

Witness Name: Dr. Barry Sinclair Parsonson

Statement No.: WITN0414001

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ROYAL COMMISSION OF INQUIRY INTO ABUSE IN CARE

WITNESS STATEMENT OF DR. BARRY SINCLAIR PARSONSON

I, Dr. Barry Sinclair Parsonson say as follows:

The writer's qualifications and experience

1. Completed an M.A. (Hons) in Psychology (1965) and Post-Graduate Diploma in Clinical Psychology (1967) at the University of Canterbury. Graduated Ph.D. in Developmental & Child Psychology (1977) from University of Kansas.
2. I taught psychology at the University of Waikato 1966-1997, developed and taught in the post-graduate programme in Clinical Psychology (1973-1995), supervising research and clinical practicum. Taught post-graduate courses in Abnormal and Clinical Psychology, with emphasis on Applied Behaviour Analysis and Behavioural Therapies. I served as Chair of Psychology Department and Dean of Faculty of Social Sciences at University of Waikato, as well as Chair of U of W Social Research Ethics Committee. I was a Member and then the Chair of NZ Psychologists Registration Board (1991-1995) and was President of the New Zealand Psychological Society (2000-2002).
3. Internship at Sunnyside Psychiatric Hospital and Templeton Psychopaedic Hospital (1965-66). Private Clinical Practice with children and adults (1966-2000); Training Psychologists in Republic of Georgia and Consultant to

UNICEF and Georgian Ministry of Education on Closure of Georgian Children's Institutions (1997-2017). Psychologist, NZ Ministry of Education (2006-2012), Psychologist, Explore Specialist Services (2013-2017). Consultant Psychologist, Hawke's Bay Regional Forensic Mental Health Service (2017-2021).

4. I am a Member and Fellow of the New Zealand Psychological Society, a Member of the New Zealand Association for Behaviour Analysis and of Association for Behavior Analysis International. I am a New Zealand Registered Clinical Psychologist and maintain a current practicing certificate. I have published over 60 articles, reviews and textbook chapters, most relating to Applied Behaviour Analysis.

Explanation of the therapeutic use of Aversion Therapy, Operant Punishment, and Electroconvulsive Therapy in standard clinical practice

Aversion Therapy – Introduction and Definition

5. Aversion Therapy is an early form of Behavioural Therapy. It was initially developed in the late 1920's as a treatment for alcoholism (Kantorovich, 1929) and its applications were later broadened to include a variety of behaviours considered "abnormal" or "challenging". Aversion Therapy is based on Ivan Pavlov's theory of *Classical Conditioning* in which control of normal reflex-induced (i.e., 'automatic') physiological responses to a stimulus is transferred by repeated exposure to a paired alternative "*neutral*" stimulus. For example, Pavlov conditioned dogs to salivate to the sound of bell (*conditioned stimulus*) by repeatedly pairing the bell with the presentation of food (*unconditioned stimulus*) for which salivation was the natural response (*unconditioned reflex*). Subsequently, the sound of the bell alone was sufficient to induce salivation as a *conditioned reflex*. In his pioneering work with alcoholics, Kantorovich used electric shocks in an attempt to replace pleasurable thoughts and experiences of drinking with negative associations (pain and fear) at the sight and thoughts

of alcohol. Kantorovich's research represents the earliest systematic application of Pavlov's classical conditioning as an aversion therapy.

6. The research into applications of Aversion Therapy increased in the 1930's, with a major focus on the treatment of alcoholism and, increasingly, on sexual behaviours. There was a resurgence and extension of research in the post-war period to include obsessions and compulsive behaviours which peaked between 1950 and 1970, particularly in Britain at the Institute of Psychiatry, London, led by Professor Hans Eysenck in collaboration with his colleagues Cyril Franks and Stanley Rachman and their research students (Eysenck. & Rachman, 1965). By the 1980s Aversion Therapy had become controversial on ethical and humanitarian grounds. As a result it was essentially replaced by more effective and acceptable therapeutic interventions that provided for development of alternative skills and adaptive behaviours that were durable. In addition, some behaviours once treated by aversion therapy, such as homosexuality and transvestitism, became increasingly socially acceptable and were no longer considered 'abnormal'. Today the application of aversion therapy is rare except in some facilities treating alcoholism and in instances where it is used as a treatment of last resort when a person's disordered behaviour is deemed a threat to their life or to the lives of others.
7. In applying Aversion Therapy, the aim is to use noxious or unpleasant stimuli to replace responses that a person can neither control nor resist performing. Usually the responses chosen for treatment are either personally harmful, are unwanted or are socially undesirable (Marshall, 1985a). For instance, consistent abuse of alcohol poses major health risks and a range of personal and social consequences. Similarly, obsessional thoughts and routines can have negative impacts on the person's enjoyment of life, their ability to work and their relationships.
8. By way of example, in an effort to cease or minimize alcoholics' consumption of alcohol, Aversion Therapy for alcoholism has generally been applied, using an emetic drug (Disulfiram) to pair vomiting as a conditioned response associated with the consumption of alcohol. The therapeutic intention is to

create an aversion to alcoholic beverages by association with vomiting. As noted below, Aversion Therapy in a variety of forms has been used in attempts to inhibit a range of other behaviours considered to be harmful, abnormal or problematic.

Applications

9. Aversion therapy has been applied in a variety of forms to alcoholism, sexual behaviours (including homosexuality, transvestitism, and paedophilia); to “challenging” and high risk behaviours of persons with intellectual or developmental disabilities, as well as to obsessional and habit disorders, such as repetitive hand-washing, fingernail biting and hoarding.

Types of Aversive Stimuli used in Aversion Therapy

10. A variety of aversive stimuli have been used in the application of Aversion Therapy. These include drugs and chemicals, mild but painful electric shocks, repetitive tasks (satiation) and unpleasant thoughts (aversive Imagery)

Chemical Aversion Therapy

11. Chemicals introduced to the body may produce an unpleasant reaction. As indicated above, Disulfiram has been widely used to induce vomiting in Aversion Therapy for alcoholism. Aromatic ammonia, which has an unpleasant smell and which gives an unpleasant nasal sensation when sniffed has been used in the management of challenging behaviours (e.g., aggression or head-banging) displayed by persons with severe developmental disabilities.

Electrical Aversion Therapy

12. The use of mild but painful electric shocks using battery-powered devices for Aversion Therapy has been extensive. By pairing the delivery of a shock with

the display of unwanted, inappropriate or harmful behaviour, the association between behaviour and delivery of the aversive stimulus is essentially simultaneous (i.e., the shock is delivered immediately the problematic behaviour is displayed). This instantaneous relationship enhances the effectiveness of the aversive stimulus in inhibiting the behaviour of concern, since any delay between performance of the behaviour and delivery of the aversive stimulus can result in the conditioning of unrelated behaviours.

Satiation

13. Satiation involves being required to engage in an activity repetitively beyond a point at which it ceases to be pleasant or enjoyable and becomes tiresome or unpleasant. For example, Ayllon (1963) treated a psychiatric patient's constant repetitive towel-folding behaviour by requiring her to constantly fold piles of towels to earn food rewards. The intervention effectively led to the patient giving up the repetitive towel-folding behaviour.

Aversive Imagery

14. Requiring a client to pair unpleasant thoughts while imagining or performing a behaviour they find problematic, such as compulsive drinking, has been successfully used as a strategy to establish an aversive response and abstinence (Cautela, 1966). Cautela called his intervention "Covert Sensitization" because it involved only imagination of the aversive stimulus and the paired undesired behaviour. He demonstrated its effectiveness with a variety of behaviours of concern.

Electrical Aversion Equipment, Specifications and Procedures

15. As the primary focus of this present statement is on the use of electrical aversion therapy, this will be described in some detail below.

16. Two to three dry cell “C” batteries, similar to those used in a torch, have typically powered the equipment used to deliver shocks in Aversion Therapy. The shock device was usually designed to deliver an unpleasant, mildly painful but tolerable 500 to 1500 volt shock (measured in milli-amperes [mA]) to the recipient’s leg. The shocks could be administered by the therapist or by the client themselves (Marshall, 1985b). Marshall *advises against the use of very intense or very painful shocks as both dangerous and therapeutically ineffective* (my emphasis). Marshall also notes “*on no account should electrical stimuli be applied to the trunk of the body or the head*” (p.115).

Therapeutic Programme

17. To be regarded as “therapy”, any intervention requires certain criteria to be met.
18. First, the therapist should be appropriately qualified and experienced in the application of the proposed therapeutic procedure. This should necessarily have included a knowledge of the relevant research, training in the methodology and procedures to be used, familiarity with equipment specifically designed for the delivery of aversive shocks and its proper use, and an awareness and understanding of any risks or ethical issues in the application of the procedure. If the intervention is a part of a research project, this proposed study should have been reviewed and approved by a qualified ethical review committee.
19. Second, there must be an assessment process to determine that the client’s behaviour is of such concern that planned therapy is appropriate, necessary and justified. In this process, the nature and circumstances of the behaviour(s) of concern are identified and defined in observable and measureable terms. In the case of Aversion Therapy, the aim is to specify the parameters of the target behaviour so that in treatment it is solely and consistently paired contiguously with the aversive stimulus in order to establish the conditioned response.

20. Third, following the assessment process, the proposed therapeutic procedure must necessarily be determined as evidence-based and appropriate. From this a programme of intervention can be determined. Once this is established, the client's informed consent to participate in the proposed treatment must be obtained

21. Fourth, following the start of therapy, the efficacy of the chosen procedure should be monitored via systematic data recording. This may be by direct observation of changes in behaviour, by client self-report, or by use of measuring devices such as rating scales. In the event that the chosen intervention is not demonstrably effective, the therapist and client should review the treatment programme and, if necessary, amend or terminate treatment. In addition, case notes of each session should be systematically recorded and, along with case data, be reviewed by a supervisor or supervisory panel and be available for assessment by any responsible authority.

Efficacy

22. Aversion Therapy research indicates that it has varying degrees of success, often depending on the strategy employed. By way of example, chemical aversion treatment of alcoholism has been found to produce variable and time-limited results, with relapse rates increasing over a few months after treatment termination. Chemical aversion in the treatment of alcoholism is still common, but the poor efficacy is probably a result of the difficulty in producing a consistent pairing of drinking and vomiting due to the time it takes to induce the emetic response. This is because even a few seconds delay between, for example, the consumption of the alcohol and the resultant emetic effect can reduce the strength of the intended link between drinking and vomiting. Electrical Aversion therapy, which has been most frequently applied to sexual, obsessional and challenging behaviours has typically been more effective, with lower post-therapeutic relapse recorded than has been the case for chemical aversion therapy. This is probably because of the immediacy of the contiguity (i.e. temporal relationship) between behaviour and shock delivery enhancing

the aversive effect by ensuring immediate pairing of the target behaviour and the aversive shock.

Ethical Issues

23. Aversion Therapy poses a number of ethical issues. First among these is the justification of the use of aversive stimuli in therapy, with concerns about inflicting pain and use of unpleasant stimuli in the context of treatment. Many practitioners consider the importance of establishing and maintaining positive therapist-client relationships in the context of psychotherapy an essential component in treatment. This makes the introduction and application of painful and unpleasant strategies controversial, regardless of therapeutic efficacy. In addition, the research on operant punishment indicates that punishment can induce aggression and avoidance behaviours, which could impact on the therapeutic relationship. Use of aversive procedures also has a poor public and professional image (Parsonson, 1997)
24. Because inappropriate application of Aversion Therapy can potentially be harmful (*e.g., use of excessive shock, use of inappropriate stimuli, misapplication of the procedures*) it is typically seen as an intervention of last resort when the behaviours of concern place the client or others at serious risk of harm. As a result, all effort should be made to prefer behavioural intervention procedures that are primarily focused on provision of positive strategies (i.e., ones that use positive reinforcement of appropriate behaviour), either in place of or contiguous with punishment of inappropriate behaviour (Parsonson, 1997).
25. Historically, the inappropriate use of electric shock has been associated with brutality and torture, which is abhorrent in the therapeutic context. *The misuse of aversion therapy for purposes for which it has not been researched, or for purposes other than therapeutic, raises serious ethical concerns, as does its application by unscrupulous or untrained persons or technicians* [My emphasis]. (Parsonson, 1997).

Operant Punishment – Introduction and Definition

26. The focus of Operant Conditioning (Skinner, 1953) is on the learned voluntary behaviours of organisms, including humans. This is in contrast to the focus on reflexes inherent to the nervous system that is the case with Pavlov's Classical Conditioning. The vast bulk of the behaviours learned by humans lie within the sphere of Operant Conditioning, including acquisition of language, education, socialization, life and work skills and responses to the environment. Operant Conditioning theory proposes (and demonstrates) that voluntary behaviours are triggered, learned and maintained by environmental stimuli and consequences.

27. The research into, and the basic elements of, Skinner's *operant conditioning* were established from the late 1930s and continue to be elaborated today in animal laboratories, using pigeons and rats as the primary research subjects. The research and application of operant conditioning to human behaviours began to occur in the 1940s and has rapidly increased since the 1960s following the first publication of a dedicated research journal (*Journal of Applied Behavior Analysis*) in 1968. In this foundation publication, Baer, Wolf, and Risley (1968) outlined the critical parameters of *Applied Behavior Analysis (ABA)*. In subsequent decades, as its applications in therapeutic interventions has widened and been demonstrated to be efficacious, *Applied Behavior Analysis* has become the intervention of choice for a variety of behaviour challenges found in persons with developmental disabilities and in a multitude of settings in which human behaviour, learning and competencies are important.

28. At the simplest level, the basic elements of Operant Conditioning are expressed in a three-term formulation of 'Stimulus-Response-Consequence'. For example, the stimulus of a lolly display at a supermarket checkout may trigger a child to respond with whining demands to an attending parent for lollies. As a consequence, the parent may purchase some lollies and present them to the child. This outcome would, in Operant Conditioning terms, constitute *positive reinforcement* (i.e., reward) of the lolly demanding behaviour. As a result,

whining and demanding lollies at the checkout in future is made more probable. In essence, *positive reinforcement* functions to increase the future probability of the behaviour occurring.

29. An alternative consequence for lolly-demanding behaviour might have been one of the parent ignoring the demands or of her or him telling the child that lollies were not good for them and a waste of money. In this instance, lolly-demanding behaviour has been subject to *extinction* (i.e., no reinforcing response) or *operant punishment* (i.e., being told off for demanding lollies at the checkout). The consequences of *extinction* and *operant punishment* differ somewhat but both function to reduce the future probability of occurrence of the targeted behaviour.

30. Functionally, *operant punishment* is the provision of an unpleasant stimulus contingent on the display of an unwanted or problematic behaviour with the intention of systematically reducing the probability that the behaviour will continue to be displayed in the future. In the application of such punishment it is essential that the delivery of the punishing stimulus be contingent on the display of the target behaviour.

Applications

31. In Applied Behaviour Analysis, *operant punishment* was, historically, applied with the intention of reducing and eliminating an array of behaviours that include self-harming (e.g., head-banging, head punching, scratching, biting), aggression and tantrums (e.g., hitting, biting screaming, whining), risk taking (e.g., unsafe climbing) typically when displayed by children or persons with developmental or intellectual disabilities. In the late 1960s and the 1970s the variety of alternative forms of applying operant punishment increased, but since that time the number of research articles published reporting the use of operant punishment has declined to the point that in recent years its application has essentially ceased. The cessation is most likely a consequence of social and

ethical disapproval of its use, along with a preference for the application of behaviour-building strategies based on operant *positive reinforcement*.

Types of Operant Behaviour Reduction Procedures

32. Research in Applied Behaviour Analysis (ABA) led to the development of a range of behaviour-reduction strategies that met the definition of either *operant punishment* or *extinction*.
33. Time-Out: The most widely used extinction procedure is *Time-Out from Reinforcement*. Time-out is a term derived from the American sports of basketball and gridiron football, it is used when a side's coach requests a break in play to talk strategy with their team. In ABA, *time-out* involves briefly denying the person access to positive reinforcement as a consequence of their having displayed a defined unwanted or challenging behaviour. Time-out may involve simply withdrawing attention from (i.e., ignoring) the behaviour of person (usually a child) until they perform a desired behaviour that can be reinforced by attention or by having them placed briefly (e.g., 30 seconds to 5 minutes) on a "naughty chair" (*non-exclusion time-out*) or placed in a separate room (e.g., their bedroom) for a similarly brief period (*exclusion time-out*) during which time attention is withheld. Time-out ends contingent on the child being quiet and composed (i.e., not screaming, crying or tantruming) at the end of the assigned time-out period. It is otherwise extended until they have been quiet or still for around 30 to 60 seconds.
34. To be effective, time-out should be a strategy that is used in an environment otherwise rich in positive reinforcement and in which its use is carefully monitored and recorded to ensure that it is not actually functioning as a reinforcer by allowing escape from a primarily punishing (typically institutional) environment (Risley, T.R., 1982. personal communication).

35. *Note: Time-out should not be confused with seclusion, which has been misused in a number of settings in which children are segregated for long periods to punish behaviour deemed by staff to be inappropriate or undesirable.*
36. Chemical and Environmental Punishers: A group of *Operant Punishment* procedures not involving electric shock that have been used in the past have included contingent delivery of loud noises or reprimands, sniffing aromatic ammonia, tasting of lemon juice or Tabasco sauce, briefly screening the face, sprays of water mist in the face and forced exercise activities. These strategies were usually aimed at reducing behaviours potentially or actually more harmful to the individual concerned, such as self-harm, property destruction and aggression. The use of these intrusive procedures resulted in varying degrees of effective behaviour reduction. In time, the ethics and social acceptability of such punishment regimes led to concerns about their use, the risks and potential harms associated with their use and a questioning of the effectiveness of the outcomes, especially in institutional environments that lacked intensive positive reinforcement for appropriate behaviours (Parsonson, 1997).
37. Overcorrection and Restitution Procedures (Foxy & Bechtel, 1983): These involve a combination of operant punishment and extinction strategies with a focus on reducing and remediating problematic behaviour by training the individual to correct (*Overcorrection and Positive Practice*) and/or to compensate for (*Restitution*) the consequences of their actions (Parsonson, 1997). These procedures aimed to punish intellectually disabled persons who engaged in destructive or aggressive behaviours while requiring them to assist to fix or clean up damage they had caused in an effort to reduce the probability of their repeating the challenging behaviour.
38. Response Cost: The application of this procedure involves loss or withholding of access to reinforcers as a consequence of inappropriate or unwanted behaviours. For example, failure to complete homework assignments results in denial of access to a favourite TV programme. In some institutional settings young persons have “good behaviour” points that earn rewards added or deducted, depending on performance of approved or disapproved behaviours.

Deduction of points functions as a punisher but loss of access to rewards may result in displays of anger or a sense of unfairness that results in loss of motivation to earn further points.

39. Electric Shock: In the 1960s response-contingent electric shock was used to punish behaviours that put the client at risk of self-harm. For example, Risley (1968) reported use of contingent electric shock to eliminate dangerous climbing and aggressive behaviours of a 6-year-old girl brain-damaged by meningitis. The intervention was deemed necessary because of the child's history of serious fall injuries, her aggressive behaviour towards her younger baby brother and the failure of other treatment strategies that had been tried. The intervention proved effective at eliminating the risky behaviours and autistic rocking. It also resulted in opportunities to teach new appropriate behaviours. On an ethical note, Risley stated that the outcome of this intervention "*should not be interpreted as a blanket endorsement of punishment with children...the punishment procedures were therapeutically justified for this child...after the failure of other procedures to control disruptive and dangerous behaviors had been extensively but unsuccessfully employed*"(p.34).
40. Birnbrauer (1968) reported a study in which contingent electric shock and shouted warnings were applied to the observable behaviours of destruction of furniture and clothing with the intention that the punishment would also generalize to eliminate occasional and unobservable aggressive biting of others by the client, a severely intellectually disabled teenager who was frequently restrained because of his destructive and biting behaviours. The results indicated initial suppression of the directly punished destructive behaviours over a period of 120 days, but subsequently, these behaviours returned to the pre-punishment levels and there was no indication that warnings and shocking of observable behaviours had any effect on the frequency of unobserved biting of others. Birnbrauer concluded that the intervention had failed to produce any lasting "internalized control" of the target behaviours.
41. The emergence and efficacy of alternative operant reinforcement and punishment procedures, along with ethical and societal changes effectively led

to the termination of the use of electric shock as a means of punishing behaviours of concern in published Applied Behaviour Analysis research and treatment programmes by 1972. It is doubtful that, in the 1970s, medical professionals, including psychiatrists, would have been aware of the extant operant conditioning research or of the fact that behavioural psychological research was increasingly demonstrating that behavioural alternatives to aversive shock therapies were more effective in facilitating behaviour change.

42. Although the research publications reporting aversive shock studies ceased, there was some continued use of electric shocks in clinical settings. This was primarily occurring in the United States. There, aversive shock was mostly aimed at reducing significant self-harm behaviours exhibited by persons with severe intellectual disabilities. For example, high rates of intensive head-banging, which risked both head injury/concussion and blindness, and serious aggressive behaviours were treated with operant punishment. Subsequent professional and public objection, and associated legal action, led to any widespread use of these applications essentially being terminated by the 1990s.

Electrical Punishment Equipment: Specifications and Procedures

43. The equipment used to deliver contingent electric shocks in the early Applied Behaviour Analysis studies was essentially by commercially available stock prods. Risley (1968) describes his equipment as using seven 1.5-volt torch batteries and delivering a low amperage shock averaging in the range of 300-400 volts (with occasional spikes to 1000 volts) for less than a second. Risley described experiencing the shock subjectively as “a sharp, extremely painful sting” localized to the part of the body touched by the contacts and terminated when the contacts were removed. Risley also noted that no visible after-effects such as skin redness, swelling, tingling or aching occurred. Birnbrauer’s (1968) stock prod produced a 500 volt 2-5 mA shock lasting 8 milliseconds. The shock was delivered by briefly touching the prod’s prongs the client’s forearm or bicep.

Birnbrauer agreed with Risley's description of the shock but added that his device produced a 10-second "after sting" (p.205).

Therapeutic Programme

44. The four criteria for an ethical treatment programme set out in Paragraphs 17-21 (Pp. 6-7) above are essentially those that should apply in the application of a programme of operant punishment using electric shocks. In the studies reported by Risley (1968) and Birnbrauer (1968) both authors obtained parental consent for the use of electric shock on their young and disabled clients ahead of their respective interventions. Further, there are descriptions of the specific target behaviours, stated rationales for the use of electric shock in each case and specifications of the equipment used. In addition, session-by-session data were presented in graph form to demonstrate the effect of the intervention on the target behaviours of each client. In discussing the results of their interventions, both authors indicated the main and side effects of the treatment and strengths and weaknesses of the procedure were outlined and discussed. Risley took steps to express his injunction that *the use of electric shock punishment should be considered a choice of last resort reserved for situations in which other, less unpleasant, interventions have been tried and found wanting when the behaviour is concern exposes the client or others to potential harm*. Birnbrauer described the dire institutional circumstances in which his client was kept because of his destructive and aggressive behaviour, including periods of seclusion and months in restraints and isolation. It was decided to try the use of contingent shock in an effort to improve both his quality of life and his engagement with staff and fellow inmates.

Efficacy

45. The efficacy of the Risley 1968) and Birnbrauer (1968) interventions was deemed less than adequate by each researcher. In Risley's study the use of electric shock took time to show any benefit and had to be supplemented with parental growling and smacking in the home setting. A positive side-effect of

shock use was increased eye contact by the child. As the climbing and assaults on baby brother reduced, increased eye contact was recorded and this increase provided opportunities to teach imitation of clapping and banging hands on the table. The child's mother was then able to teach five new imitative responses at home and reportedly went on, after the programme ended, to work on teaching imitation of sounds in an effort to establish speech.

46. In Birnbrauer's intervention, the use of shock only temporarily suppressed destructive behaviours that later returned to the original level. Also, there was no evidence that its use, or that the pairing of shouted words such as "Don't!" or "No" had led to any reduction of the unpredictable biting of others by the client. Birnbrauer concluded that electric shock, whilst capable of powerful and rapid suppression, had very specific effects that limited its applicability under circumstances such as those he had encountered in his study.

Ethical Issues

47. As with Aversion Therapy, use of response contingent shock to deliver operant punishment presented ethical concerns. These included concerns of potential harmful side effects, such as punishment-induced aggression, avoidance of the therapist, and incomplete suppression of high risk and potentially harmful behaviours. Riskey (1968) also reported that he found delivering painful electric shocks to a child personally stressful and unpleasant. Birnbrauer (1968) was concerned about the limited efficacy of his intervention and the absence of any durable or positive outcome.
48. The above issues, along with increased social disapproval of contingent electric shock as a punisher and the emergence of more efficacious and positive forms of behavioural intervention, led to the rejection of use of a number of operant punishment strategies. However, time-out and response cost continue to be used in some home, school and institutional settings. In these environments it is sometimes used inappropriately and in circumstances which do not match

Risley's corollary about requiring their use within an environment providing access to a high level of positive reinforcement

Electroconvulsive Therapy (ECT)

49. (Note: The writer is not a psychiatrist and is not an expert on Electroconvulsive Therapy. This opinion is based on research from the published studies and from the statements of persons qualified or experienced in the deliver of standard ECT treatment)

Introduction and Definition

50. Electroconvulsive Therapy (ECT) was initially introduced in the late 1930s as a treatment for schizophrenia. Following observations that suggested that persons diagnosed with both schizophrenia and epilepsy showed signs of remission of their schizophrenic symptoms following epileptic seizures it was decided that artificially induced seizures could offer a cure. At first seizures were induced using Insulin, but it was then found that passing a low voltage electric current through the brain was a more efficient method of inducing seizures. However, ECT was found to be ineffective as a treatment for schizophrenia and it was then trialled as a treatment for depression with more promising results. In its early use, ECT was given without either anæsthetic or muscle relaxant (*unmodified ECT*), with the result that limb fractures and dislocations could occur during seizures. Over time, effective anæsthetics and muscle-relaxant drugs have been developed and their use since the late 1950s in *modified ECT* has been the norm, resulting in elimination of the risk of fractures and dislocations (Holmes, D. 1994)

Applications

51. In the 1960s and 1970s ECT was primarily used to treat a range of depressive disorders. Over the subsequent years, as antidepressant medications were

developed and their efficacy was improved, ECT has, become more commonly reserved for the treatment of Major Depressive Disorders that have failed to respond adequately to antidepressant medication or alternative psychological therapies such as Cognitive Behaviour Therapy (CBT).

ECT Equipment

52. Ectron Ltd. in the United Kingdom produced the equipment used at Lake Alice. Dr. Russell who developed the Ectonus ECT apparatus in that decade had founded the company in 1950. The company still exists and manufactures modern ECT equipment among other products

Therapeutic Programme and Procedures

53. In the USA a course of ECT treatment is reported (Holmes, 1994) to be anything from 6-20 sessions with administration of each session of therapy normally being spaced 2-3 days apart. Reports indicate that the average course of treatment is 8 sessions, with more severe or recalcitrant depressive episodes requiring the most sessions. ECT is considered capable of producing a more rapid effect on depression than medication, for which uptake and effect may require periods of up to two weeks before having an effect.
54. In applying ECT, the patient is placed on a bed or hospital trolley and injected with a muscle relaxant and an anaesthetic medication. A tongue restraint is placed in their mouth to prevent the tongue being swallowed during the seizure. Two electrodes covered with a jelly (to enhance the flow of the current) are placed on the head, either with one electrode on each temple (bilateral) or with one electrode on the person's non-dominant temple and the other on the forehead (unilateral). When the 70-150 volt current, lasting from 1/10th to 1-second, is delivered it will induce a seizure that can inhibit breathing and the patient will require oxygen shortly after as they recover (Holmes, 1994).

55. The above description generally matches that of the standard procedure followed in New Zealand Psychiatric Hospitals in the 1960s and 1970s, as outlined to the writer by a former senior Registered Psychiatric Nurse. This person worked in Seacliff, Cherry Farm, Oakley and Carrington Hospitals over that period. She described the procedure as follows:
56. Patients offered ECT were mostly those diagnosed with Depression. A psychiatrist or medical officer explained the proposed treatment to them and they were required to sign a consent to the treatment. Treatment typically was scheduled prior to breakfast to avoid the possibility of the patient choking. Once in the treatment room, the psychiatrist and a qualified psychiatric nurse attended the patient, trainee staff were sometimes also present to assist. The patient was administered a muscle relaxant and, once relaxed, an anaesthetic, after which they were put on oxygen prior to the ECT being delivered. The Psychiatrist operated the ECT equipment and the shock was mostly delivered unilaterally to reduce post-therapeutic confusion and memory loss. Usually, only a slight tremor was observed when the ECT was delivered. As the patient recovered they were placed in a recovery room and monitored. Treatments usually involved a series of 4 to 6 ECT sessions, usually delivered two days apart on a Monday, Wednesday and Friday. The Psychiatrist wrote clinical notes after every treatment indicating the anaesthetic and muscle relaxant used, the ECT delivered and the patient's recovery and response to treatment.
57. Bilateral ECT treatment was only used in instances in which the person has undergone some very traumatic event, such as committing infanticide. Often they were compulsory admissions.
58. NB: She stated that *ECT was never given unmodified (i.e., without anaesthetic or muscle relaxant) and never used as a punishment in this nurse's experience.*

Efficacy

59. Evidence of Efficacy of ECT as administered in the decade 1960-1970 is unavailable. Modern ECT therapy is very different because of the increased sophistication of equipment and the resultant changes in treatment procedures and the range of disorders treated. However, efficacy data for the treatment of the acute phase of Major Depression and treatment for Depression associated with Bipolar Disorder indicates that, for the former, 75% of 217 US patients evidenced remission on completion of a short course (8-12 treatments) of ECT. In the UK, a review of 18 research trials, with a total of 1144 patients, showed a high efficacy rate (0.80), evidencing higher efficacy than antidepressant medication. In treatment of Psychotic (Bipolar) depression, ECT was found to be more effective than antidepressant medication. However, the efficacy of ECT was reported to be very variable, ranging from 20% remission to 80%, depending on factors such as seizure intensity, laterality of shock and whether provided in a research trial or in a hospital clinic (Lisanby, 2007). Lisanby reports that use of ECT is typically reserved for treatment of depressions that have not responded to antidepressant medications because of the higher risk of side effects, especially if patients have medical disorders that contraindicate its use.

Ethical Issues

60. Ethical issues regarding ECT relate to the lack of scientific evidence of how ECT works, and the side effects, namely, post-ECT confusion and memory loss, longer term memory loss in some cases, as well as evidence of high relapse rates when short courses of treatment are applied, which is quite common (Lisanby, 2000, 2007).

Analysis of the Treatment of the 11 Complainants at Lake Alice Hospital

61. Reported and Recorded Treatment Procedures Employed by Dr.Selwyn Leeks and Villa Staff:

- a. The statements and some file records of eleven former male patients, all of whom were admitted to Lake Alice as children or adolescents while Wards of the State, were analyzed by the writer. The following categories of treatment were reported and, in some instances, were recorded in medical files, included: application of ECT shocks to temples and other body parts. This use of electric shock was identified by Dr. Leeks as 'Aversion Therapy' and is variously recorded in nursing notes as 'Ectonus Discussions", 'Ectonus Therapy', 'Special Therapy' and 'ECT'. Other forms of punishment identified by recipients and in nursing notes typically included injection of Paraldehyde and, occasionally, other psychotropic medication, and also seclusion in a locked room or secure ward.

Complainant Data Summaries

62. Introduction: The notes below are summaries, sometimes quoting directly from the person's statements, in order to clearly illustrate their experiences of their times in Lake Alice. As medical notes were mostly missing, and as those available were typically sparse and did not cover all of the time any of these persons spent in the Hospital, these recollections and reports are only occasionally verifiable from the available Hospital records. However, the consistency of descriptions of events by this group of persons, all of whom were reporting independently, is significant. In addition, some report witnessing events that happened to the others, which offers a degree of confirmation. The writer has no reason to doubt, in general terms, the veracity of what these persons report.
63. Each summary report details admissions, age on each admission and the duration of each period in Lake Alice. Where available, a diagnosis is listed. Also detailed, in condensed form, are some of the key experiences of each person in respect of punishment for what was judged as inappropriate or unwanted behaviour. This included "ECT" (their term), the injection of

Paraldehyde (a viscous liquid tranquillizer that, when injected intramuscularly, caused pain and left an unpleasant taste and smell that lasted some time), and the use of periods of seclusion.

64. Mr. Halo: *First admission* 1975 (aged 13 years) for 11 days. *Second admission* 1976 (aged 14 years) for 6 months. *Diagnoses*: Childhood Behaviour Disorder and Mild Mental Retardation.
65. *ECT*: He reported 10-12 occasions given unmodified ECT on temples as punishment for fighting with peers and sexual contacts with peers. Case notes are incomplete but records tend to support claims for ECT in 1975 and 1976.
66. *Paraldehyde*: Six Paraldehyde injections (5cc) as punishment for theft, sexual behaviour, fighting, aggression and “general behaviour” are recorded in 1976. Six occasions of seclusion as punishment are recorded in 1976 for periods ranging from 1 hour to 2.5 days.
67. Mr. Nichol: *Admission* 1973 (aged 12 years) for four months. *Diagnosis*; No diagnosis available in records.
68. *ECT* Reported 17-25 occasions given unmodified ECT. His incomplete Clinical notes record some of these as for masturbation, fighting in day room, passing wind in the day room, behaving in a socially unacceptable manner, for food refusal and poor behaviour. Dr. Leeks usually gave ECT on a Friday. Mr. remembers “vicious” pain and convulsions.
69. **GRO-B** *Admission* 1973, aged 13 years for 10 months. *Diagnoses*: Initial diagnosis by Dr. Leeks, Hysterical Character Disorder, then Schizoid Character Disorder and, finally, Simple Schizophrenia
70. *ECT*: Claimed 7 unmodified ECTs as punishment, recalled one ECT to temples for play fighting, 7 or 8 times on his knee, once for fighting, once for whistling at a female nurse. On one occasion was shocked by a nurse for having a sexy magazine, first on the leg, then the thigh and finally beside his testicles for 5-10

minutes in each site. ECT by Dr. Leeks was usually on a Friday. He turned the dial (shock intensity) up and down repeatedly.

71. *Paraldehyde*: Was given as punishment for talking back, not calling certain nurses "sir".
72. **GRO-B** *First Admission* 1972 (aged 14 years) for 13 months, *Second Admission* 1974 (aged 16 years) for 3 weeks. *Diagnosis*: No diagnosis recorded.
73. *ECT*: Estimated 20-30 unmodified ECTs on Fridays as punishment. Claimed shocks administered for up to 5 minutes to the temples, arms and hands (for fighting), legs (for kicking a door); and to his genitals (for masturbation and homosexual acts). Recalls shocks as "Unbelievably painful, it was agony."
74. *Paraldehyde*: Injected 5cc in each buttock on one occasion as punishment. "You can't move afterwards." Said, "it hurt incredibly." Remembers the taste and smell after injections.
75. *Seclusion*: Sometimes for 3-4 days at a time or longer as punishment for homosexuality and masturbation. No toilet but meals and water given.
76. Mr. **GRO-B** *Admission* 1973 aged 13 years for 14 months.
77. *ECT*: Unmodified ECT first administered on second day after admission. Shock level was turned up and down in 3-4 second bursts at rate of 2 per minute. Shocked on hands and legs. On day three, was shocked by other boys under Dr. Leeks' supervision for allegedly sexually abusing them.
78. *Seclusion*: Locked in secure room with only a mattress and toilet bucket.
79. **GRO-B** : *First Admission* 1974, aged 11 years 11 months, for 12 months. *Second Admission* 1975 (aged 13 years) for 19 months. *Third Admission* 1978 (aged 16 years) for 11 months. *Diagnosis*: Schizophrenia

80. *ECT*: Claimed ECT shocks administered to temples over 30 times and over 10 times to groin, mostly unmodified. Given as punishment for not eating food, not taking medication, for not listening to staff, and for allegedly sexually abusing other children. Nurse (named) administered shock for “horsing around with other kids and making a noise”. Held down, yelling and crying. Shocks hurt. 1978 Course of 4 modified ECT recorded, 2 bilateral, 2 unilateral
81. *Paraldehyde*: Injected 10ccs in buttocks for punishment, “it hurt afterwards.” Remembers the strong smell.
82. *Seclusion*: Locked room, mattress on the floor and a toilet bucket. Forced into the room if resisted and injected with Paraldehyde or Largactil (Chlorpromazine, was used for treatment of Depression and serious Behavioural Disturbances). Locked in for 1-2 weeks, meals delivered, taken out to shower. Kind staff would get you out for a walk around the balcony.
83. **GRO-B**: *First Admission* 1974 (aged 14 years) for 12 months. *Second Admission* 1977 (aged 17 years) for 3 weeks. *Diagnosis*: Behaviour Disorder of Childhood.
84. *ECT*: Reported being shocked 6 or 7 times on Fridays, once on his shoulder, other times on his knees as punishment for attempting to escape from Lake Alice. The shocks were usually delivered by Dr. Leeks, but once by a senior nurse (named). **GRO-B** had to choose which knee would be shocked. The voltage would be repeatedly turned up and down and he would scream with the pain, which would last for 10-20 minutes afterwards. On two occasions he was required by Dr. Leeks to deliver the shocks to himself.
85. *Paraldehyde*: **GRO-B** recalls being injected by nursing staff, 5cc to each buttock as punishment for running away. Reported it was painful “like an electric fence shock” that lasted for 20 minutes, making it “too painful to move upstairs to the secure room.” So he had to be helped up by nurses. On waking up, he would smell and taste the “really awful taste” of the Paraldehyde. Later the dose

was increased to 10cc in each buttock. "It was cruel" and only increased his determination to escape.

86. *Seclusion* **GRO-B** was placed in the Maximum Security Unit for 4 weeks after one escape when aged 15 years. He reported threatening to go to the Ombudsman and a lawyer and was released from Lake Alice Hospital as a result of this threat.
87. Mr. Zentveld: *First Admission* 1974 (aged 13 years) for 2 months. *Second Admission* 1974 (aged 13 years) for 4 months. *Third Admission* 1975 (aged 14 years) for six months. *Fourth Admission* 1975 (aged 14 years) for 6 months. *Fifth Admission* 1976 (aged 15 years) for 19 months. *Diagnoses: Behaviour Disorder and Reactive Depression, Behaviour Disorder, Behaviour Disorder of Childhood.*
88. *ECT*: Mr. Zentveld reported being shocked as punishment seven times on his third admission (1975). The shocks were usually given him on Fridays by Dr. Leeks as punishment for throwing apples, arguing with other boys, not eating meals and for bedwetting. He was put on a bed, with staff holding him down. Dr. Leeks would put jelly on his temples and then the shock waves made him lunge up and down in "sheer pain". Dr. Leeks would tell him he would have to change his thoughts and deliver more shocks, "turning the dial up and down, stop for about 10-15 seconds, then turn the dial right up and push the button. He would later wake up naked and alone in the secure room and feel "like shit". Shocks were given on temples, knees and genitals, the latter for bed-wetting.
89. *Paraldehyde*: Administered as punishment 3 times in 1974 for throwing apples, 'continual agitation' and 'exuberant attitude', twice in 1975 for fighting, and three times in 1976 for tripping a patient, quarreling and disturbing other patients, and for 'boyish behaviour'.
90. Mr. Wickliffe: *First Admission* 1972 (aged 10 years) for 3 months. *Second Admission* 1973 (aged 11 years) for 3 months. *Diagnosis: Explosive Personality Disorder.*

91. *ECT*: This was initially administered on 3 to 4 occasions by Dr Leeks at Palmerston North Hospital as punishment for escaping from a Social Welfare Boy's Home. Mr. Wickliffe reported that it was unmodified ECT that it was "indescribably" painful. Once in Lake Alice, he recalls kids waiting in terror on Fridays to see if they were to be shocked. "Some would be shaking, others would be shitting or pissing their pants. They were not just scared, it was pure terror." When he was given unmodified ECT, Mr I said, "I was screaming, it was a continuous scream, I was pissing and shitting on the bed." The shock "zapped but didn't knock me out." Dr. Leeks asked "Did you like it?" " Do you feel any better?" "I didn't answer." "In the first 3 months, I got shock treatment every week."
92. *Paraldehyde*: Injected with Paraldehyde for kicking a ball at a window. "I couldn't sit down. I could smell it and feel it. It was a controlled pain, not as bad as shock treatment, I'll never forget the smell and the feel."
93. *Seclusion*: Mr. Wickliffe reported being locked up before ECT so he couldn't run away. He was also secluded for "trivial" misbehaving, such as not wanting to assemble beer crates. Mr. Wickliffe claimed to have been locked up for a week on one occasion.
94. **GRO-B**: *First Admission* 1976 (aged 14 years) for 6 months. *Diagnosis*: Behaviour Disorder of Childhood.
95. *ECT*: Always for punishment, such as smoking cigarettes, being with a girl and for trying to run away. **GRO-B** reported being given unmodified ECT on the testicles for being with the girl, "it left burns and made them swell".
96. *Paraldehyde*: The first time was for kicking a soccer ball at the window where Dr. Leeks was standing. There were two instances when, having been sodomised by a staff member, **GRO-B** was injected with Paraldehyde and "promised worse" if he told anyone. He stated that on one occasion when he had been put in solitary confinement, a nurse came in carrying two

Paraldehyde syringes. **GRO-B** asked if these were for after being sodomised. He recalled that the horrified nurse injected the mattress instead, but no other action was taken. Paraldehyde was injected for being caught watching another boy get ECT, for running away and for lagging behind on a walk. He reported Paraldehyde being injected between each of the knuckles of one of his hands because he had punched another boy.

97. *Seclusion:* **GRO-B** recalled being secluded on his first night in the Villa. He was secluded naked after a first attempted escape and for 3 to 4 days after his second escape attempt. Following having his knuckles injected with Paraldehyde, he was secluded.
98. **GRO-B** *First Admission* 1975 (aged 12 years) for 3 years 10 months. *Second Admission* 1979 (aged 16 years) for 2 days. *Third Admission* 1979 (aged 16 years) for 2 1/2 months. *Diagnoses: (all 1979)* Psychopathic Schizophrenia, Adolescent Personality Disorder, Explosive Antisocial Personality Disorder “(not mentally ill – intellectually handicapped to some extent)”.
99. *ECT:* **GRO-B** claimed that he received the most shock ‘treatment’ when aged between 12 and 13 years (1975-76). No anaesthetic was given and the electrodes were put on his temples. Dr. Leeks “turned on the machine and got a bit of a shock, so he quickly turned it off. When he turned it on again my whole body tensed up, locked up so I couldn’t breathe. I could see this black and white zigzag line going across my temple and I could hear this massive buzzing inside my head. I felt my whole body going into convulsions and it scared me a lot. I could feel the most intense pain in my temples.” At other times, **GRO-B** recalled the dial being turned up and down by Dr. Leeks to “give higher and lower shocks, giving a higher, then a lower and a higher one and so on. At other times he would just jam it on high for a long time, those were always the most painful. The length of time you got shocked for probably depended on how sadistic Dr. Leeks was feeling at the time.” In the ECT room “one time I kicked Dr. Leeks in the crotch. The nurses grabbed me and put me on the bed.” **GRO-B** **GRO-B** reported being held down by the nurses, who were swearing at him.

“The next thing I remember is Dr. Leeks putting the ‘headphones’ (electrodes) on my left upper thigh. I could feel my leg and my thigh cramp up when the electric shock began. Half my body was very tense and it was very painful. Dr Leeks turned the shock wave up and down a few times. I could feel the shock wave going up and down through my leg. I screamed and screamed and, although no one told me, I knew I was getting ECT for kicking Dr. Leeks”. “I would have received ECT easily 20 times, but probably a lot more, mostly without anaesthetic, but sometimes I was put to sleep first (NB Medical records seem to show a short course of therapeutic ECT in **GRO-B** final admission that was given by a different psychiatrist). “I thought ECT was about punishment, not therapy. If you were bad you got ECT. I would get ECT for swearing, not doing as I was told, walking out of the Villa when I was not allowed to.”

100. *Paraldehyde*: **GRO-B** described the nurses (named) as giving Paraldehyde injections in the buttocks for swearing at staff, for being cheeky to staff, for not doing things correctly, for not doing what they requested of him, for eating too slowly. He reported that the injections were “really, really painful” and that sometimes he was “dragged down the corridor and given an injection in front of the rest of the ward in the day room, where everyone could see me. This was extremely embarrassing.”
101. *Seclusion*: “This was punishment for swearing, arguing, or anything in the day that got to them (Nurses).” **GRO-B** recalled being dragged and wrestling with staff while being taken to seclusion. He noted that sometimes the seclusion room had a mattress and a potty and sometimes it was just bare. He stated that in most instances the only time you were taken out was for a shower. Food was brought in on a tray and no books or magazines were allowed and the windows were shuttered, so he tried to sleep to pass the time. By his recollection, he was put in solitary about 15 times, usually being given a Paraldehyde injection as well.
102. Note 1: Sexual Abuse: Two of the above persons alleged being sexually abused by older male patients or, in one instance, by one particular staff member. There

were also instances in which three of the boys were allegedly sexually abusing other boys. Some of the young persons allegedly abusing others reported having experienced sexual abuse at home and/or in Social Welfare Institutions prior to admission to Lake Alice and, at the time, thinking that it was 'normal behaviour'.

103. Note 2: Informed Consent for Treatment: None of the 11 persons indicated that either they or their family had given informed consent. Several mentioned that as far as they knew, their family were unaware of their receiving both 'ECT' and Paraldehyde injections. One person stated that his parents did not know he had been placed in a psychiatric hospital.
104. Several indicated that they had strongly resisted going to ECT and/or had objected to being injected with paraldehyde. One person indicated that Dr. Leeks had responded to his objection to ECT by saying 'I am sorry, but it has to be done'. One recorded that his objection to nurse preparing to give a paraldehyde injection was responded with "I have to do this, the Dr. ordered it."
105. Note 3: Life Before Lake Alice: Each of the eleven complainants who, as preteens or young teenagers, were admitted to Lake Alice Child and Adolescent Villa in the 1970s was a State Ward. Their Department of Social Welfare files indicate that most, but not all, were uplifted from family circumstances that involved one or more of the following: physical abuse, sexual abuse, neglect and/or trauma. Their behaviour that brought them to the attention of the Department of Social Welfare and to their being uplifted was essentially youth crime, which included shoplifting, theft, burglary and arson. The Department placed these young persons in foster homes where, in some instances, abuse continued. When multiple home placements failed, the next step involved being sent to a "Boys Home", where for some, abuse and bullying continued, often resulting in escapes and or rebellion and, eventually, admission to Lake Alice for "treatment".
106. Note 4: Life after Lake Alice: All eleven men report facing very challenging personal, physical health, mental health and behavioural challenges after their

experience of Lake Alice. In at least eight instances, some symptoms of Post Traumatic Stress Disorder (PTSD) are evident in terms of nightmares, flashbacks, avoidance, and a sense of anxiety or threat in certain situations or in the presence of medical staff or authority figures (e.g., Police). Some blame the unmodified ECT for problems with memory and fear of electric shocks. Most report difficult personal relationships with partners or family, a few have never sustained a relationship. Many have engaged in crime and experienced imprisonment, two mentioned feeling safe in prison because life in open society involved too many threats and challenges. Several indicated that they had had difficulty maintaining a job or had lived on a benefit other than having the occasional seasonal or casual job. One reported having difficulty keeping jobs because of repeated conflicts with persons in authority, blaming this on the treatment he had received in state care and in Lake Alice.

Target Behaviours of Reported and Recorded Treatments

107. A consistent theme in the reports of treatment by the 11 persons is that the “target behaviours” for ‘treatment’ were most often misdemeanours, such as swearing, arguing, fighting, not complying with staff, being cheeky or tardy, not eating meals, and kicking a ball near windows. Some reported being punished for leaving the Villa, for absconding, for bed-wetting and for sexual behaviours such as masturbation or engaging in homosexual acts.
108. With respect to punishment by “ECT”, in each instance, the young persons received either ECT in the form of unmodified ECT to the temples, electric shocks delivered through the ECT equipment to their knees, thighs, shoulders, hands or genitals. Reports indicate that the resultant shocks were very painful, that the intensity of the shocks was manipulated during the delivery, and that shock delivery was often repeated in any given session.
109. Regarding Paraldehyde, this was almost entirely delivered by injection of 5cc into each the buttocks. There were one or two reports of oral administration, but this was unusual. Records and reports demonstrate that Paraldehyde was

administered solely for punishment, presumably because the injection caused considerable pain, inhibited movement and had a tranquillizing effect. There is no evidence that there were medical reasons for administering this drug.

110. Seclusion involved placement in a bare, shuttered room, with a mattress on the floor and a toilet bucket or potty, as punishment for behaviours such as swearing, fighting, food refusal and disobedience. The periods of seclusion reported ranged from half an hour to several days. Two persons reported being confined for periods ranging from several days to 2-3 weeks in the Hospital's Maximum-Security Unit as punishment for escaping. The rooms in this Unit were similarly bereft of furniture.

Procedural Issues

111. The 'treatment' of these young persons involved a regime dominated by punishment for misdemeanours and challenging behaviours. In most instances there is no evidence of any process of formal assessment or a psychiatric diagnosis indicative of mental illness that formed the basis for a treatment regimen using the aversive strategies that dominated 'treatment'. Further, there is no evidence in the available hospital files of any individual therapeutic plans designed to address specific behaviours of concern that justified 'treatment'. Additionally, there is no evidence in the available hospital records that indicate that any data were recorded to monitor the efficacy of the 'treatment' in terms of changing or enhancing the behaviour of the young persons entrusted to their care.
112. It appears that these children were considered by the Lake Alice Hospital's Medical Superintendent, Dr. Pugmire, to be unwelcome in the Hospital and not appropriately placed there. In a letter to the Director of the Social Work Division of the Department of Social Welfare about one young person, dated 19 February 1975, Dr. Pugmire stated "*From our point of view at Lake Alice "X" (Name withheld for privacy reasons) is simply one of fifty other dim-witted delinquents brought into Hospital last year. These patients are not suffering*

from any acute mental illness, such as Schizophrenia or Mania or Depression, so we cannot bring about a quick cure in a medical sense. They require and would respond very well to a prolonged course of residential training as they are capable of learning although their rate of learning is extremely slow and they would need five to ten years to make any worthwhile change in behaviour patterns, After that had been done they would require life-long support and supervision possibly with re-admissions for refresher courses throughout the duration of their lives.”

113. There is occasional reference in some complainants' statements to 'kind' staff, but these are rare and provide some small contrast to the actions of Dr. Leeks and the senior nursing staff identified by almost all of the complainants as the primary participants in the various punishments meted out in the villas to which these young persons were assigned.

Ethical Issues

114. As indicated above, there is an absence of proper diagnosis and assessment, of treatment justification and planned intervention, and no evidence of any 'treatment' data having been systematically recorded, analyzed or reviewed in order to monitor efficacy and to demonstrate benefits or harms.
115. Additionally, there is no record of consent to treatment by family, by the young persons involved, or by the responsible Social Workers or Department of Social Welfare staff.
116. Aversion Therapy, by the 1970s was becoming a treatment of last resort, when other, less invasive, less unpleasant, and more effective interventions had failed to reduce high risk or self-harming behaviours. There is evidence to suggest that at Lake Alice Hospital, the so-called "Aversion Therapy" was the intervention of first choice. For example, one of the recipients reported receiving "ECT" on his second day at the Hospital.

117. The application of Aversion Therapy required training in its use. If Dr. Leeks was trained in its use, there is no evidence from the descriptions of his attempted application of what he termed 'Aversion Therapy' to suggest that he applied any established therapeutic procedure or followed any of the basic precepts of its therapeutic use.
118. On the other hand there is evidence of repeated, administration of very painful electric shock punishment, termed "ECT", to the temples, legs and genital regions of the young persons. Contemporary advice was that even shock equipment specifically designed for the purpose should not be used on the head or trunk of the body and that shocks delivered to the leg should be "moderately painful" (Marshall, 1985b). There is also evidence in Lake Alice records of the injection of Paraldehyde as punishment for misbehavior and, similarly, of the use of seclusion as punishment.
119. A regime dominated by punishment cannot be justified as 'therapeutic', given that such regimes are more likely to generate feelings of fear and anxiety (as personal statements suggest) and, potentially, feelings of hatred and/or anger towards those delivering the punishment and the society that they represent, along with a strong desire to escape from such an environment. The reports of the complainants summarized above reflect these very feelings. Contemporary ethical standards emphasized "Do no harm." but harm was indeed done in this case.

Summary and Conclusions

Were the Lake Alice Treatment Procedures consistent with standard treatments using Aversion Therapy?

120. Paragraphs 5-25 (Pp. 2-8) of this document sets out in detail the therapeutic application of Aversion Therapy, the clinical procedures and equipment used, and the associated ethical issues and efficacy of Aversion Therapy.

121. In this writer's opinion, there is no meaningful comparison between that standard clinical application of Aversion Therapy and the procedures adopted and applied by Dr. Leeks and staff at Lake Alice Hospital. As the contemporary published evidence of the application of Aversion Therapy shows, the procedure required consistent, contemporaneous and controlled pairing of the aversive stimulus with the display of the defined target behaviour in order to establish a conditioned response. The proper application of Aversion Therapy was described in the research literature of the time and formal training in its application had been available from the late 1940's. Aversion Therapy became a treatment of last choice, not one for dispensing as punishment for misdemeanours.
122. None of the essential elements of Aversion Therapy are evident in the way that Dr. Leeks, some nursing staff and some fellow inmates are described as applying electric shocks to the complainants.
123. By arranging for Friday "ECT" sessions, Dr. Leeks could never have met the essential Aversion Therapy criterion of pairing the aversive shock with the display of the target behaviour to establish a conditioned response. Descriptions by the complainants of the anxiety and distress experienced while waiting to see if their names were called on these Fridays suggests that they were traumatised and conditioned to fear both Dr. Leeks and Fridays rather than to the display of specific target behaviours, such as escaping, fighting or sexual activities for which they were evidently being punished.
124. Additionally, there was no evidence of any specifically planned therapeutic process in any of the available the hospital records. Nursing notes typically refer young persons to treatment by "Ectonus therapy", "ECT" or "Ectonus discussions with Dr. Leeks" in relation to an array of behaviours that the youths displayed considered by staff to be deserving of punishment. There were no medical records of any data being recorded to demonstrate treatment efficacy and there is no available information on Dr. Leeks' specific training or qualifications to apply Aversion Therapy.

125. Application of unmodified ECT to deliver painful shocks to the temples, legs, hands or genitals of these young persons is, in fact, closer to torture than it is to any known ethical form of therapy.

Were the Lake Alice Treatment Procedures consistent with Operant Punishment?

126. Is it possible to argue that the various punishments meted out to the complainants could be justified as “Operant Punishment” with the therapeutic aim of treating the challenging behaviours that had resulted in these young persons becoming Wards of the State?
127. As set out in Paragraphs 26-48 (Pp. 9-17) of this document, Operant Punishment involves the contemporaneous and contingent application of a punishing stimulus at the moment that a defined target behaviour was displayed. The therapeutic intention was to reduce the frequency of, or to eliminate, behaviours that were potentially dangerous to self or others. Use of punishment in reported research was always seen as an intervention of last resort in order to reduce behaviours that were harmful to self or others or were problematic in the environments in which they were displayed.
128. Typically, intervention followed direct observation and recording of behaviour prior to intervention in order to define the form and nature of the proposed target behaviours and to determine that the behaviours of concern warranted the intended treatment. In addition, data were recorded in each session to establish the efficacy of the intervention once it was introduced. The equipment used to deliver electric shocks was pretested on those delivering them so that they were aware of the intensity of shock and the degree of pain involved, typically described as unpleasant but as brief (i.e., milliseconds) and of moderate intensity.

129. The published studies always involved justification for the use of punishment and reported informed consent from parents or guardians to apply it therapeutically.
130. The variety procedures used in Operant Punishment studies included the contingent use of both chemical and electrical punishers and the application of brief (a few minutes) time-out from reinforcement, as well as a range of other contingencies such as response cost and restitution, as outlined in Paragraphs 26-48 (Pp. 9-15).
131. A reading of the reported use of the electric shock punishment procedures by Dr. Leeks and the Lake Alice nurses involved in applying them in no way matches that used in the published descriptions of methodology and procedures used in the therapeutic application of Operant Punishment. In the case of Lake Alice, there was no pre-treatment assessment of any specific or defined target behaviour. No data were recorded to establish a baseline or to determine the effectiveness of the intervention over its course or afterwards.
132. Additionally, the application of electric shock was not made under controlled circumstances in which it was immediately contingent on the display of any defined target behaviour. Dr. Leeks typically held sessions of "ECT" on Friday afternoons, which meant shock delivery was never contingent on contemporaneous display of the targeted behaviour. Further, the "ECT" shocks were very strong, very painful and were delivered on a range of parts of the recipients' bodies. There was no reported attempt by those delivering the shocks to get a sense of the shocks' intensity or pain level by applying them to themselves. And there was no evidence that this was a treatment of last resort due to potential risk of harm to self or others.
133. With respect to the use of Paraldehyde or seclusion as a punishment, these bear some similarity to Operant Punishment, given that their application was normally contingent on the display of some form of unwanted behaviour and that their application was at times almost contemporaneous with the display of unwanted behaviour. However, their use in the context of Lake Alice failed to

observe the basic requirements of having sets of defined target behaviour, observing and recording the behaviours of concern, consistently applying appropriate consequences within the context of an ethical intervention that produced individually effective and beneficial outcomes for each of the young persons involved. There was no evidence that any of the available Operant Conditioning research informed the interventions delivered or that any of those involved in providing 'treatment' had any training in its application. Certainly these interventions at Lake Alice were not applied within the context of an essentially positively reinforcing environment that aimed to build skills and appropriate, functional behaviours.

Were the Lake Alice Procedures consistent with Standard ECT Therapy?

134. (Note: The writer is not a psychiatrist and is not an expert on Electroconvulsive Therapy. This opinion is based on the writer's literature search and the statements of persons qualified or experienced in the delivery of standard ECT treatment)

135. When compared with the standard ECT methods and procedures outlined in Section 3 above, there is no doubt that Dr. Leeks was not in any way conforming with what was a standard form of ECT in using the equipment to deliver punishing and painful shocks to these young persons. To begin with, there were no reported diagnoses of any form of depressive disorder when Dr. Leeks was involved with these persons (*although reports suggest that one or two of the adolescents, who may have been depressed at the time, received a standard course of ECT on later admissions. These seem to have been administered by doctors other than Dr. Leeks*). Secondly, the use of unmodified ECT to deliver repeated and varied-intensity shocks over a session by turning the shock intensity up and down over what was reported on each repeated occasion as a number of minutes, does not conform with the standard ECT procedure of the time. Additionally, the application of the electrodes to parts of the body other than the temples, or to the temples themselves, with no standard ECT therapeutic purpose, has no medical or ethical justification.

136. The terms “Ectonus Therapy”, “Ectonus Discussions” and “Special Therapy” in Lake Alice Nursing Records may simply represent a cover term for the types of intervention Dr. Leeks was providing to these youths to justify it as “therapy”. Dr. Garry Walter, a Professor of Psychiatry, in his 2009 review of the use of ECT by Dr. Leeks refers to the “Ectonus Technique” as one in which the patient does not have a full convulsion. He noted that it was not widely adopted by the psychiatric profession and that there was little contemporary research available on it. Dr. Walter also noted that “Ectonus” was the brand name of the equipment produced by the Ectron Company, so it is possible that the term “Ectonus Therapy” simply referred to the machine used to deliver the punishing shocks.
137. Dr. Walter provided two reports, one in 2001 and one in response to Police inquiries in 2009. In each of these expert opinions, Dr. Walter reviewed the relevant medical literature and used his own extensive knowledge and experience of ECT to reach the following conclusions:
- a. Use of an ECT machine to deliver aversion therapy has *never* (his emphasis) been medically approved as the degree of discomfort and side-effects would have been excessive compared to standard aversion therapy;
 - b. The theory underpinning aversion therapy requires the patient to be awake during the procedure (ECT generally renders the patient unconscious);
 - c. ECT was not a recognized form of aversion therapy (Related to this, I presume that Dr. Leeks was not formally evaluating or studying ECT as a type of aversion therapy)
 - d. The specific behaviours that Dr. Leeks was seeking to abolish were not always clear;
 - e. The level of discomfort reported by patients was presumably extreme, and this way beyond the pain and discomfort levels described in conventional aversion therapy;
 - f. The patients and families presumably did not consent to ECT for this purpose (and indeed may have protested about the use of the treatment);

- g. The general atmosphere that may have pervaded the unit and ECT sessions were possibly not “therapeutic”.
138. Dr. Walter also condemned the misuse of ECT to deliver shocks to parts of the body where no convulsion could occur (e.g., genitals, knees) as medically unjustified and potentially harmful. Further he condemned its use for the primary purpose of punishment. Further, he strongly disapproved of the ECT being delivered by persons unqualified to do so, including by other patients. Dr. Walter expressed concerns about the potential for the young persons involved to suffer long-term physical and emotional harm from the procedures used at Lake Alice by Dr. Leeks.
139. The limited information available from medical notes, the statements of the affected individuals and the multitude of negative long-term effects demonstrate that the treatment procedures failed to meet any of the requirements of standard ECT treatment at the time.

Were the Lake Alice Medication Procedures consistent with normal practice?

140. Intramuscular Paraldehyde was often used to subdue aggressive or very disturbed psychiatric patients. It functioned as a hypnotic or tranquillizer and was also taken orally to treat epileptic seizures before more effective alternatives were developed in the 1960s and 1970s. It is known for its capacity for those treated with it to experience its distinctive taste and smell.
141. The use of Paraldehyde as a punishment was solely to induce pain and, possibly, to tranquilize. The fact that the intramuscular injection, rather than oral administration, was the primary mode of delivery points to its ability to cause immediate pain and immobilization as the grounds for its choice. Given that the drug was also unpleasant when orally administered because of its taste and smell, it appears that the preference was for intramuscular delivery. There appears to be no medical justification for the use of Paraldehyde as a punishment.

142. There were unlikely to have been any genuine medical or therapeutic justifications for its use on the young persons in Lake Alice Hospital.

The Writer's opinion on the Lake Alice Procedures

143. Having been trained in the use of clinical behavioural therapies and experienced in their application, as well as having read the relevant research literature and considered the standard clinical procedures for the therapeutic use of punishment in Aversion Therapy and Operant Punishment, I can only conclude that I could find nothing in the Lake Alice procedures that matched that knowledge. I personally found the reading of the complainants' statements in this case both disturbing and emotionally harrowing.
144. From a clinical and ethical perspective, there are no scientific, medical or therapeutic justifications for the use of electric shock, Paraldehyde or seclusion in the practices adopted and abused by Dr. Leeks and the senior nursing staff of the unit in their treatment of the children entrusted to their care. In addition, there must also be a degree of culpability in the fact that the Medical Superintendent, Dr. Pugmire, was willing to admit these young persons as patients knowing that they did not suffer from any acute or easily treated psychiatric disorder, and in the knowledge that the treatment available in the Hospital for which he was responsible was neither appropriate or able to produce positive outcomes.
145. At the very least, the actions of Dr. Leeks and the Unit staff was an abuse of power and medical authority, an unjustified assault on the human dignity and the rights of the young persons, and an inhumane regime of maltreatment that induced fear, anxiety, and terror as well as causing lasting emotional and physical harm on those forced to suffer the ordeal of Lake Alice Hospital at that time. In my opinion, the intended aim of these actions by Dr. Leeks and senior nursing staff was not therapeutic, but as a means to punish a range of

behaviours they deemed undesirable through the intentional use of force to induce pain as a punishment.

146. In summary, there is no evidence in the Lake Alice information available to me that the procedures to which these children and young persons were in any way consistent with either Aversion Therapy or Operant Punishment procedures available from published research at the time. One way to describe what was done to these young persons in the name of “treatment” is that it was cruel and unusual punishment applied in ways that fit the UNCAT definition of torture set out below.
147. In my opinion, one issue for deliberation is where on the scale from maltreatment to torture does this unjustified exposure to institutional violence reside?
148. The formal definition of torture provided by the United Nations Convention Against Torture (UNCAT) and Other Cruel, Inhuman or Degrading Treatment or Punishment (1987) states:
149. *For the purposes of this Convention, the term "torture" means any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person has committed or is suspected of having committed, or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity. It does not include pain or suffering arising only from, inherent in or incidental to lawful sanctions.*
150. This is a matter for the Royal Commission of Inquiry to consider as it determines the outcome of its deliberations in respect of the treatment of the young persons sent to Lake Alice Hospital and the consequences of that maltreatment on each of them.

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Statement of Truth

This statement is true to the best of my knowledge and belief and was made by me knowing that it may be used as evidence by the Royal Commission of Inquiry into Abuse in Care.

Signed: **GRO-C**

Dated: 04/04/2021

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