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An independent academic psychologist, based in England, who has written extensively on different areas of psychology with an emphasis on the critical stance towards traditional ideas.

A complete listing of his writings at http://kmbpsychology.jottit.com.

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1. SOCIAL ELEMENTS TO THE PRIVATE EMOTIONAL EXPERIENCE

1.1. EMOTIONAL EXPERIENCE

"Emotions are not the most obvious topic for social psychological enquiry. They can seem quintessentially personal and private, nothing to do with other people at all (at least for members of individualistic cultures)" (Parkinson 2011 p405) [1].

The acceptance of the "social" element of emotions comes from the experiment of Schachter and Singer (1962) (appendix 1A). It showed, though not perfectly, that the experience of emotion has a basis in the social context. Subsequent work has shown that the reactions of others is important in the experience of emotion. For example, watching a comedy film with a friend who does not like it will reduce the experience of amusement (Parkinson 2011).

Cognitive theorists explained the emotional experience as a product of the cognitive appraisal of the situation. For example, Lazarus et al (1962) varied the commentary accompanying a stressful film [2], and this produced different emotional reactions. "In short, emotion was shown to depend on how someone else told participants to orient themselves towards something happening in the social world" (Parkinson 2011).

The social element of emotions is also seen in emotional responses to ingroup and outgroup members' experiences, but not experienced by the individual themselves, as in the example of schadenfreude. This is pleasure at the misfortune of others (especially outgroup members).

Leach et al (2003) predicted that "intergroup schadenfreude" would be "greatest when an outgroup suffers in a domain of interest to ingroup members. For example, those most interested in international soccer should feel the most pleasure in response to a rival country's downfall in soccer" (p932). It will also be increased when the ingroup's status is threatened.

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[1] Wierzbicka (2010) highlighted the problems of studying emotions when they are embedded in the language, and there is a risk that categories of a language will be mistaken for "categories of nature".

[2] Seventy psychology students at the University of California, Berkeley, USA, viewed an anthropological film called "Sub-Incision" from Australia that showed a rite of passage among an indigenous group involving the circumcision of adolescent boys with a piece of flint.

Leach et al (2003) used the rivalry in football between the Netherlands (ingroup) and Germany (outgroup) at the 1998 World Cup. Pilot studies with Dutch students had established this perceived rivalry. In the first experiment, the interest in football, and the feeling of ingroup threat were varied with 147 first-year psychology students at the University of Amsterdam. The threat condition involved participants thinking about the Netherlands' loss to Brazil before rating their feelings towards other losing teams in the World Cup (including happy on a seven-point scale).

Participants with more interest in football reported more schadenfreude at Germany losing (irrelevant of the threat or control condition). For participants not interested in football, schadenfreude was greater in the threat condition.

In the second similar experiment, 252 Dutch students were asked about their feelings towards losing teams in the 2000 European Championships. Participants with more interest in football reported more schadenfreude at the loss of a rival, whether it was Germany or Italy (who actually beat the Netherlands in the semi-final). But with participants not interested in football, schadenfreude at Germany's loss (to England) was significantly greater than Italy's loss (to France in the final) in the threat condition (where participants were reminded of the Netherlands' loss). Where the participants were encouraged to think about Dutch people's honesty and tolerance, schadenfreude towards Italy (a legitimately superior team) declined. The authors observed: "The schadenfreude of those lower in interest was, however, more sensitive to the circumstances under which rivals suffered a misfortune. Thus, the schadenfreude of those less interested in soccer was moderated by the threat of in-group inferiority and the legitimacy of schadenfreude" (Leach et al 2003 p941).

1.2. APPENDIX 1A - SCHACHTER AND SINGER (1962)

Schachter and Singer (1962) saw an emotional experience as the product of physiological arousal and the interpretation of the situation. "Thus precisely the same state of arousal could be labelled 'joy', or 'fury', or 'jealousy' or any of a great diversity of emotion labels depending on the cognitive aspects of the situation" (Schachter and Singer 1962 quoted in Gross 1990).

Schachter and Singer attempted to create the physiological arousal in different social contexts to see how the individual labelled the emotional experience.

Step 1 - Physiological arousal

Participants were given an injection of adrenaline (which stimulated the autonomic nervous system), but told it was a vitamin supplement. A control group received a placebo injection. The experimental group was divided into three based on the information given about the side effects of the injection - correct information ("informed"), no information ("ignorant"), or false information ("misinformed") (figure 1.1).

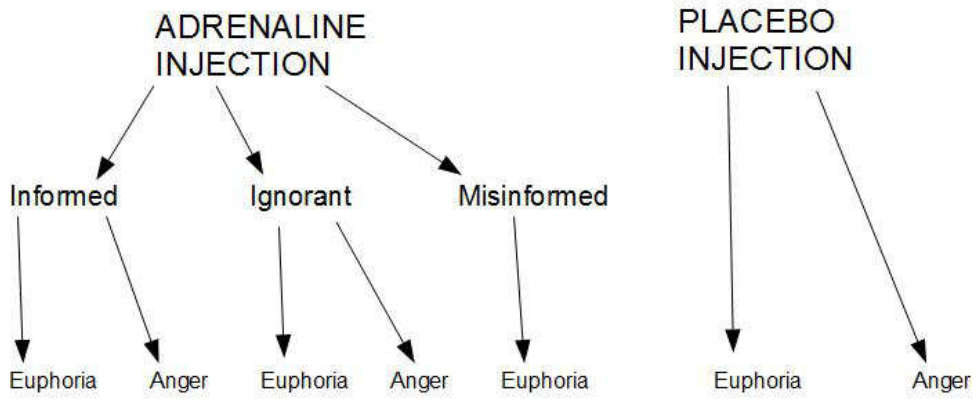

Figure - The independent conditions in the Schachter and Singer (1962) experiment.

Step 2 - Social situation

After the injection, participants were left individually in a room with a confederate who behaved in a euphoric or angry way.

The emotion was measured on a five-point scale primarily [3]. The participants were male introductory psychology undergraduates at Minnesota University, USA. It was predicted that the participants in the ignorant and misinformed conditions would label their emotions based on the behaviour of the confederate. The informed condition participants would label their arousal as due to the injection, and the placebo group who had no physiological arousal would report no emotion experience of euphoria or anger.

When the confederate showed euphoric behaviour, participants rated their mood as happier in the ignorant and misinformed conditions than in the informed condition, and as more angry when the confederate showed angry behaviour. However, some participants in the latter

[3] The experimenters observed the behaviour of participants covertly.

situation reported feeling happy, and participants receiving the adrenaline injection did not all report more emotions than the placebo group (Parkinson 2007).

Parkinson (2007) stated the three main criticisms of this experiment as:

i) Artificial situation.

ii) Operationalisation of "emotion" as answers to a question as open to "honesty" issues.

iii) The ethics of deceiving the participants about the injection, for example.

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2. PSYCHIATRIC MEDICATION: PRESCRIBERS, TAKERS, AND PRODUCERS

2.1. INTRODUCTION

The number of prescriptions of psychotropic [4] drugs has risen in recent years. For example, in the USA, 5.84% of the population were prescribed anti-depressants in 1996, which had almost doubled (10.12%) by 2005 (Ilyas and Moncrieff 2012).

Ilyas and Moncrieff (2012) looked at trends in prescribing psychotropic drugs in England between 1998 and 2010 using data from the National Health Service's Prescription Cost Analysis. This records all prescriptions outside of NHS hospitals (eg: by GPs) [5]. Psychiatric prescriptions were found to have increased by 6.8% per year during the study period [6], which was in line with increases in prescriptions of all drugs. Anti depressants were the individual class of drugs that showed the largest increase (130% between 1998 and 2010), while there was a 66% increase for anti-psychotics.

There are a number of possible reasons for the increase in prescriptions:

1. Demand side - patients: An increase in patient numbers; due to:
- Increase in number of sufferers;
- Increase in UK population as whole;
- Increase in diagnosis.

2. Demand side - amount: An increase in the quantity of

[4] A general name for drugs used with mental disorders.
[5] It does not include non-NHS/private prescriptions.
[6] A total of 42.7 million prescriptions for psychotropic drugs in 1998 and 79.8 million in 2010 (Ilyas and Moncrieff 2012).

drugs prescribed to each patient. For example, data from the UK General Practice database suggested that prescriptions are given now for longer periods with depression and schizophrenia (Ilyas and Moncrieff 2012).

3. Supply side - medical practitioners: Doctors and psychiatrists are prescribed more including to individuals who would not have received drugs in the past (wider usage/"off-label use"). For example, a rise in the prescribing of anti-depressants to individuals who do not have a diagnosis of depression (eg: 40% of prescriptions in one study) [7], or anti-psychotics to dementia sufferers (eg: 15% of prescriptions in the UK) (Ilyas and Moncrieff 2012).

4. Supply side - pharmaceutical companies: Marketing pressure from manufacturers which encourages doctors to prescribe more and patients to demand more. For example, anti-depressants being used to treat other conditions like anxiety or insomnia (Ilyas and Moncrieff 2012).

5. Compensation/newer drugs - The replacement of one class of drugs by another (eg: declining prescription of benzodiazepines vs increase in "Z" tranquillisers). But, as with any new product, demand for it can increase due to the simple novelty of it

2.2. PRESCRIBERS

Medication is prescribed by doctors to combat illness and disease. But the actual motivation and factors involved in prescribing are complex, particularly when they are comparable drugs available.

The idea of "rational prescribing" assumes that doctors choose drugs based on appropriateness, effectiveness, safety, and economy (Parish 1974). In reality, prescribing is a function of factors like the patient's disorder, the product, the manufacturer, the doctor, and the doctor's environment (Zelnio 1982).

While Raisch (1990) categorised the factors influencing prescribing as:

i) Direct methods - eg: official prescribing restrictions.

ii) Indirect methods - eg: scientific data, opinions of colleagues, advertising.

iii) Individual factors - demographics of the prescriber

[7] This can be seen as an example of the medicalisation of everyday life (appendix 2A).

(and patient) (eg: age) [8].

iv) Practice factors - eg: organisational structure.

Zelnio (1982) found two groups of criteria involved in drug choice generally - those related to the generic drug class, and to the brand of drug. Zelnio used a postal questionnaire with 155 doctors in Iowa, USA, which offered the respondents pairs of prescribing criteria to choose from (eight criteria organised into 28 pairs). Overall, "potential side effects" and "probable efficacy" were the most important criteria, but this varied depending on the choice of generic drug or brand (table 2.1).

PRESCRIBING CRITERIA	OVERALL RANKING	GENERIC DRUG RANKING	BRAND OF DRUG RANKING
Potential side effects	1	2	1
Probable efficacy	2	1	3 *
Contra-indications	3	3	2
Dosage form availability	4	6	6
Drug cost	5	4	8 *
Source of drug information	6	7	4 *
Frequency of administration	7	5	7 *
Manufacturer's reputation	8	8	5 *

(* Significantly different between generic and brand scores)

(Source: Zelnio 1982 table 2 p281 and table 5 p283)

Table 2.1 - Order of importance of eight prescribing criteria.

General prescribing behaviour has been modelled on consumers' perceptions of "comparative offerings" using techniques like perceptual mapping. Perceptual mapping asks consumers to place comparative brands on different dimensions, and a model is developed of how the brands are cognitively perceived.

Monteiro et al (2009) applied this technique to fourteen anti-hypertensive medicines (used to control high blood pressure) with 283 general practitioners (GPs) in the UK. The attitudes towards the drugs were scored (1-7) on 21 criteria (table 2.2) like "has relatively

[8] The ethnicity of the patient may play a role in the prescribing of psychotropic drugs. For example, studies in the USA found that Black patients were more likely to receive higher doses of anti-psychotics than White patients (eg: 1.8 more likely among schizophrenics; Diaz and de Leon 2002). But in a study in south London, Connolly and Taylor (2008) did not confirm this difference.

infrequent side effects", "offers long term control of hypertension", and "well supported by clinical trials".

- Offers long term control of hypertension
- A cardio protective drug
- Has relatively infrequent side effects
- Effective for severe cases of hypertension
- A relatively expensive drug
- Very suitable for asthmatic and bronchitic patients
- A very simple dosage regime
- Tends to cause postural hypotension
- Very suitable for elderly patients
- Widely recommended by local consultant
- Improves patient's quality of life
- A useful drug for use in mild cases of hypertension
- Well supported by clinical trials
- Very suitable for younger hypertensives
- Occasionally will produce severe side effects
- First line treatment in hypertension
- Useful for difficult hypertensive cases
- Effectively lowers systolic blood pressure
- Has a beneficial effect on serum lipid profile
- Regresses left ventricular hypertrophy
- Benefits the whole cardiovascular system

(Source: Monteiro et al 2009)

Table 2.2 - Criteria for rating anti-hypertensive medication.

The scores were then grouped using factor analysis, and three key factors emerged: "medical support", "long term efficacy", and "additional beneficial effects". Two less important factors also emerged: "adverse side effects" and "asthmatic and bronchitic suitability" (table 2.3).

"Additional beneficial effects":
- Benefits the whole cardiovascular system
- Regresses left ventricular hypertrophy
- Has a beneficial effect on serum lipid profile
- Useful for difficult hypertensive cases
- A cardio protective drug
- Improves patient's quality of life
- Very suitable for younger hypertensives
- A relatively expensive drug

"Long-term efficacy":
- Offers long term control of hypertension
- A very simple dosage regime
- Effectively lowers systolic blood pressure
- Effective for severe cases of hypertension
- Well supported by clinical trials

"Medical support":

- First line treatment in hypertension
- A useful drug for use in mild cases of hypertension
- Widely recommended by local consultant
- Very suitable for elderly patients

"Adverse side effects":
- Tends to cause postural hypotension
- Occasionally will produce severe side effects
- Has relatively infrequent side effects

"Asthmatic and bronchitic suitability":
- Very suitable for asthmatic and bronchitic patients

(Source: Monteiro et al 2009)

Table 2.3 - Five factors and 21 criteria.

Putting these factors together, doctors were found to prefer anti-hypertension drugs that were perceived as beneficial beyond reducing blood pressure, were effective in the long-term, and were supported by experts in the field.

Lilja (1976) distinguished between habitual and non-habitual brand choice of medications, where the former dominates. The non-habitual choice occurs when a doctor is faced with a new drug and/or a new condition. Lilja (1976) concentrated on this in a study of Swedish GPs. The doctors were presented with two different case studies. The decision over which medication to recommend was found to be based on three dimensions: curing effect, side effects, and cost of medication.

Prescribing can be viewed in the same way as the relationship between attitudes and behaviour. The theory of reasoned action (Ajzen and Fishbein 1980) argued that attitudes lead to behavioural intentions which is turn lead to behaviours. The model also includes subjective norms (views of influential others) and perceived behaviour control (ability to carry out behaviour) [9] (figure 2.1).

Lambert et al (1997) applied this theory to the prescribing of seven different anti-biotics by 25 doctors in the mid-west USA. Attitudes and behavioural intentions did not predict actual prescribing behaviour (based on number of prescriptions in three-month period). It seems that general attitudes about specific anti-biotics were less important than patient-specific requirements and management systems (eg: freedom to choose medication within an organisation). This was only a small-scale

[9] In this example, factors like patient demand, formularies, and preferred drug lists could influence perceived behaviour control (Lambert et al 1997).

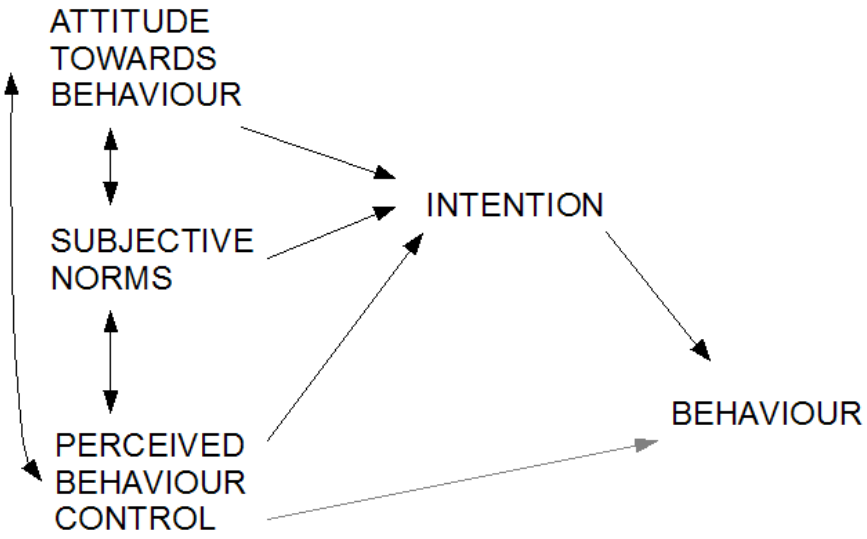

Figure 2.1 - Theory of reasoned action.

study, and related to anti-biotics.

It is assumed that the motivations of prescribers are "good", but conflicts of interests could be "bad" motives for prescribing one medication instead of another. "Conflicts of interests occur when doctors are unduly influenced by a secondary interest (ie: a personal incentive) in their acts concerning one of the primary interests to which they are professionally committed" (Maj 2008 p91). The primary interest is usually the patients/clients, while the secondary interests include financial gain, personal recognition, career advancement, fame, or favouritism towards a relative, for example, as well as allegiance to a theoretical position or political cause ("allegiance effect") (Maj 2008).

The actual medication given to a patient may not be the one prescribed because of errors, like illegible handwriting by the prescriber (for example, 16.1% of prescriptions written for elderly patients in psychiatric units in Leeds, England; Nirodi and Mitchell 2002). In an audit of prescriptions in April 2008 at the Accra Psychiatric Hospital in Ghana, Sanati (2009) found that 19% were illegible, 37% had the wrong spelling of the drug name, and 13% were unclear about the dose.

2.3. TAKERS

Adherence [10] [11] to self-administered medication is less than 50% (Haynes et al 2008) [12] [13]. Studies reported improvements with simplification of dosage regimen, and use of adherence enhanced packaging. In a review of randomised controlled trials of techniques to improve adherence, Haynes et al (2008) found limited success. The techniques that did improve adherence were complex, and included combinations of factors like more convenient care, information, reminders, reinforcement, counselling/therapy, and supportive care. But telling people about the negative consequences of not adhering did not tend to improve adherence. Haynes et al (2008) felt that the "diversity, complexity, and uncertain effects of the interventions make generalisations problematic about which interventions work and which do not. Even the most effective interventions did not lead to large improvements in adherence and treatment outcomes" (p16).

Adherence is reduced by the side effects of medications (appendix 2D).

Where non-adherence is high, an alternative to voluntary ingestion of medication is required. For example, among individuals receiving treatment for opioid dependence naltrexone implants can be effective. Naltrexone blocks the action of heroin, but patients can be reluctant to take it, so sustained-release implants in the abdomen twice a year can be used. Kunoe et al (2009) reported that such implants reduced opioid use among Norwegian patients who were meant to be abstaining from such substances.

2.4. PHARMACEUTICAL COMPANIES

Studies sponsored by pharmaceutical companies are much more likely to have findings favourable to the funders than non-pharmaceutical company funded studies [14]. This may be due to "questionable trial design" including giving inadequate dose of a competitor drug (Goldacre 2009).

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[10] Adherence can be defined as "the extent to which patients follow the instructions they are given for prescribed treatments" (Haynes et al 2008). For example, a medication is prescribed for twice a day for ten days, and the patient follows that regimen for three days and stops, their adherence is 30% (6/20).

[11] If individuals do not adhere to treatment, there may be a case for compulsion in the case of psychiatric medications (appendix 2B).

[12] Most studies use self-reports of adherence (which probably overestimate), whereas objective measures are preferable, like the Medication Event Monitoring System (MEMS) pill bottle which has a cap containing a microchip that records the date and time the bottle is opened (Haynes et al 2008).

[13] The factors affecting adherence may also influence attendance at appointments (appendix 2C).

[14] Approximately 75% of funding in the USA comes from pharmaceutical companies (Lawton 2009).

The biggest concern is publication bias where the pharmaceutical company sponsoring the study can decide not to publish disappointing results. A small number of all clinical trials may get published (10-20%), and the majority of those published studies will be positive (two-thirds to three-quarters) (Goldacre 2009) [15]. Thus unflattering data is hidden or missing, while information to doctors is more likely coming from the marketing department (according to Goldacre 2012). "The problem is, if they [pharmaceutical companies] are allowed to distort the evidence on how good a drug is, then they distort clinical decision-making in a way that harms people" (Goldacre 2012 p28).

Other issues with pharmaceutical companies include concerns raised by consumer groups in the USA, like "Community Catalyst", about such companies giving away coupons that offer discounts on their drugs or free trials (New Scientist 2006).

2.5. TRUST

It would seem that in situations related to health, medical knowledge based on scientific evidence should trump intuition and common sense [16]. For most people in the West for the majority of the time this is the case. But cases arise where individuals not only do not accept medical knowledge, they even believe the opposite.

A well-known example is the relationship between the measles, mumps, and rubella (MMR) vaccine and autism. The scientific evidence is clear that there is no causal relation between the vaccine and autism (eg: Taylor et al 1999 [17]) [18], yet "vaccine refusers" have increased in numbers (Bearman 2010).

There are different reactions to such parents, varying from rational calculators of risk to foolish. But their decision to not vaccinate their children is related to trust (or distrust). "What many see when they look out

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[15] The website ClinicalTrials.gov was set up in 2000 in the USA to maintain details of all trials of new drugs (whether subsequently published or not), but this has been criticised for lacking complete information, particularly about outcomes of the trials (Wise 2009). In a comparison of registered clinical trials and subsequent publication, Mathieu et al (2009) found selective reporting in the published version in 46 of 147 cases (31%). This included a new statistically significant outcome introduced in the published article or omission of a non-significant outcome.

[16] Scientific ideas can change and common sense has come to be proved right in certain cases.

[17] Over twenty epidemiological studies showed no temporal relationship (ie: autism developing after the vaccine) (Hornig et al 2008).

[18] The 1998 study of Andrew Wakefield in the "Lancet" is often quoted as evidence of a relationship. This article was subsequently retracted, but "refusers" view this as a silencing of the truth (eg: Jenny McCarthy and Jim Carrey) (Bearman 2010). In terms of science, Hornig et al (2008) showed Wakefield's evidence to be wrong - no association between autism with gastrointestinal disturbances and the measles virus in the bowel.

at science is a vast conspiracy that interlocks government agencies (worldwide) with big pharma, whose reckless pursuit of profit leads them to leave the lives of their children in ruins" (Bearman 2010 p113). For example, pharmaceutical companies have advertising budgets much greater than those for research and development, and they have a history of misdeeds (eg: thalidomide [19]) (Bearman 2010).

In post-modern societies, there is a debunking of traditional authority, and the trust that was once given to such authority (like science and medicine) is placed elsewhere [20]. Individuals find their own sources of "authority" (expertise) and trust them.

2.6. SOME ISSUES WITH PSYCHOTROPIC MEDICATION

Medications like anti-depressants can be "hit and miss" (ie: work for some people and not others or work today but stop tomorrow) as well as having a waiting period before any marked effect [21]. Not to mention side effects. "Clearly, patients critically need anti-depressants that work faster and better, yet the pipeline for novel drugs is drying up" (Henig 2012 p62).

This has led to a move away from the recent focus of anti-depressants on neurotransmitters like serotonin to substances like ketamine. In rats given ketamine, new nerve cells in the brain started growing and the animals were less likely to show depression-like behaviour (Henig 2012).

Other ideas include drugs that work on the neurotransmitter acetylcholine (eg: scopolamine used for motion sickness) (Henig 2012).

Benzodiazepines (BDZ) (tranquillisers) are commonly prescribed for post-traumatic stress disorder (PTSD), but

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[19] More recently, GlaxoSmithKline (GSK) has been sued in the USA over knowing from animal studies that paroxetine (anti-depressant marketed as "Paxil" in the USA and "Seroxat" in the UK) leads to birth defects when taken by pregnant mothers (Tanne 2009b). Meanwhile, Pfizer has been fined in the USA for promoting off-label use of ziprasidone (anti-depressant marketed as "Geodon" in the USA). Doctors can prescribe any approved drug for any condition, but pharmaceutical companies can only promote the drugs for approved use in the USA (Tanne 2009a).

[20] Colquhoun (2009) saw the lack of trust in science generally as due to the "tendency of real science to indulge in hyperbolic self promotion" (p636).

[21] Moncrieff (2010) distinguished between the traditional "disease-centred model" of psychiatric drugs and a "drug-centred model". In the former case, drugs are seen as helping the individual by correcting an abnormal brain state and dealing with an underlying disease. With the "drug-centred model", psychiatric drugs are psychoactive substances like any other, and they produce an effect upon the individual's behaviour. For example, small doses of alcohol help individuals with social anxiety, not be dealing with an underlying disease, but by weakening social inhibitions through intoxication. The upshot is that psychiatric drugs may be helpful in the short-term, but less beneficial in the longer term (Moncrieff 2010).

there is a debate, particularly in the USA, about their use. Here are some of the arguments against their use.

- Produce rapid short-term symptom relief that could discourage participation in therapy.

- Increase risk of motor vehicle accident (Capehart 2012).

- "Long-term harm" (Lund et al 2012).

- Discontinuation symptoms.

- Animal studies show they interfere with the extinction of conditioned fear which counters exposure therapy (Lund et al 2012).

- Capehart (2012) warned: "When our patients talk about the horrors of combat, we should avoid dispensing a benzodiazepine to treat our own anxiety" (p308).

- Alternatives are available (eg: SSRI anti-depressants and non-pharmacological treatments). But Emelity (2012) felt "A bias exists toward the use of psychosocial treatment as opposed to psychopharmacologic treatments of PTSD" (305).

Singh (2012) reported the experiences of children taking stimulant medication for Attention Deficit Hyperactivity Disorder (ADHD) on the VOICES (Voices on Identity, Childhood Ethics and Stimulants) study. This involved 151 families in the USA and the UK with children aged 9-14 years who were diagnosed with ADHD and given stimulant medication, with ADHD but unmedicated, and without a diagnosis of ADHD. Two "ecological niches" were drawn out from the interviews - performance and conduct [22].

- Performance niche - ADHD is viewed in relation to academic performance. US children gave more spontaneous reports of stimulants helping this.

- Conduct niche - ADHD is seen in the context of social behaviour (including aggression). More spontaneous reports of stimulants helping this aspect were given by UK children. About two-thirds of children in this niche had used ADHD as an excuse for their disruptive behaviour, particularly as many teachers and parents believed that sufferers could not control such

[22] ADHD can be viewed as an "eco-bio-developmental disorder" (ecological-biological-developmental) (ie: more than simply biologically determined) (Singh 2012).

behaviour.

Vrecko (2010) questioned the use of medication to treat mental illness, with particular reference to anti-carving drugs, like naltrexone, with addiction: "it would be misleading to suggest that anti-craving medications represent a new treatment for a pre-existing disorder; indeed, it would be misleading to even suggest that anti-craving medications represent a 'treatment' for a recently reshaped biological disease... For medications like naltrexone do not treat a brain disease: they do not cure brain lesions in an ontologically distinct population of diseased individuals, and they would, of course, be deemed ineffective if they brought about neurobiological changes, but did not alter subjective and social outcomes. What such medications do do, is reduce the intensity and frequency of impulses that individuals experience to engage in a problematic behaviour. This, in turn, reduces the risk that such behaviour will produce the negative personal and social consequences that characterise (for example, in diagnostic criteria) behavioural compulsions" (p45).

These drugs are "civilising technologies": "a means of producing states in which individuals are healthier, more responsible and more able to adhere to the duties, expectations and obligations of their families and societies. That is, a state in which individuals are better citizens" (Vrecko 2010 p45).

2.6.1. Panic Disorder and Drug Treatment

Panic disorder is a specific type of anxiety disorder referred to as panic attacks in everyday language. Tranquilliser-based drugs which reduce the symptoms of increasing heart rate, sweating, and dizziness, for example, are traditionally used to combat it, but selective serotonin reuptake inhibitor (SSRI) anti-depressants are also given to sufferers.

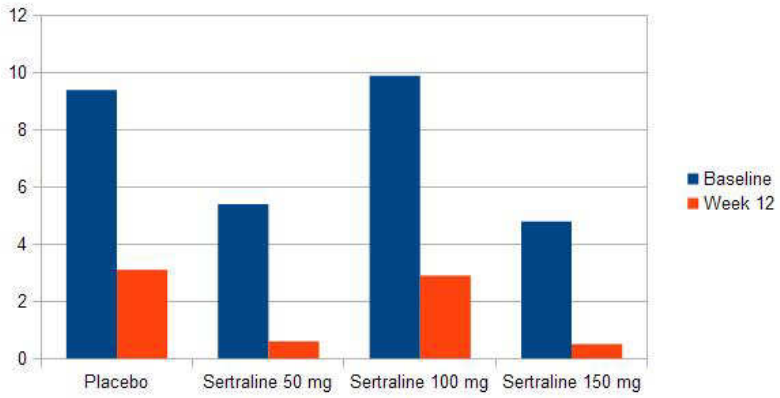
Londborg et al (1998) reported the first controlled trial using one type of SSRIs, sertraline (brand name "Lustral"). Volunteers recruited at seven sites in the USA were given a placebo pill for two weeks (without telling them it was a placebo - ie: single blind) as a lead-in to the study. This allowed a washout period for other medications, and a baseline measure of number of panic attacks. Individuals who experienced at least two such attacks in this period were randomised to twelve weeks of sertraline (three different dosages) or placebo. One hundred and seventy-eight individuals began the study, and 124 completed it.

The outcome assessment was a reduction in the number

of panic attacks [23] as measured by the Sheehan Panic and Anticipatory Anxiety Scale (PAAS) (Sheehan 1989) [24]. A clinician completes this based on daily reports from the patient.

Sertraline was significantly better than placebo in reducing panic attacks (65% versus 39% reduction from baseline) with 57% and 41% respectively reporting no attacks by week 12 (non-significant difference) (figure 2.2). Among the sertraline groups, low dosages were more successful (71%, 83%, and 42% for 50 mg, 100 mg, and 200 mg per day respectively).

Though sertraline was more successful, a large number of the placebo group benefited. This may be due to expectations of improvements by both the patient and the clinician, receiving attention from a clinician, and keeping systematic records of symptoms.



(Data from Londborg et al 1998 table 4 p57)

Figure 2.2 - Mean panic attack scores on PAAS at start and end of study.

2.7. APPENDIX 2A - MEDICALISATION

"Medicalisation" refers to "the process by which 'non-medical' (or 'life' or 'human') problems become understood and treated as 'medical' problems" (Parens 2011 p1). For example, the "human" problem of shellshock is medicalised as post-traumatic stress disorder. It can

[23] Panic attacks were defined based on at least four of the following symptoms - shortness of breath; dizziness; unsteady feelings or faintness; palpitations or increased heart rate; trembling or shaking; sweating; choking; nausea or upset stomach; feeling unlike yourself, detached from a situation and/or like things happening around you are strange and unreal; numbness or tingling; hot flashes or chills; chest pain or discomfort; fear of dying; fear of going crazy or doing something uncontrolled (DSM-III-R criteria).

[24] The PAAS also measures number of "limited symptom attacks" (1-3 symptoms), number of episodes of anticipatory anxiety, and percentage of time spent having anticipatory anxiety.

lead to normal human variation being seen as pathological - "living well requires that we learn to let some sorts of problems be. It requires that we learn to affirm, rather than try to erase, variations in our moods, behaviours, and appearances" (Parens 2011 p2). Also individuals become seen as objects (physical bodies) to be treated, and "its increasing influence steals attention and resources away from changing the social structures and expectations that can produce such suffering in the first place" (Parens 2011 p3).

Parens (2011) quoted the example of a psychiatrist prescribing anti-depressants for his sad patients, who asked a female patient if the drugs worked. "She answered, 'Yes, they're working great...I feel so much better. But I'm still married to the same alcoholic son of a bitch. It's just now he's tolerable" (p4). This is an example of the medicalisation of sadness [25]. However, Parens (2011) wanted to distinguish between "good" and "bad" medicalisation.

"Good" medicalisation might be, for example, the behaviour that is now diagnosed as Alzheimer's disease which was once called "senility" and viewed as a moral problem. The medicalisation of childbirth and menstruation, for example, would be "bad" medicalisation because "by bringing ever more normal features of women's bodies and lives within the purview of medicine, disease mongers diminish women’s power to control their own bodies and, more generally, diminish their ability to flourish" (Parens 2011 p6).

2.8. APPENDIX 2B - COMPULSORY MEDICATION

The Mental Health Act 2008 in England and Wales introduced supervised community treatment orders which could compel individuals with mental disorders living in the community to take medication. Individuals who failed to adhere to their medication could be held in hospital for 72 hours and given compulsory medication.

Arguments for (Dawson and Burns 2008):

- A less restrictive alternative to detention in psychiatric hospital. It is motivated by the principal of "less restrictive practice", and the benefits could not be achieved by other means (Strachan 2009).

[25] Rejecting the use of anti-depressants in this situation has been called "pharmacological Calvinism": "if a drug makes you feel good, it not only represents a secondary form of salvation but somehow it is morally wrong and the user is likely to suffer retribution with either dependence, liver damage, ...,or some other form of medical-theological damnation" (Klerman 1972 quoted in Parens 2011 p5).

- They are intended to allow individuals with mental disorders to live in the community.

- They are another tool available for psychiatrists.

- They are useful with particular groups of patients with poor medication adherence and high risk of hospital readmission (eg: middle-aged males with a history of schizophrenia).

- They have been used successfully in countries like Australia, and in New Zealand since 1992. In the latter country, surveys have found them to be popular with psychiatrists after ten years of use, but also with carers and patients themselves (Dawson 2009).

Arguments against (Lawton-Smith 2008):

- There is no evidence for their benefits (eg: in reducing hospital readmissions). Strachan (2009) observed that there was limited evidence in the USA, and any success was due to an appropriate plan of care in place.

- They are part of the increase of compulsion of psychiatric patients (eg: in New York state in the USA the average length of order is sixteen months).

- There are ethical concerns about their use in terms of the restriction of liberty (Strachan 2009), and "patient autonomy versus professional paternalism".

- The danger of "mission creep" (ie: their use with more and more individuals as time passes).

- They may be used instead of solving the underlying problem. "Some have argued that the motivation behind the introduction of new powers to allow 'compulsory treatment in the community' was more to assuage public anxiety about the potential threat to them caused by some people with mental health problems, a threat that is arguably in the public mind far greater than reality, than to provide a more liberal regime for the management of seriously ill psychiatric patients" (Skuse 2009 p54).

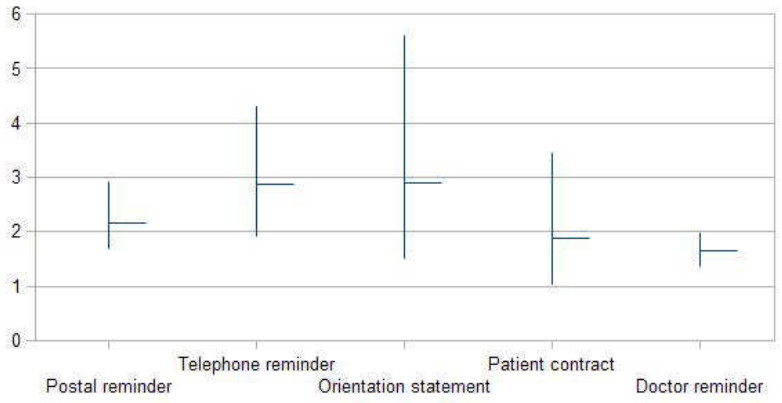
2.9. APPENDIX 2C - NON-ATTENDANCE AT MEDICAL APPOINTMENTS

A sizeable number of individuals referred by GPs to psychiatric services do not attend their first appointment (21-33%; Neeleman and Mikhail 1997).

Neeleman and Mikhail (1997) compared fifty attendees and fifty non-attendees at a hospital in Dartford, Kent (south-east England). Details about the individuals were collected from the GPs' notes given to the hospital's out-patient department.

Non-attenders were more likely to be younger, have relationship and social problems, a history of self-harm, trouble with the law, substance abuse, and no clear psychiatric diagnosis by the GP than attenders.

In terms of keeping appointments for medical services generally, Machoria et al (1992) reported an average of 58% attendance in 23 studies. In a meta-analysis these authors found that attendance was improved with postal and telephone reminders, reminders by doctors (of future appointments), "orientation statements" (information about reason for the appointment), and "patient contracts" (figure 2.3) [26].



(Data from Macharia et al 1992 table 2 p1815)

Figure 2.3 - Odds ratio of improving attendance compared to controls.

2.10. APPENDIX 2D - SIDE EFFECTS OF MEDICATION

Medications have side effects of which some are greater than others. For example, anti-psychotic medication produces weight gain for may takers, which can cause potential health problems in the long-term as well as reducing treatment adherence (Alvarez-Jimenez et al 2008).

Individuals taking this medication may benefit from

[26] Brugha et al (2012) observed that systematic reviews and meta-analyses generally that attempt to synthesise primary research can use different instruments to measure and/or different definitions of the behaviour/disorder.

treatment, preferably non-pharmacological, to control the weight gain. Alvarez-Jimenez et al (2008) investigated which non-pharmacological treatments were most effective. They found ten randomised controlled trials that compared non-pharmacological treatment for weight gain with a control group among patients with first-episode or chronic schizophrenia taking anti-psychotics. The treatments included cognitive-behavioural therapy (CBT) (challenging the negative thoughts about the medication-induced weight gain - eg: it is inevitable and uncontrollable), nutritional counselling, or an exercise-based programme. In total 482 patients were involved in the ten trials, and the programmes lasted between eight weeks and six months (with 2-3 months follow-up). Individuals receiving any of the treatments had a significant reduction in body weight compared to the controls during the programme and at follow-up.

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