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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. BEING SOCIALLY OSTRACISED IS LIKE PHYSICAL PAIN

- 1.1. Introduction
- 1.2. Cyberball experiments
- 1.3. Aspects of ostracism
- 1.4. References

1.1. INTRODUCTION

Ostracism involves being rejected, excluded, or ignored by a group or an individual (Williams 2011). It can vary from averted eye contact to complete exile, and includes intentional and unintentional (eg: the other person ignored me because they did not see me) versions (Williams et al 2000).

In a US survey, 67% of 2000 respondents admitted to using "the silent treatment" on a loved one (ie: being a source of ostracism), and 75% had been the target of such behaviour (quoted in Williams et al 2000).

1.2. CYBERBALL EXPERIMENTS

Williams et al (2000) devised a virtual ball toss game called "Cyberball" ("triadic ball toss paradigm") to study ostracism. Using three cartoon characters (avatars), participants toss a ball back and forth on a computer screen (table 1.1). The computer game is designed to ostracise some players (ie: the virtual ball is never thrown to their cartoon character).

Individuals were randomly assigned to one of four conditions in the game:

- Over-inclusion - the participant's avatar was thrown the ball more often than other avatars (67% of time).
- Inclusion - the participant received the ball the average number of times (one-third of time with three players).
- Partial ostracism - the ball was thrown to the avatar on less occasions than average (20%).
- Complete ostracism - the ball was not thrown to the avatar at all.

The participants then completed post-game questionnaires about mood. Using Cyberball in 62 countries with 1486 participants ¹, the researchers found

¹ The data were collected via the Internet using a website under the guise of research into "the utility of the computer as a tool of mental visualisation" (Williams et al 2000 p751).

that ostracised individuals reported emotions like sadness and anger, reduced self-esteem, and less perceived control over their lives. Though this was an artificial situation and "unimportant", the exclusion produced strong emotional reactions.

- Participants were then given an overview of the experiment. They were told that there would be two other players and that they should all visualise themselves (and the other players) throwing and catching a flying-disc according to the messages that were shown on their screen. In fact, the other "players" were computer generated. Further, participants were informed that they could choose to "quit" at any time and move on to the last part of the study. This quit option was presented after the sixth throw to ensure that the ostracism manipulation was perceived. Thereafter, participants picked one of seven colours to represent themselves in the game. Their colour choice was confirmed, and they were informed which colours the other players had chosen (in fact, the computer randomly assigned the other players' colours). This was the only information provided about the other players.
- For each turn a message and animation were presented on the screen, detailing what had happened. The message and animation varied according to who threw and who caught the flying-disc as well as whether the throw and the catch were good. The message had the following structure: "[Thrower] threw the flying-disc to [receiver]. It was a good (bad) throw. [Receiver] caught (did not catch) it". [Thrower] and [receiver] were replaced with the respective player's chosen colour in the appropriately coloured word. In cases in which the participant was either the thrower or receiver, then "You" (in the participant's chosen colour) was placed appropriately in the message. To maintain enough variability to make the interaction interesting, the probability of a good throw or a good catch was set at .9. This was held constant for all players (both the participant and the computer-generated players) in all conditions.
- When participants received the flying-disc, they had the choice of whom to throw to next by selecting that player's colour. On each of the turns that participants were not in possession of the flying-disc, they were simply notified of what had happened the previous turn and given the option to continue. An algorithm controlled the computer-generated players' throws. The probability that they would throw it to the participant was programmed according to the quantity of ostracism condition to which participants were assigned. The time taken by each of the computer-generated players to make their decision and throw the flying-disc was varied each turn to increase the believability that they were also "real" participants.

(Source: Williams et al 2000 p751)

Table 1.1 - Details of the Cyberball game.

Smith and Williams (2004) confirmed the effects of ostracism in an experiment using mobile phone texting (SMS) among Australian students. During an eight-minute "interaction" with two other texters (not physically present), the participant's messages were either answered immediately (inclusion condition) or not at all

(ostracism condition). The results showed that "ostracism from a text message interaction is sufficiently negative to lower self-reported state levels of belonging, control, self-esteem, and meaningful existence and to produce more negative affective ratings" (p298).

One difference from experiments with Cyberball was that ostracised individuals were bolder (ie: sending provocative and/or clarification texts to get a reaction - eg: "Are you people not speaking to me. I am being oppressed"; p297).

1.3. ASPECTS OF OSTRACISM

One explanation for the effect on mood is that belonging to a group is a need not a desire or preference, and exclusion threatens that (Williams 2011). In fact, Williams (1997) argued that ostracism threatens four fundamental needs - belonging, self-esteem, control, and meaningful existence. It also "carries with it the implicit association that the target has done something wrong" (Williams et al 2000 p749).

The physiological effect of exclusion was shown by Eisenberger et al (2003), who asked students to play Cyberball while in a brain scanner. After exclusion, by apparently other players, the brain showed activity in the dorsal anterior cingulate cortex, which is associated with the emotional aspects of physical pain (Williams 2011) ².

DeWall et al (2010) found that painkillers reduced the brain's reaction in this situation. Half the participants had been given the analgesic, acetaminophen (Tylenol) beforehand and half a placebo. The former group showed less signs of rejection.

It is suggested that social rejection and physical pain share underlying brain reactions (ie: neural pathways) (Williams 2011).

The emotional reaction to ostracism even occurs when excluded from a hated or despised group, or when there are financial benefits to being ostracised. Gonsalkorale and Williams (2007) used rejection by the "Imperial Klans of Australia" (Ku Klux Klan (KKK) in Australia) (despised group) with undergraduates at the University of New South Wales. The self-reported negative effects of ostracism were the same if ostracised in Cyberball by the despised group or ingroup members. The authors concluded: "These

² Even when participants were told that a computer was randomly producing excluding behaviour in Cyberball, participants still experienced the ostracism negatively (Zadro et al 2004). The only difference was that being ostracised by a computer randomly made participants angrier than when supposedly done by other human players of Cyberball.

findings indicate that, perhaps because people are hard-wired to detect it, ostracism is an unpleasant experience, regardless of whom or what is doing the ostracising" (Gonsalkorale and Williams 2007 p1183).

Van Beest and Williams (2006) used Dutch students in an experiment with a version of Cyberball ("Euroball"), where individuals were rewarded for being ostracised. Individuals received 50 Euros when the ball was not thrown to them in the virtual game. This did not reduce the self-reported negative consequences of being ostracised.

Williams (2011) argued that exclusion makes the individual feel "invisible" ³, and an aggressive reaction, for example, makes the individual feel "visible" again. Wesselman et al (2010; quoted in Williams 2011) set up a scenario where students had to cook food for a person who had rejected them or not. It was made clear that the other person did not like spicy food. The rejected students put more hot sauce on the food than the non-rejected ones (average: 14.35 grams vs 1.75 grams).

Though personality traits do not influence the immediate reaction to ostracism, socially anxious individuals and those prone to depression ruminate longer on the experience (Williams 2011).

Research has also shown that ostracised individuals are more likely to subsequently conform to the majority's norms. For example, conformity on a Asch-like task on a computer screen was 27% for individuals previously ostracised in Cyberball, compared to an overall mean of 23%, and 18% for non-ostracised participants (Williams et al 2000).

1.4. REFERENCES

DeWall, C.N et al (2010) Acetaminophen reduces social pain: Behavioural and neural evidence Psychological Science 21, 7, 931-937

Eisenberger, N.I et al (2003) Does rejection hurt? An fMRI study of social ostracism Science 302, 290-292

Gonsalkorale, K & Williams, K.D (2007) The KKK won't let me play: Ostracism even by a despised outgroup hurts European Journal of Social Psychology 37, 6, 1176-1185

James, W (1890/1950) Principles of Psychology, vol 1 New York: Dover

³ William James (1890/1950) admitted that even negative attention was better than being ostracised: "If no one turned round when we entered, answered when we spoke, or minded what we did, but if every person we met 'cut us dead', and acted as if we were non-existing things, a kind of rage and impotent despair would ere long well up in us, from which the cruelest bodily tortures would be a relief; for these would make us feel that, however bad might be our plight, we had not sunk to such a depth as to be unworthy of attention at all" (quoted in Van Beest and Williams 2006 p922).

Smith, A & Williams, K.D (2004) R U there? Ostracism by cell phone text messages Group Dynamics: Theory, Research and Practice 8, 4, 291-301

Van Beest, I & Williams, K.D (2006) When inclusion costs and ostracism pays, ostracism still hurts Journal of Personality and Social Psychology 91, 5, 918-928

Wesselmann, E.D et al (2010) Adding injury to insult: Unexpected rejection leads to more aggressive responses Aggressive Behaviour 36, 4, 232-237

Williams, K.D (1997) Social ostracism. In Kowalski, R (ed) Aversive Interpersonal Behaviours New York: Plenum

Williams, K.D (2011) The pain of exclusion Scientific American Mind January/February, 30-37

Williams, K.D et al (2000) Cyberostracism: Effects of being ignored over the Internet Journal of Personality and Social Psychology 79, 5, 748-762

Zadro, L et al (2004) How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence Journal of Experimental Social Psychology 40, 560-567

2. DIFFERENT TYPES OF CAPITAL AND OLDER ADULTS

- 2.1. Types of capital
- 2.2. Bequeathing ethical capital
- 2.3. References

2.1. TYPES OF CAPITAL

Bourdieu (1986) defined capital as "accumulated labour (in its materialised or its 'incorporated', embodied form).." (p242). It can be seen as having different types (Williams et al 2010):

1. Economic capital - This is the type from profits and wages, and described in terms of money (ie: wealth).
2. Social capital - This "comprises 'durable networks' of 'mutual acquaintance and recognition' which facilitate interpersonal trust, and make possible social membership and participation" (Williams et al 2010 p881).
Social capital is an individual resource that can be used when required. Gray (2009) saw social support as an outcome of social capital. While social capital in a community can be seen in interactions and ties in clubs, social groups, religious congregations, and formal community organisations (Putnam 2000).
3. Cultural capital - Bourdieu (1986) described this as "long lasting dispositions of the mind and body" (p243). It is manifest in educational attainment, knowledge, and "good taste". That is things that require an investment of time (though individuals may try to buy the latter).
4. Ethical capital - This "comprises a system of rules for living, derived from the wisdom of elders, lessons learned, and reproduced in day-to-day encounters. Often assuming the form of truisms and maxims, ethical capital can also incorporate, but is not limited to, religious and spiritual guidance" (Williams et al 2010 p882).

2.2. BEQUEATHING ETHICAL CAPITAL

Dying individuals can bequeath economic, social and cultural goods to their relations and others typically. But individuals living in poverty have little of these to leave, but they can bequeath ethical capital.

Williams et al (2010) investigated such a process

among low socio-economic status (SES) individuals in the USA. The interviewees were thirty-three such individuals, suffering from terminal cancer in a hospital in Birmingham, Alabama. The majority of them were African Americans (70% of total), were female (70% of total), and were aged between 40-60 years old (two-thirds of total). All were classed as living below the poverty level in terms of household income.

Examples of ethical capital were shown in responses to questions about how the individuals wanted to be remembered, and what they had to leave their family. For example, one woman said: "I tried to do the best I can for them, everybody that I can. I tried to set a good example for the little ones. I may not have any money left, but they'll have something valuable if they follow in my footsteps. If I see somebody that needs help, I give them help. If I see somebody that needs to be fed, I feed them" (p889).

While another woman said: "Material things are not about nothing anyway. They don't mean nothing. The best thing I owned was good health, and life and living. If I could put that in a bottle, now that would be something to leave" (p890). Another interviewee said something similar: "The only thing I have to give is to make sure my children are safe with their thoughts on God. You can't hang on to material things. You've got to have something in here that you can pull for in the very desolate" (p890). Overall, "Positive experiences are kept in our repertoire and passed on to survivors. Negative experiences are also used as material for a cautionary tale when instructing others" (Williams et al 2010 p892).

Williams et al noted: "In the absence of material resources to bequeath loved ones, participants describe their desire to leave loved ones some form of ethical currency to facilitate interactions with others and protect them against moral bankruptcy, social marginalisation, and cultural deprivation. As part of this process, participants assess their life circumstances to create a legacy allowing them to remain personally relevant to loved ones after death" (p892).

And for the dying individual, there are benefits:

By leaving loved ones a sense of how they wish to be remembered, individuals engage in generativity, in which they bestow their life's lessons and their personal beliefs on the younger generation, in hopes of teaching the next generation. In doing so, they restore dignity to their lives, during a time when they may have little physical dignity, as they lose control over their bodies (Williams et al 2010 p894).

2.3. REFERENCES

Bourdieu, P (1986) The forms of capital. In Richardson, J (ed) Handbook of Theory and Research for the Sociology of Education New York: Greenwood Press

Gray, A (2009) The social capital of older people Ageing and Society 29, 5-31

Putnam, R (2000) Bowling Alone New York: Simon & Schuster

Williams, B; Woodby, L & Drentea, P (2010) Ethical capital: "What's poor man got to leave"? Sociology of Health and Illness 32, 6, 880-897

3. THE "WHAT IF" EFFECT

- 3.1. Introduction
- 3.2. The "George Bailey effect"
- 3.3. Appendix 3A - Koo et al (2008)
- 3.4. References

3.1. INTRODUCTION

Positive psychology, which aims to improve an individual's well-being, recommends that "counting one's blessings" on a regular basis will help. But "counting one's blessings – thinking about the presence of the positive events in one's life – may have only a minor impact on people's current affective states, to the extent that they have adapted to these events" (Koo et al 2008 p1219). In other words, these things become familiar, and can be taken for granted. An alternative is to think about what would have happened with the absence of the positive events.

Reflecting on "what if" after events can work two ways. "Too much focus on 'what might have been' can mire us in regret and feelings of powerlessness or keep us from savouring our good fortune" (Herbert 2011 p66). On the other hand, it could stop complacency or taking things for granted.

3.2. THE "GEORGE BAILEY EFFECT"

Koo et al (2008) described the positive benefits of "what if" thinking as the "George Bailey effect" after the character in the film, "It's a Wonderful Life" who sees what would have happened if he had not been born ⁴. Koo et al (appendix 3A) asked 88 individuals in committed romantic relationships (for at least five years) to write a short essay about either: (a) never having met their partner; (b) how they met their partner; or (c) a typical day in their life (control group). The first group showed the largest increase in relationship satisfaction ⁵.

Ersner-Hershfield et al (2010) found a greater

⁴ In the film, "an angel named Clarence Odbody takes a suicidal man named George Bailey on a tour of the world as it would have been had George never been born. Rather than asking George to count his blessings, Clarence allows him to observe a world in which those blessings never came about. This exercise forces George to realise just how rare and precious the good things in his life actually are, which instantly cures his depression" (Koo et al 2008 p1219).

⁵ This is an example of counterfactual reasoning - "this kind of thinking is relatively uncommon in everyday life; that is, people are much less likely to engage in 'what if' reasoning after positive events than after negative events" (Koo et al 2008 p1219), or downward social comparison ("namely that comparing oneself to others who are worse off makes one feel better"; Koo et al 2008 p1222).

commitment to the country (study 1) or the company (study 2) after participants were asked to imagine an alternative history of the USA or their company in two experiments.

In study 1, four US undergraduates were divided into the counterfactual-reflection or the factual-reflection condition. "In the counterfactual-reflection condition, participants were asked to imagine their home country's origins, 'keeping in mind all of the key events and pivotal people that might have been different', and to 'write down what your country and world would be like in this alternative universe where these key events and people had not existed'. Participants in the factual-reflection condition were asked to imagine their home country's origins, 'keeping in mind all of the key events and pivotal people that led to it existing' and to 'write down what your country and world are like because these key events and people existed'" (Ersner-Hershfield et al 2010 p1481). The counter-factual reflection condition ("what if") had significantly higher patriotic attitudes about the USA (mean: 5.33 vs 4.82).

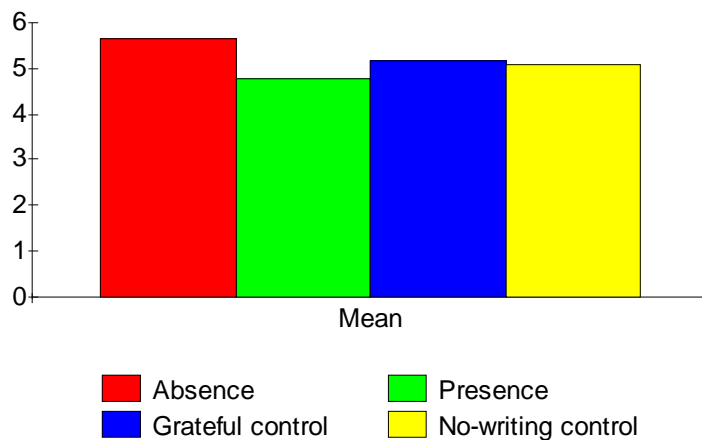
Study 2 involving 97 MBA students. "In the counterfactual-reflection condition, participants wrote down the story of their current or most recent company's origins and described 'all of the possible ways that the company might not have come into being, and the key events and pivotal people that may have been different'. In the factual-reflection condition, participants wrote down the story of their company's origins and described 'all the ways that the company came into being, and the key events and pivotal people that led to it existing'" (Ersner-Hershfield et al 2010 p1482). The former group reported greater organisational commitment (mean: 4.58 vs 4.08).

3.3. APPENDIX 3A - KOO ET AL (2008)

In the first study, Koo et al (2008) asked 65 undergraduates at the University of Virginia in the USA to write about a positive event in their lives. The students were divided into four groups in terms of how they were asked to write about the event. In the presence condition, the focus was upon how the event had become part of the individual's life (similar to "counting one's blessings"). The absence condition involved thinking about life if the event had never happened ("what if"). There were two control groups - one group wrote a factual essay about the event (grateful control), and the other did not write at all (no-writing control). All participants then rated their emotions on a seven-point scale.

Participants in the absence condition reported

significantly more positive emotions than the other conditions (figure 3.1).



(Higher score = positive emotions)

Figure 3.1 - Mean ratings of emotions.

Koo et al then replicated the study with 120 more students from the same university, but without the grateful control condition. The findings from study 1 were confirmed.

In study 3, 46 students read about the previous two experiments, and were asked to predict how they would feel if they had taken part. The participants in the presence condition predicted the highest positive emotions. This showed that "people are unaware of the fact that writing about the absence of a positive event will improve their mood" (Koo et al 2008 p1220).

Study 4 involved individuals in long-term romantic relationships recruited from the Internet or University of Virginia staff. In the presence condition, participants described how they met their partner, while the absence condition involved reflecting on having never met. The control groups were either a typical day, how they met a friend, or having met a friend. Feelings about the romantic relationship were measured two weeks before and after the experiment. On the absence condition produced a positive change in feelings.

Finally, sixteen students were asked to predict how they would have behaved in this experiment. They predicted more positive feelings in the presence condition.

3.4. REFERENCES

Ersner-Hershfield, H et al (2010) Company, country, connections: Counter-factual origins increase organisational commitment, patriotism, and

social investment Psychological Science 21, 10, 1479-1486

Herbert, W (2011) The Midnight Ride effect Scientific American Mind January/February, 66-67

Koo, M et al (2008) It's a wonderful life: Mentally subtracting positive events improves people's affective states, contrary to their affective forecasts Journal of Personality and Social Psychology 95, 5, 1217-1224

4. VENLAFAXINE AND POST-TRAUMATIC STRESS DISORDER

- 4.1. Introduction
- 4.2. Davidson et al (2006)
- 4.3. Issues with clinical trials and Davidson et al (2006)
- 4.4. References

4.1. INTRODUCTION

Psychotropic drugs which are designed for use with one particular mental disorder are often used later with other conditions. In this situation it is even more important that the efficacy of the drug is established for that particular mental disorder.

Venlafaxine extended-release (VER) is a serotonin noradrenaline reuptake inhibitor (SNRI) originally developed to combat depression. It stops the reuptake of two neurotransmitters (serotonin and noradrenaline), thereby increasing the amount in the brain. It was reported as helping reduce depression in clinical trials (eg: Thase et al 2006). Subsequently, it was prescribed for anxiety disorders with apparent success - generalised anxiety disorder (eg: Galenberg et al 2000), social anxiety disorder (eg: Allgulander et al 2004), and panic disorder (eg: Bradwejn et al 2005). Davidson et al (2006) investigated its efficacy with Post-Traumatic Stress Disorder (PTSD).

4.2. DAVIDSON ET AL (2006)

PTSD can occur after a traumatic experience, and includes intrusions of memories about the trauma into waking consciousness ("flashbacks") and sleep (nightmares). Davidson et al (2006) performed a six-month long, double-blind, placebo-controlled trial of VER to reduce PTSD symptoms ⁶.

This study involved 329 adults diagnosed with PTSD from 56 psychiatric outpatient clinics in Argentina, Chile, Columbia, Denmark, Finland, Mexico, Norway, Portugal, South Africa, Spain, Sweden, and the UK. After a period of seven days without any current medication for PTSD, participants were given VER or a placebo for 24 weeks (figure 4.1). The main outcome measure was the Clinician-Administered Post-Traumatic Stress Disorder

⁶ Double-blind means that neither the researchers nor the participants knew who was taking the active drug or the placebo during the study. This attempts to remove the influence of expectations on improvement by both parties.

Scale - 1 Week Symptom Status Version (CAPS-SX) (Blake et al 1995) administered at the start of the study and at the end. This measures the seventeen DSM-IV symptoms of PTSD.

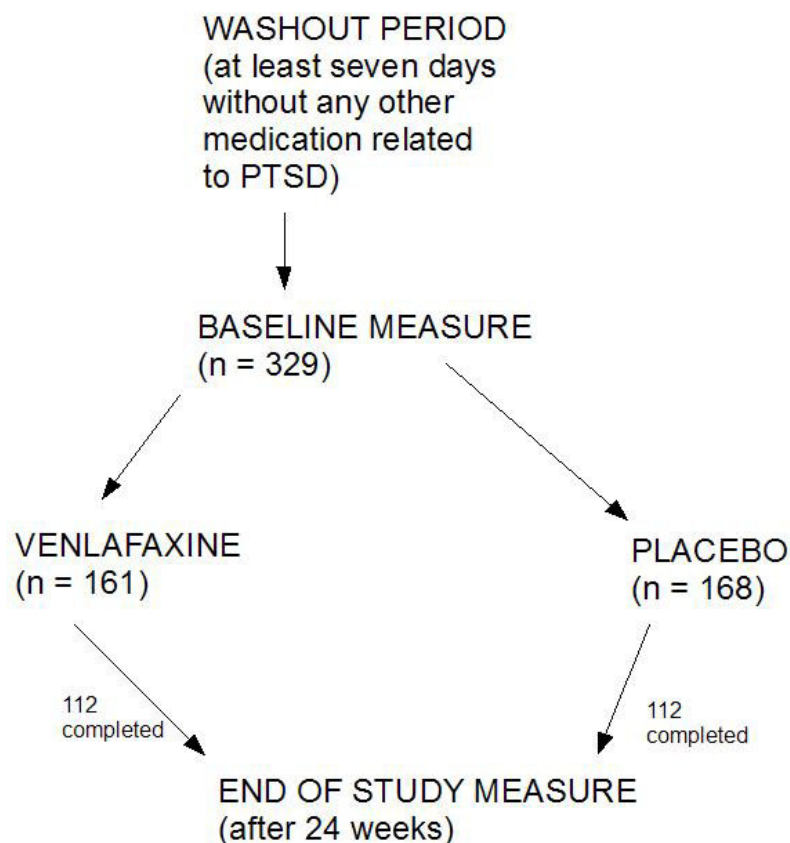
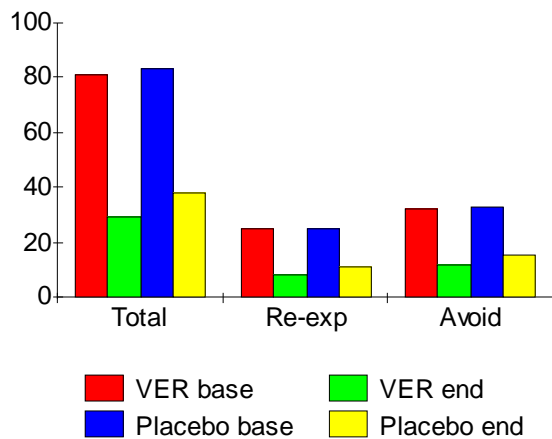


Figure 4.1 - Structure of study.

Both groups showed reductions in the mean total CAPS-SX scores between baseline and end of the study, but the VER group had a significantly greater improvement (ie: reduction of symptoms) (mean reduction 51.8 vs 44.8 on CAPS-SX) (figure 4.2). At the end of the study, 44.7% of completers in VER were rated as in remission (CAPS-SX score of 20 or less) compared to 33.3% of completers in the placebo group. However, statistical analysis on the mean total CAPS-SX score of completers showed no significant difference - reduction of 59.2 (VER) vs 54.0 (placebo).



VER base = VER group baseline score
 VER end = VER group end of study score
 Re-exp = re-experiencing trauma symptoms
 Avoid = avoidance of reminders of trauma

Figure 4.2 - Mean scores on CAPS-SX showing significant differences between the VER and placebo groups.

4.3. ISSUES WITH CLINICAL TRIALS AND DAVIDSON ET AL (2006)

1. Inclusion and exclusion criteria.

Davidson et al used the following criteria for participation in the study:

- Inclusion (included): at least 18 years old; able to consent to participate; not hospitalised; have DSM-IV diagnosis of PTSD; CAPS-SX score of 60 or more; PTSD symptoms for at least previous six months; good general health; not pregnant.
- Exclusion (included): intolerant, hypersensitive or non-responsive to VER or other anti-depressants; co-morbid major depression, panic disorder, psychosis, or alcohol/drug abuse; high risk of suicide or violence; currently involved in crime.

Though the inclusion and exclusion criteria are important to obtain similar individuals for the study, it does leave the researchers open to the criticism of "cherry-picking" (ie: choosing "best" individuals - those most likely to respond to treatment).

2. Sites of study.

The Davidson et al (2006) study was a multi-site study in 12 countries. The cross-cultural element is a

strength as many clinical trials for psychotropic drugs take place in a limited number of Western countries (ie: USA and western Europe). However, standardising procedures between countries and languages can be an issue. For example, the scoring of PTSD using the CAPS-SX was based on videotaped patient interviews for training. No inter-rater reliability measures were collected.

3. Allocation to condition.

This was done by Davidson et al by the use of computer-generated numbers linked to sealed packages of tablets. Thus the administrators at each site did not know if the package contained VER or placebo.

Though the study was blind for the participants in that they did not know if they were receiving treatment or a placebo, being part of a study has an influence. Both groups improved during the study because of expectations of improvement by the patients, and/or just being paid attention. It has been noticed that individuals undergoing therapy show signs of improvement initially because of the attention they receive irrelevant of the technique used by the therapist.

4. Outcome measure.

A standardised clinician-administered measure was used (CAPS-SX) with standardised cut-off scores (ie: ≤ 20 = remission, ≥ 60 = PTSD). However, no self-reported measure of PTSD was used.

5. Participant drop-out.

Initially 442 individuals were recruited. This was reduced to 329 at baseline with exclusions, and 224 completed the study. The completers were just over two-thirds of those at baseline, but half of the original number recruited (table 4.1).

Importantly, 105 individuals dropped out during the study for different reasons:

- Adverse events (ie: side effects not tolerated) (n = 24).
- Did not return to clinic (27).
- "Unsatisfactory response" (ie: unhappy with drug/placebo's effect or lack of effect) (23).
- Protocol violation (eg: missed dose) (12).
- Other medical event (4).
- Other non-medical event (7).
- Other (8).

Drop-out rates were 30.4% for the VER group and 33.3% for the placebo group.

	ALL RECRUITED (%)	BASELINE (%)
All recruited (n = 442)	100	-
At baseline (n = 329)	74.4	100
Completed (n = 224)	50.7	68.1

Table 4.1 - Numbers of participants at different stages of the study.

Standard practice includes all participants at baseline in the analysis, which in this case, produced a significant improvement, but not for the mean total CAPS-SX scores for completers only (table 4.2).

	Mean CAPS-SX score reduction		Remission (CAPS-SX score ≤20) (%)	
	VER	PLACEBO	VER	PLACEBO
All baseline \$	51.8	44.8 *	50.9	37.5 **
Completers	59.2	54.0 ***	44.7	33.3 ****

\$ - the last measure was used before drop-out (known as last-observation-carried-forward; LOCF)

* significant at p = 0.006

** significant at p = 0.01

*** not significant

**** significant at p = 0.04

Table 4.2 - Scores at week 24 of study including drop-outs or not.

6. Side effects.

Side effects are accepted as a consequence of psychotropic medication. Fifteen individuals in the VER group dropped out of the study because the side effects were perceived as too bad. Interestingly, nine individuals dropped out from the placebo group for the same reason. This has to be psychological because the placebo pill had no active ingredient, and this shows the power of expectations.

Both groups reported common side effects like headaches, nausea, and dizziness. Overall, more side effects were reported by the VER group (78% reported at least one side effect vs 69%).

7. Length of study.

Twenty-four weeks/six months is a standard length for many clinical trials. This time period is better than shorter studies (eg: 12 weeks) for detecting longer term effects (good or bad), but not as effective in that sense as long studies (eg: 12 months). Some problems with medications do not appear until long term general use which short clinical trials did not detect.

8. Financial support for the study.

As with many clinical trials, the Davidson et al (2006) study was supported by a pharmaceutical company (Wyeth Pharmaceuticals). It has been suggested that pharmaceutical companies prefer not to publish clinical trials that do not show significant benefits for the treatment over the placebo.

4.4. REFERENCES

Allgulander, C et al (2004) Efficacy of venlafaxine ER in patients with social anxiety disorder: A double-blind, placebo-controlled, parallel-group comparison with paroxetine Human Psychopharmacology 19, 387-396

Blake, D.D et al (1995) The development of a Clinical-Administered PTSD scale Journal of Trauma and Stress 8, 75-90

Bradwejn, J et al (2005) Venlafaxine extended-release capsules in panic disorder: Flexible-dose, double-blind, placebo-controlled study British Journal of Psychiatry 187, 352-359

Davidson, J et al (2006) Treatment of post-traumatic stress disorder with venlafaxine extended release Archives of General Psychiatry 63, 1158-1165

Galenberg, A.J et al (2000) Efficacy of venlafaxine extended-release capsules in non-depressed outpatients with generalised anxiety disorder: a six-month randomised controlled trial Journal of the American Medical Association 283, 3082-3088

Thase, M.E et al (2001) Remission rates during treatment with venlafaxine or selective serotonin reuptake inhibitors British Journal of Psychiatry 178, 234-241