but without the life-threatening elements to warrant its diagnosis.

73. Dr Parsonage concluded that the applicant had undoubtedly suffered a "head injury but the extent of any brain injury is uncertain". He noted the slightly diminished GCS and her amnesia around the event and the assessment of a "mild traumatic brain injury" by the Brain Injury Clinic. He also noted Dr Milder's diagnosis of "concussive injury".

74. However, he noted the subsequent neuropsychological examinations in July 2016 and the minimal abnormalities found in it. He said:

> "As a result of the shock of the injury and Ms Detloff's perception that she was somehow to blame for the accident caused her to develop significant symptoms of anxiety and depression. She did not suffer an Acute Stress Disorder nor Post- Traumatic Stress Disorder because she has no memory of the incident and her pre- occupation has been with self-blame and the attitude of staff towards her rather than of the accident itself. Using DSM-5 criteria she would be diagnosed as suffering from a Persistent Depressive Disorder with anxious distress.

> On the basis of the information available to me it is my opinion that Ms Detloff suffered an initial concussive/mild traumatic brain injury, from which she had largely recovered by July 2016, and that her ongoing problems including subjective memory impairment are largely a function of her Persistent Depressive Disorder with anxious distress."

75. Again, when asked about whether the injury was a "primary injury or a secondary consequential injury" he replied:

> "In my opinion, her Persistent Depressive Disorder with anxious distress is a primary injury. It did not arise as a consequence of physical injuries but instead arose as a result of the shock of the accident and her perception that she was to blame for the accident."

76. Ms Debbie Anderson, clinical neuropsychologist, prepared a medico-legal report dated 28 September 2018. Ms Anderson noted the applicant's amnesia and the fact that she was focussed on the idea the accident was her fault and spent a lot of time ruminating about it. She reviewed the documents including the hospital records and the initial slight diminution of the GCS, returning to normal after about seven hours or so. Ms Anderson noted the initial report of the duty manager on the day of injury observing a "bump on the head and (the applicant) was a little confused". The records of the Brain Injury Clinic were also briefly reviewed with "reported moderate ongoing post-concussion symptoms", difficulties with memory and fatigue as well as tearfulness.

77. Ms Anderson also reviewed the neuropsychological assessment for clinical purposes of Corinne Roberts in July 2016 concluding that overall there was a good recover, but subjective and family reports suggested ongoing difficulty coping.

78. Ms Anderson also noted Dr Milder's view (see below) that the applicant had a "concussive injury" as well as a neck injury and the psychiatric opinion of Dr Parsonage regarding the Persistent Depressive Disorder with anxious distress and the applicant had largely recovered from the initial concussion.

79. After administering a number of neuropsychological tests, Ms Anderson concluded that the available information suggested the applicant "most likely did sustain a concussion initially with confusion and she unfortunately experienced a range of persisting post-concussion symptoms".

80. However, persisting neuropsychological symptoms were not readily identified despite ongoing complaints of coping in day-to-day activities. She diagnosed the applicant as suffering from a persisting Adjustment Disorder but accepted the psychiatrist's view that it met the criteria for depression and she assessed impairment of 15% WPI. Further psychological and psychiatric treatment was strongly suggested.

81. Dr Dan Milder, neurologist, reported at the request of the applicant's solicitors on 12 June 2018. He noted in very brief terms the injury and attendance at the hospital. He noted the attendance on some 15 occasions on the Brain Injury Clinic and the neuropsychological assessment by Ms Roberts in July 2016 evidencing mildly reduced efficiency of working memory and diminished ability to function adequately in normal daily situations, particularly those associated with stress. He noted the various physical symptoms of headaches, and difficulties with memory and concentration. There was social withdrawal and anxiety and depression. He noted forgetfulness with cooking and her inability to care for her granddaughter. Dr Milder noted the MRI imaging in December 2015 without identifying any relevant abnormality on his view. He concluded the applicant had suffered a "concussive injury", with the outlook uncertain and that impairments of memory and concentration may remain. He did, however, recommend further neuropsychological assessment, presumably resulting in the assessment of Debbie Anderson as outlined above.

82. After being provided with that report of Ms Anderson, Dr Milder again reported on 16 October 2018. He confirmed his view that the applicant suffered a “concussive injury” and said:

> “Despite the conclusions of a second neuropsychological assessment referred to above, it is entirely possible a head injury with concussion has resulted in ‘organically determined’ deficits in concentration and memory. Such ‘organically determined’ deficits may impair mood.”

83. Dr Milder assessed the impairment of the applicant according to Table 3-8, Class 2, p 325 of AMA 5, due to emotional and behavioural disorders. He assessed 18% WPI. AMA 5 relates to Central and Peripheral Nervous Systems, including traumatic brain injury.

84. Dr Ross Mellick, neurologist, also examined the applicant, this time on behalf of the respondent’s solicitors. In his report dated 11 January 2019, Dr Mellick also provided a brief history of the events on the day with minimal consideration of the contemporaneous material surrounding it. He noted the applicant had no recollection of the accident or her day at work after her arrival that day. He notes there was no loss of consciousness and she did not fall to the ground. He noted that when she was taken home, her partner became concerned because she was not speaking normally and took her to hospital. Her first recollection is being at the hospital.

85. Dr Mellick noted the applicant’s attempted return to work on suitable duties with assistance and her eventual dismissal which was “an extreme shock to her”. He also recounted the return to work and being “abused” by her colleague. Dr Mellick recorded:

> “She said she was distressed by this and since that time has had problems with her mood. When referring to this, she became briefly tearful and in order to make detailed recollections, she gave me permission to get information from her close friend, and Ms Detloff also contributed to the history of the mood disorder.
>
> The main problem is a sense of anxiety, depression and ‘getting really scared going in there’. She began treatment for psychological issues in December 2015 or early 2016.”

86. Dr Mellick noted the MRI imaging and the absence of intercranial changes to the incident, and the neuropsychological reports of July 2016 and September 2018, noting the latter’s conclusion that there was no found demonstrable cognitive impairment attributable to the effects of the brain injury.

87. When expressing his opinion, Dr Mellick says this:

> “The details of the injury do not include reference to the occurrence of unconsciousness or symptoms indicative of a brain injury occurring at the time of the injury in question. She was thoroughly investigated on that day at the Emergency Department of Coffs Harbour Hospital and has subsequently had the benefit of neurological assessment, without identification of objective evidence of intracranial or cervical pathology arising because of the injury.”

88. Dr Mellick conceded that there was impact on the applicant’s head from falling bottles. When asked to assess impairment arising from the central and peripheral nervous system, he said he could find no evidence of such impairment in January 2019.

89. Dr Mellick specifically reviewed Dr Milder's opinion of a "concussive injury" when requested by the respondent's solicitors. He said:

> "A significant improvement may have occurred since she was assessed by him. I find no evidence of concussion… (referring then to cervical symptoms)".

and disagreed with Dr Milder's opinion "on the basis of (his) assessment today".

90. Dr Mellick also noted Dr Milder requested a further neuropsychological examination and that the second assessment in September 2018 did not provide evidence of intercranial or cognitive abnormalities. Again, he did not deal with Ms Robert's findings in 2016 as to whether there was an initial injury, regardless of the applicant's presentation at his assessment in January 2019.

91. As noted above, given the use of medical terminology in the evidence before me, I consider it appropriate to consult a reputable medical dictionary, being Gould's Medical Dictionary. The relevant definitions to which I drew counsel's attention were as follows:

> "Shock: 1. The state of being shaken; a severe shaking or jarring of a part, as by an explosion, or a violent blow. 2. The morbid state resulting from such a jarring. 3. Brain concussion.
>
> Brain Concussion: It is a condition produced by the sudden application of violent physical force to the head, marked by varying disturbances of consciousness, autonomic disturbances, reflex changes, lethargy, vomiting and headache; recovery is usual.
>
> Brain injury: 1. Any form of trauma to the brain, whether of infectious, mechanical (metabolic and toxic) or vascular origin, and resulting in a variety of pathological phenomena including cerebral edema and petechial haemorrhages. The clinical manifestations are highly variable, depending on the nature, extent, site and duration of the injury. 2. …"

SUBMISSIONS

Applicant's submissions

92. Both counsel made detailed submissions for which I thank them. As they were recorded, I will only outline the submissions here.

93. Mr Inglis submitted that it was clear there was a traumatic brain injury on the facts of the case. He embraced the definition of brain injury as set out in Gould's Medical Dictionary above. He particularly pointed in brief terms to the following facts: There was a mildly diminished GCS; Dr Lu, within days, recognised there was a "brain problem (amnesia)" and referred the applicant to a brain injury rehabilitation service; the next day he referred to the injury as "brain concussion"; and thereafter the references appear throughout the materials.

94. Mr Inglis embraced the opinion of Dr Singh regarding a traumatic brain injury on this point emphasising that Dr Singh had taken a good description of the symptoms compared to that of Dr Mellick. Dr Singh provided a detailed description of the diagnosis and the reason that she had arrived at that conclusion.

95. As for the identification of the "pathology" aspect of an injury for the purpose of the worker's compensation legislation (see discussion below) he submitted that radiology was useful guides in the identification of the offending pathology, however they were not determinative, particularly in brain injury circumstances. He said clinicians need to rely upon all the symptoms and clinical presentation including for example, in the case of soft tissue injury. That, Mr Inglis submits, is what Dr Singh and Dr Milder have done (as well as others).

96. He submits that I would not accept Dr Mellick because his history is brief and while he notes the absence of loss of consciousness and the radiological corroboration, he does not note important indicators noted by the other practitioners including the GCS and all of those matters refer to Dr Singh in her opinion. He submitted that if he did take note of those issues, he should say why they are not consistent with the diagnosis of traumatic brain injury and why he disagrees with other practitioners. Mr Inglis submits Dr Mellick's report is not based on sufficiently accurate history so as to form any weight and fails the '*Makita* test' (see below).

97. In respect of the claim for a primary psychological injury, Mr Inglis points out the very early appearance of the applicant appearing depressed and tearful in the above chronology. He notes the support of a primary psychological injury (without identifying the DSM diagnosis) by Dr Parsonage, Corinne Roberts and Dr Kahn.

98. Mr Inglis cited *Romanous Constructions Pty Ltd v Arsenovic* [2019] SWWCCPD 82, in which Roach DP set out a number of matters useful in identifying or distinguishing between the occurrence of a primary compared to a secondary psychological injury. In particular, he refers to [59] onwards, with which I will deal with below.

99. Importantly, says Mr Inglis, there is no mention within the evidence that the applicant's physical pain or disabilities have contributed her psychological condition.

Respondent's submissions

100. Ms Goodman, for the respondent notes that I have to specifically find a traumatic brain injury for the applicant to succeed. She refers to *Reln (Manufacturing) Pty Ltd v Smith* [2018] NSWWCCPD 51 (*Reln*), a decision of DP Wood at [147] in which the Deputy President found the arbitrator's determination that there was a traumatic brain injury was flawed.

101. In *Reln*, the worker had a parietal subcutaneous haematoma established on CT scan but not any intracranial pathology, whereas here, the applicant does not have any pathology at all established.

102. The essential submission Ms Goodman makes is that whilst it is conceded the applicant has suffered a "head injury" it is not conceded that she therefore suffered a traumatic brain injury. Further, it is not conceded that a concussion or a brain concussion constitutes a traumatic brain injury. Ms Goodman emphasised the absence of loss of consciousness and the mildly diminished GCS, returning to normal within several hours of the accident. She points out that the applicant was discharged from hospital the same day presumably indicating that there was no brain injury.

103. Whilst Ms Goodman conceded that Dr Mellick does not make any specific reference to the observations immediately after the accident at the hospital or the Brain Injury Clinic, he did consider the reports of Dr Anderson and Dr Roberts and notes Ms Anderson's conclusions of lack of neuropsychological brain dysfunction at the time of that examination in 2018. It is submitted that although Dr Mellick did not specifically refer to the early clinical observations, he was aware of them through reading the reports of the two neuropsychologists who did make detailed reference to them.

104. As for the opinion of Dr Milder, Ms Goodman says that the persisting symptoms upon which he apparently relies to conclude a concussive injury were really psychological symptoms worsened in situations of stress and his agreement with Ms Anderson in 2018 that fluctuating performances in various cognitive capacities reflect mood dysfunction.

105. Ms Goodman also points out that Dr Milder's further report after viewing Ms Anderson's report only talks about "possible" head injury associated with discussion, falling short of the probability required to be discharged by the applicant's onus.

106. It is submitted that even if there is "concussion" it cannot be assumed that it is a brain injury as it is equally likely to be a consequence of "head injury".

107. Ms Goodman took me to cl 5.9 of the *NSW Workers Compensation Guidelines for the Evaluation of Permanent Impairment, 4th* ed 1 April 2016 (the Guidelines), regarding assessment of impairment from traumatic brain injury, particularly the requirements set out therein. I will deal with those requirements further on, but my observation during the hearing to the effect that the Guidelines are applicable to an AMS in determining impairment on the day of assessment are marginally relevant as to whether or not there was, many years prior, a traumatic brain injury at all.

108. Ms Goodman embraced the need to identify pathology for the purpose of identifying injury; *Lyons v Master Builders Association of NSW Pty Ltd* (2003) 25 NSWCCR 422 (*Lyons*), which she submits, mean that I need to find more than the presence of amnesia or other symptomatic changes to support a diagnosis.

109. When the concept of an aggravation of degenerative condition as acute injury was raised, without demonstrable change in the underlying pathology, Ms Goodman conceded that increased symptoms of such a degenerative condition it may suffice, but here there was no evidence of any brain pathology at all, either pre-existing or post-injury (other than minor matters not considered to be relevant by any expert).

110. In relation to the claim for primary psychological injury Ms Goodman embraces the opinion of Dr Singh, particularly her reliance upon the history of returning to work and being abused by the co-worker for getting them in trouble and another worker approaching her and introducing himself in an attempt at humour.

111. It is pointed out that the applicant was and remains absent of any personal memory of what happened and is only proceeding on what she has been told. This is presumably to undermine any allegation of PTSD as the trauma was not experienced by her first hand.

112. Ms Goodman concedes that Dr Singh does not specifically refer to the early hospital notes, the general practitioner or of that of the Brain Injury Clinic. However, Ms Goodman submits that Dr Lu's note on 15 November 2015 that the applicant was "teary" and "blaming herself" was support for a conclusion that the psychological injury was likely to be secondary. There was discussion between Ms Goodman and myself concerning whether or not self-blame causing psychological symptoms as opposed to the development of a psychological condition as a result of the consequences of a physical injury, is not a matter of some importance in the proceedings.

113. Finally, it is noted that Ms Goodman appropriately, conceded that the diagnosis of the secondary psychological condition is not irrelevant, but does not preclude the finding that there is a primary psychological condition arising from the accident itself as opposed to the physical consequences of the accident.

FINDINGS AND REASONS

114. It may be accepted that "Injury" refers to both the event and the pathology arising from it: *Lyons* per Neilson CCJ at [429]. The injurious event, in this case, is not in issue. Nor is causation in issue to a large extent. The issue is whether the accepted head injury, also involved a brain injury.

115. It may also be accepted, as implicitly, the applicant does, that there is no identifiable pathology on radiological imaging.

116. In *Watts v Rake* [1960] 105 CLR 158 at 163, Menzies J said:

> "Prima facie, where a plaintiff was in apparent good health before an accident and bad health thereafter, the change will be regarded as a consequence of the accident and it is for the defendant to prove that there is some other explanation for it, e.g., that the plaintiff has aggravated his condition by some unreasonable act or omission."

117. Scientific certainty is not required, but the decision maker must feel actual persuasion of the occurrence or existence of the fact in issue before it can be found: *NOM v* DPP [2012] VSCA 198 at [124]. See also Dixon J in *Briginshaw v Briginshaw* [1938] HCA 34; 60 CLR 336.

118. The Court of Appeal in *Nguyen v Cosmopolitan Homes* [2008] NSWCA 246 (*Nguyen*) summarised the approach as follows:

> "(1) A finding that a fact exists (or existed) requires that the evidence induce, in the mind of the fact-finder, an actual persuasion that the fact does (or at the relevant time did) exist;
>
> (2) Where on the whole of the evidence such a feeling of actual persuasion is induced, so that the fact-finder finds that the probabilities of the fact's existence are greater than the possibilities of its non-existence, the burden of proof on the balance of probabilities may be satisfied;
>
> (3) Where circumstantial evidence is relied upon, it is not in general necessary that all reasonable hypotheses consistent with the non- existence of a fact, or inconsistent with its existence, be excluded before the fact can be found; and
>
> (4) A rational choice between competing hypotheses, informed by a sense of actual persuasion in favour of the choice made, will support a finding, on the balance of probabilities, as to the existence of the fact in issue." (at [55])

119. In *Flounders v Millar* [2007] NSWCA 238, Ipp JA said at [35]:

> "it remains for the plaintiff, relying on circumstantial evidence, to prove that the circumstances raise the more probable inference in favour of what is alleged. The circumstances must do more than give rise to conflicting inferences of the equal degree of probability for plausibility. The choice between conflicting inferences must be more than a matter of conjecture. If the court is left to speculate about possibilities as to the cause of the injury, the plaintiff must fail".

120. In *E-Dry Pty Ltd v Ker* [2017] NSWCCPD 26, Keating J said:

> "…. Were direct proof is not available, it is enough if the circumstances appearing evidence give rise to a reasonable indefinite influence: they must do more than give rise to conflicting inferences of equal degrees of probability so that the choice between them is a mere matter of conjecture … but if circumstances are proved in which is reasonable to find a balance of probabilities in favour of the conclusion sought then, though the conclusion that may fall short of certainty, it is not to be regarded as mere conjecture or surmise"

121. High Court decision of *Fuller-Lyons v New South Wales* [2015] HCA 31 and the necessity for an inference of fact to give rise to “a definite conclusion of which the trier of fact is affirmatively satisfied, as distinct from merely a possible explanation for the known facts.”

122. In *Murray v Shillingsworth* [2006] NSWCA 367 (*Murray*), Einstein JA examined the relationship between scientific "certainty" and the legal approach as to probabilities. He cited Spigelman CJ in *Seltsam Pty Ltd v McGuiness* [2000] NSWCA 29 (*Seltsam*) (and other authorities including *Holt le v Hocking* (1962) SASR 128, and *Clarke v Chandler* (1984) Aust Torts Rep 80-631). In general terms, the approaches are markedly different and the law must find a "truth" even where science may not yet have done so.

123. In *Murray,* Santow JA added "Even rigorous scientific reasoning may, however, contain an element of intuitive inference still awaiting scientific confirmation though with promising indications, such as in the acceptance of a particular assumption." at [10].

Whether medical evidence necessary

124. In *Fernandez v Tubemakers of Australia* (1975) 2 NSWLR 190, Glass JA said at 197:

> “The issue of causation involves a question of fact upon which opinion evidence, provided it is expert, is receivable. But a finding of causal connection may be open without any medical evidence at all to support it: *Nicolia v Commissioner for Railways* (NSW) (1970) 45 ALJR 465 or when the expert evidence does not rise above the opinion that a causal connection is possible: *EMI (Australia) Ltd v Bes* [1970] 2 NSWR 238. The evidence will be sufficient if, but only if, the materials offered justify an inference of probable connection. This is the only principle of law. Whether its requirements are met depends upon the evaluation of the evidence.”

125. Mahoney JA, in *Tubemakers* at 200C, said:

> “Medical science may say in individual cases that there is no possible connexion between the events and the death, in which case, of course, if the facts stand outside the area in which common experience can be the touchstone, then the judge cannot act as if there were a connexion. But if medical science is prepared to say that it is a possible view, then, in my opinion, the judge after examining the lay evidence may decide that it is probable. It is only where medical evidence denies that there is any such connexion that the judge is not entitled in such a case to act on his own intuitive reasoning. It may be, and probably is, the case that medical science will find a possibility not good enough on which to base a scientific deduction, but courts are always concerned to reach a decision on probability and it is no answer, it seems to me that no medical witness states with certainty the very issue which the judge himself has to try.”

126. This proposition was approved in the High Court: *Tubemakers of Australia Limited v Fernandez* (1976) 50 ALJR 720 (*Fernandez*), the plurality held, held that in drawing an inference as to the causal connection between the injury and the condition, the jury was entitled to have regard to the absence of any pre-accident disability and the appearance of the condition after the accident together with the absence of any other proof or indication in the evidence of an alternative cause of the condition. The combination of the circumstances taken together with the medical evidence provided a sufficient basis from which the jury could draw an inference favourable to the respondent worker: see also *Woolworths Limited v Christopher-Coates* [2014] NSWWCCPD 14.

127. In *Australian Security and Investments Commission v Rich* [2005] NSWCA 152 (*Rich*) at [170], Spigelman CJ said (Giles and Ipp JJA agreeing): "[a]n expert frequently draws on an entire body of experience which is not articulated and, is indeed so fundamental to his or her professionalism, that it is not able to be articulated".

128. Contemporaneous evidence such as clinical notes, early reports or medical reports may be instructive: *Department of Education & Training v Ireland* [2008] NSWWCCPD 134; but only in the context of all the evidence.

Traumatic brain injury

129. On a thorough appraisal of all the evidence which I have attempted to set out in detail above, I am comfortably satisfied of the following factual matters:

(a) The applicant received a significant trauma to her head when the bottle fell on her;

(b) As a result of the trauma she was confused, observed by the duty manager;

(c) Her husband noted immediate behavioural changes in the applicant, sufficient for him to take the applicant to emergency hospital care;

(d) Medical staff at the hospital immediately noted retrograde amnesia, the applicant did not know that her daughter was on holidays, the applicant was asking the same questions over and over again, another general behavioural features which I think I can comfortably conclude our consistent with brain trauma (but I will rely upon the medical evidence for that particular conclusion below);

(e) Dr Lu immediately diagnosed "acute head injury, brain concussion/amnesia";

(f) Both the hospital staff in the emergency department, and her usual general practitioner considered her presentation consistent with brain injury, and referred her to the brain injury clinic, a brain injury rehabilitation specialist service;

(g) On 16 November 2015, the Brain Injury Clinic completed a "Rivermead post-concussion symptoms questionnaire" and considered the applicant's presentation consistent with having suffered a brain injury;

(h) The applicant continues to suffer complete lack of recall of the injury to this day; she also exhibited extremely out of character behaviours towards the family and remains, although improving, emotionally volatile;

(i) Dr Devina Singh, consultant psychiatrist less than five months after the injury, on 5 April 2016, concluded the applicant's history and presentation was consistent with brain injury. She observed "symptoms of post-concussion syndrome that occurred immediately following her head injury and continues since". Dr Singh adhered do those views following further examination in December 2018;

(j) Dr Kahn, treating psychiatrist, diagnosed the applicant with a "closed head injury (i.e., an acquired brain injury)" in June 2016;

(k) Although the applicant was not immediately subjected to neuropsychological testing after the injury, some eight months after the accident, there was identified (by Ms Roberts), albeit mild, test results consistent with brain injury;

(l) Dr Parsonage, consultant psychiatrist, concluded that the applicant had undoubtedly suffered a "head injury but the extent of any brain injury is uncertain". He did not question the presence of brain injury, only the extent, which in the circumstances of this case is a matter for an AMS. It is noted that Dr Parsonage reached that conclusion even without the early hospital clinical notes;

(m) Ms Debbie Anderson, clinical neuropsychologist, found no evidence of persisting deficits in September 2018. This report was not directed to whether or not a brain injury occurred initially;

(n) In June 2018 and October 2018, Dr Milder expressed his view that the applicant suffered a "concussive injury". He noted that the further neuropsychological tests in 2018 which did not establish any deficits, he explained this, saying:

> "Despite the conclusions of a second neuropsychological assessment referred to above, it is entirely possible a head injury with concussion has resulted in "organically determined" deficits in concentration and memory. Such "organically determined" deficits may impair mood."

(o) I find that the applicant did suffer a "concussive injury", and in so concluding, note the approach regarding expert evidence outlined in *Murray, Fernandez,* and *Rich* above;

(p) I note Dr Mellick, neurologist, concluded that there was no evidence of brain injury following his examination in January 2019. However, I prefer the combined opinions of all the foregoing treating and forensic examiners. I am less persuaded by Dr Mellick's opinions as he did not refer to the emergency department observations including the fact the applicant did not know her daughter was on holidays, and was repeating questions over and over again, and did not address the personality changes identified in the other evidence. On my reading, Dr Mellick was more concerned as to whether or not the applicant continued to suffer from a brain injury, rather than whether or not she sustained one in the first place. He did not review the neuropsychological opinion of Ms Roberts in July 2016 to the effect that there were mild deficits at that time. He did not comment upon the diminished GCS, the presence of retrograde amnesia, anterograde amnesia, the neuropsychological mild impairments found in mid 2016, or the personality changes involving aggression, irritability and so on. Whilst he does associate deficits in attention and concentration with mood dysfunction, this is only a partial recognition of the broad spectrum of presenting symptoms or relevant observations concerning the allegation of brain injury as distinct from psychological injury. Dr Mellick was the last to report, yet does not explain why, even if he did consider the early presentations of the applicant were not significant when other experts relied upon those observations to come to their conclusions of traumatic brain injury. These experts include the treating clinicians who made the very notes under discussion

130. I will now deal further with Ms Goodman's submissions. The respondent seeks comfort in the recent decision in *Reln*. While *Reln* provides helpful guidance in the exercise of fact finding, a proper reading of *Reln* was really a criticism of the arbitrator's reasons rather than the conclusion the arbitrator reached. In particular, the arbitrator did not provide reasons as to why she accepted the history in a forensic report over the contrary factual evidence, other than to say that she preferred that history to a history recorded by another forensic examiner.

131. In *Reln*, the worker was injured in a car accident on 17 April 2012. She had a parietal subcutaneous haematoma established on CT scan, but not any intracranial pathology. There were no contemporaneous references to amnesia, the reference being three days after the event, and the lack of recall was limited to the accident itself. An assessment by an occupational therapist concluded that there was no post-traumatic amnesia, despite the lack of recall of the event itself. There were inconsistencies between the contemporaneous complaints made by the worker and her statement made five years later. The arbitrator did not consider these. Here, there is no such inconsistency, and indeed, the applicant relies almost solely upon contemporaneous evidence.

132. Otherwise, the alleged brain injury in *Reln r*elied upon a single forensic opinion by Dr Teychenné, that there was incomplete cervical cord lesion and/or a traumatic brain injury, thus establishing injury involving the central and peripheral nervous system. That opinion was made four years after injury, on the basis of a history that was not corroborated by contemporaneous evidence. No such criticism can be validly made in this case.

133. More specifically, the respondent relies upon Wood DP's reasons at [147], in particular the sentence emphasised:

> "147. There may no doubt have been a suspicion that Ms Smith suffered a traumatic brain injury, particularly in the light of the moderate sized parietal subcutaneous haematoma found on the CT scan of the brain taken on 18 April 2012. It is apparent that a head injury occurred. <u>That, however, is not sufficient, without some other evidence such as radiological evidence disclosing some pathology, to find an injury to the brain occurred.</u> It is apparent that a head injury occurred. That, however, is not sufficient, without some other evidence such as radiological evidence disclosing some pathology, to find an injury to the brain occurred."

134. In my view, Wood DP was not pronouncing that there must be radiological evidence for a worker to establish any injury, or more precisely, a brain injury. That is readily apparent in the language she used ("such as"). It is also clearly a matter beyond judicial authority as it relates to the facts submitted by the respondent to be necessary. Clearly, each case must be considered on the basis of the evidence, contemporaneous, lay and expert, to arrive at a conclusion of fact for that particular case. I have outlined the volume of relevant evidence in the above chronology and reasons upon which I conclude in favour of the applicant.

135. Although it is indisputable that a person may have a "head injury" without traumatic brain injury (see *Reln*), I do not consider the distinction in this case exists. The evidence repeatedly refers to concussion or brain concussion. Clearly, the terms are medical, and I would have thought that it was not necessary to obtain clarification by further expert reports or resort to medical dictionaries. Nevertheless, I refer to the medical definitions of the terms set out in the review of the evidence above. The applicant obviously received "a violent blow", and was subject a "sudden application of violent physical force to the head", she clearly suffered from "varying disturbances of consciousness" (albeit not complete loss), as evidenced in the hospital notes. I conclude, that she suffered "brain concussion".

136. Further, I conclude that the applicant, as a result of the "violent physical force to the head" probably suffered a "form of trauma to the brain". Although the radiological evidence does not show "pathological phenomena", I am satisfied, on the whole of the evidence, most particularly the lay and "clinical manifestations", relied upon by the relevant experts, that the applicant traumatic suffered brain injury.

137. Ms Goodman's references to the absence of loss of consciousness and the mildly diminished GCS, and reasonably early discharge from hospital are noted. However, they are more pertinent, in my view, to the severity of the injury rather than its occurrence. In any event, these matters have been considered by all the experts upon whose opinions I base my conclusions.

138. Clause 5.9 of the Guidelines does not assist the respondent. Relevantly, it is as follows (my emphasis):

> "5.9 In assessing disturbances of mental status and integrative functioning; and emotional or behavioural disturbances; disturbances in the level of consciousness and awareness; disturbances of sleep and arousal function; and disorders of communication (AMA5 sections 13.3a, 13.3c, 13.3d, 13.3e and 13.3f; pp 309–311 and 317–327), the assessor should make ratings based on clinical assessment and the results of neuropsychometric testing, where available.
>
> For traumatic brain injury, there should be evidence of a severe impact to the head, or that the injury involved a high-energy impact. Clinical assessment must include at least one of the following:
>
> - significant medically verified abnormalities in the Glasgow Coma Scale score
> - significant medically verified duration of post-traumatic amnesia
> - significant intracranial pathology on CT scan or MRI.
>
> ……."

139. I find that there was severe impact to the head. No medical practitioner has suggested that there is not persisting amnesia, and I find that there probably is continuing amnesia. It is clearly post-traumatic. Clause 5.9 (if it were my role to decide it, which under the Guidelines it is not) would provide that the applicant had "traumatic brain injury".

140. In so far as the pathological element of injury is concerned (per *Lyons*), I acknowledge the absence of radiological change. However, all of the evidence establishes numerous clinical observations sufficient to support injury to the brain of some degree. I conclude that it is sufficient in this case to identify traumatic brain injury as the "pathology" to the extent it is necessary to do so.

Primary psychological injury

141. Ms Goodman's appropriate concession that the presence of any secondary psychological condition does not preclude a finding that there is a primary psychological condition exists is noted. Further, it is not necessary for me to consider whether there in fact is a secondary psychological condition.

142. It is relevant, however, to note that there is undoubtedly likely to be frustration or other emotional consequences of the deficits which the applicant now suffers. It is also relevant to note that the applicant became upset when confronted with the situations of blame and misguided attempts at humour upon her return to the workplace. It may well be that these incidents, together or in isolation, led to a psychological condition, as Dr Singh opines. Equally, it may be that the applicant's reaction to these stressors are a reflection of the brain injury she suffered as I have found above. As I have said, however, it is not necessary for me to decide that matter.

143. Upon presentation at the hospital after the incident, the applicant was crying and upset that she could not remember events. Two days after the incident, on 15 November 2015, Dr Lu noted she was "teary, blaming self that it's her fault".

144. By 15 February 2016, a PTSD questionnaire noted the applicant was trying hard not to think about the incident (I note, not about the sequelae of the incident, or the further contact with co-workers). She went out of her way to avoid situations that reminded her of it, was constantly on guard, watchful and easily started. She was avoiding the workplace and particularly the area where injury occurred. On the same day, Ms Helliwell said the applicant was still teary and described being teary and upset at her workplace approaching the area where the injury occurred, and that she avoided going there. She described a feeling as if "something is not right" and needed her hand to be held when crossing the road. This feature persisted for some time thereafter. This is when a referral to a clinical psychologist was indicated.

145. On 25 February 2016, Dr Lu noted "anxiety/depression, PTSD", "still anxious, guarded, crying, swearing a lot the last few days". While Dr Lu thought she was worse after contact with colleagues, I interpret that note to be an acknowledgement of the PTSD type symptoms, made worse.

146. On 10 April 2016, Ms Greenhalgh noted "particularly troubling" nightmares and flashbacks of the injury persisted. She attributed most deficits to the head injury, but also said some of these symptoms are also related to mood and anxiety. She diagnosed "Adjustment Disorder with mixed anxiety and mood", and also noted that "a number of post-traumatic stress symptoms that may make her eligible for this criterion as well".

147. In June 2016, Dr Kahn after examining the applicant alone and her partner alone noted a range of symptoms including "feeling massively guilty", elements of considerable anxiety when discussing the incident and how it affected her life and continuing almost daily recurrent recollections of the accident and its sequelae. This was highly distressing. There was avoidance and she was easily startled. Dr Kahn diagnosed, in addition to an acquired brain injury, a "major depressive episode associated with considerable anxiety; and also resulting in an acute stress disorder (with many similarities to a posttraumatic stress disorder….". The only barrier to a PTSD diagnosis was the absence of the required, life threatening trauma.

148. In July 2016 Corinne Roberts, noted tearfulness, with a primary concern about feeling uneasy and upset regarding the recent visit to the workplace. However, Ms Roberts also noted the PTSD screen referred to above and the possible avoidance and increased arousal. Ms Greenhalgh's report was also noted, as was Dr Kahn's.

149. I accept the opinions of Dr Kahn, and Dr Parsonage, supported but not entirely repeating various clinicians at the brain injury clinic.

150. To reach this conclusion, it is not necessary for me to reject Dr Singh's opinion regarding the presence of a secondary psychological condition. It is necessary to deal her expressed opinion in so far as they suggest the absence of a primary psychological injury, and why I prefer the views of the others on that point. Although Dr Singh says she had early reports by Dr Lu, the Coffs Harbour Health Campus and the Brain Injury Clinic she does engage with the symptoms relied upon by the others to conclude that there is PTSD or similar primary injury. Dr Singh recounted sleeping difficulties, nightmares and fears, being easily startled and tiredness and exhaustion. However, she concluded the applicant's condition arose from the encounter with her colleague and feeling frustrated with her brain injury related incompetence. Her conclusion was expressed: "that seemed to be the underlying psychological reason for not being able to cope with the impairment she has since the injury". Dr Singh diagnosed "Major Neurocognitive Disorder due to traumatic brain injury" and later in 2018, adding "Depressive Disorder due to another medical condition associated with anxious distress".

151. When attempting to address the legal distinction between primary psychological injury and secondary psychological injury Dr Singh says the applicant's symptoms are "directly related to a sense of shame worsened by being self-critical" as well as the difficulty accepting her physical impairments. On that basis Dr Singh concluded that there was no primary psychological injury as defined in the 1987 Act.

152. Section 65A of the 1987 Act defines the terms:

> "In this section:
>
> ***primary psychological injury*** means a psychological injury that is not a secondary psychological injury.
>
> ***secondary psychological injury*** means a psychological injury to the extent that it arises as a consequence of, or secondary to, a physical injury."

153. It is difficult to categorise the applicant's injury based on a sense of shame as being secondary to a physical injury. The sense of shame appears to me to be related to the incident itself rather than the sequelae of the brain injury. In this regard, I do not see Dr Singh's opinion to be that different from that of Dr Kahn. The only difference seems to be Dr Kahn's more holistic appreciation of the presenting symptoms including the nightmares, flashbacks, being startled, avoidance of the accident site, and needing to hold someone's hand to cross the road.

154. I am comfortable with Dr Parsonage's conclusion that the applicant's psychological injury "did not arise as a consequence of physical injuries but instead arose as a result of the shock of the accident and her perception that she was to blame for the accident."

155. Noting those symptoms, I am comfortably satisfied that the applicant suffers from the symptoms of a primary psychological injury in the nature of PTSD without the life-threatening trauma required for the formal diagnosis. I accept Dr Kahn's diagnosis of major depressive episode associated with considerable anxiety and acute stress disorder.

156. While some of the symptoms arising from frustration as the result of her brain injury my overlap with that diagnosis, I remain appropriately persuaded to conclude that the applicant suffered a direct and psychological injury. There may be several causes of the same result at law. In *March v E & MH Stramare Pty Ltd* [1991] HCA 12; (1991) 171 CLR 506 (*March*), Mason CJ (at 509):

> "The law does not accept John Stuart Mill's definition of cause as the sum of the conditions which are jointly sufficient to produce it. Thus, at law, a person may be responsible for damage when his or her wrongful conduct is one of a number of conditions sufficient to produce that damage…"

157. I find the applicant suffered a psychological injury as a result of the incident on 13 November 2015.

158. For reasons previously expressed, it is not necessary for me to distinguish the observation by Dr Milder that the applicant's psychological symptoms worsened in situations of stress. Also, as the conclusion I have reached is not based on PTSD the absence of memory of the incident is of limited relevance.

SUMMARY

159. I find the applicant suffered a traumatic brain injury and primary psychological condition as a result of the traumatic injury on 13 November 2015.