Exploring The Efficacy of The 'Thrive Programme' with Emetophobic Clients: Results of a Survey

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ABSTRACT: *This paper presents the results of a survey, which explored the efficacy of the Thrive Programme with emetophobic clients. Results suggest that the Thrive Programme had a significant impact upon the participants' emetophobia severity, as well as upon their locus of control, self-esteem and social anxiety.*

Key words: *emetophobia, vomit phobia, specific phobia of vomiting, SPOV, Thrive Programme*

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INTRODUCTION:

Emetophobia, a fear of vomiting, is a relatively common but under-researched psychological disorder. One recent study (Van Hout & Bouman, 2006) explored professionals' (including psychologists, psychiatrists, nurses and social workers) views of emetophobia. Although 48.6% of respondents had seen cases in their own practice, 29.7% of the 111 participants had never heard of the phobia. A majority (61.3%) of the professionals regarded the disorder as deserving of more attention. Within the research literature, various terms have been used to refer to a phobia of vomiting, including a fear of vomiting, emetophobia and a specific phobia of vomiting (SPOV), and different criteria have been used to assess the fear. These differences may have lead to difficulties in making comparisons between studies and resulted in the emergence of varying figures for the prevalence of emetophobia. Studies have, for example, suggested that the point prevalence of a fear of vomiting is between 0.1% (Becker et al., 2007) and 8.8% (Hout & Bouman, 2011). Emetophobia is one of the most common symptoms for which the first author of this paper is consulted in his practice. Individuals with emetophobia are predominantly female, with studies revealing that 85-97% of their emetophobic participants are women (Hout & Bouman, 2011; Lipsitz, Fyer, Paterniti, & Klein, 2001; Veale & Lambrou, 2006).

Previous research has suggested that most emetophobes predominantly fear themselves vomiting (Hout & Bouman, 2011; Lipsitz et al., 2001; Veale & Lambrou, 2006), although many also have an additional fear of others vomiting because they believe that this would put them at risk of being sick themselves. Research has also suggested that a minority of individuals with this phobia only fear others vomiting (Lipsitz et al., 2001; Veale & Lambrou, 2006). A phobia of vomiting often has a severe impact upon sufferers' lives. Research studies have indicated that emetophobic individuals show impairments across many domains of their lives (e.g. Hout & Bouman, 2011; Lipsitz et al., 2001; Veale & Lambrou, 2006). Many engage in a range of safety-seeking and avoidance behaviours in an attempt to prevent themselves from vomiting, including, for example, avoiding particular forms of transport, restricting their food, maintaining very high levels of hygiene, avoiding becoming pregnant and keeping away from people who are ill.

Emetophobia often starts in childhood. Lipsitiz et al (2001) reported that the mean age of onset of the disorder was 9.2 years in their sample. Veale and Lambrou (2006) found a mean age of onset of

9.8 years, with participants suggesting that their symptoms first became a problem at a mean age of 11.6 years. Research has suggested that the condition often has a chronic course, with average durations of the phobia exceeding 20 years at the time of participation (Lipsitz et al., 2001; Veale & Lambrou, 2006).

Overlap with other disorders

Researchers have noted that emetophobia shows similarity with a number of other disorders, including social anxiety, obsessive compulsive disorder (OCD), panic disorder and health anxiety (Boschen, 2007; Veale & Lambrou, 2006; Veale, 2009). Like those with social anxiety, many emetophobia sufferers worry that others will evaluate them negatively if they vomit (Boschen, 2007) and Lipsitz et al (2001) found that 62% of their sample were more anxious about vomiting in public than in private. Similar to those with OCD, emetophobes commonly show substantial preoccupation with their gastrointestinal state and many engage in rituals in an attempt to prevent vomiting. As with panic disorder, those with a fear of vomiting may experience recurrent panic attacks. As with health anxiety, many emetophobes also show significant concerns about their health, worrying about illnesses that could cause vomiting. Some sufferers, also, attribute nausea caused by anxiety to physical problems instead (Veale, 2009). Where a sufferer's social anxiety, panic, health anxiety and obsessional compulsive symptoms are specifically related to the fear of vomiting, comorbid diagnoses are not made. Individuals with emetophobia can, however, have comorbid diagnoses, including the disorders mentioned already, depression and other phobias (Veale, 2009).

Proposed causal and maintaining factors in emetophobia

Research has suggested that many people with emetophobia have had aversive experiences of vomiting. Studies have indicated that some individuals develop the fear after a gastrointestinal illness or hospitalisation which included nausea or vomiting (Klonoff, Knell, & Janata, 1984; Williams, Field, Riegel, & Paul, 2011). One recent study (Veale, Murphy, Ellison, Kanakam, & Costa, 2013) found that those with emetophobia rated their autobiographical memories of vomiting themselves as significantly more distressing than the control group, as well as recalling more memories of others being sick. The authors suggested that sufferers could develop their fear through classical conditioning, whereby an experience of vomiting could lead to the phobia, or vicarious learning, where watching others vomit or acting fearfully in relation to vomit could be sufficient for the development of emetophobia. Prior research by the first author has, also, indicated that emetophobic's fear can be triggered by aversive experiences (Hagley & Kelly, 2009).

Unpleasant experiences of vomiting seem, however, to play only a small role in the development of the phobia. Indeed, one study (Klonoff et al., 1984) that explored a fear of vomiting in children, which began after a hospitalisation or illness which included nausea or vomiting, suggested that a combination of developmental transitions in the children's lives, psychological stressors and parental reinforcement of the symptoms helped to maintain their fears. Indeed, since most people experience unpleasant episodes of vomiting at some point during their lifetime but do not develop emetophobia, other factors must be important contributors to this phobia.

Many papers have highlighted the substantial role that sufferers' cognitions and avoidance behaviours play in maintaining their emetophobia (e.g. Boschen, 2007; Veale & Lambrou, 2006; Veale, 2009). Veale (2009, p. 279) discussed how safety-seeking and avoidance behaviours *"have an unintended consequence of increasing the frequency of thoughts about vomiting and symptoms of nausea and will prevent disconfirmation of the threat of vomiting."* Boschen (2007) emphasised that a

tendency to somatize anxiety as gastrointestinal distress, catastrophic misappraisal nausea and other gastrointestinal symptoms, hypervigilance to gastrointestinal cues, beliefs about the unacceptability of vomiting, avoidance behavior, and selective confirmation biases all contribute to emetophobia. The first author's experience has supported the notion that sufferers' cognitions play a key role in a fear of vomiting, and, indeed, has indicated that those with emetophobia are not afraid of vomiting itself per se, but are instead fearful of the anxiety and emotional reaction that they create.

One recent research study has demonstrated a link between emetophobia and disgust propensity (how often people experience disgust) and sensitivity (the extent to which people evaluate disgust-related experiences negatively) (van Overveld, de Jong, Peters, van Hout, & Bouman, 2008). It was found that an emetophobic group demonstrated significantly higher levels of both disgust propensity and disgust sensitivity compared to the control group. Additionally, disgust sensitivity was consistently the best predictor of emetophobic complaints. The authors noted that woman generally have higher levels of disgust propensity, which may help to explain the gender bias in emetophobia. Veale (2009, p. 273) has suggested that gender differences in the way in which individuals perceive vomiting may also be seen in the normal population and that *"men may be more likely to view vomiting as a joke and even desire to vomit after heavy drinking."*

Davidson, Boyle, & Lauchlan (2008) explored the relationship between emetophobia and locus of control. Their study suggested that emetophobes have a more internal locus of control than participants with other psychological disorders. It was postulated that an internal locus resulted in a fear of losing control, and that this contributed emetophobia. The notion that emetophobes have an internal locus of control, however, contradicts the first author's clinical experience. Although emetophobes are scared to lose control and have an over-inflated sense of responsibility in relation to preventing themselves from vomiting, it should be noted that locus of control and desire for control are different concepts (e.g. Burger, 1984; Dembroski, MacDougall, & Musante, 1984; Gebhardt & Brosschot, 2002). Desire for control refers to the amount of control people want, whereas locus of control refers to the amount of control they believe that they have over their lives. In the first author's clinical practice, he has found that, although those he has treated with emetophobia do have a very strong desire for control, they generally do not have a particularly internal locus of control and are often very external in relation to emotional and coping domains.

There could be a number of reasons why, if those with emetophobia actually have a relatively external locus of control, the study by Davidson, Boyle and Lauchlan (2008) found a more internal locus of control in those with a fear of vomiting. Emetophobics' strong desire for control could mask their externality. Additionally, although some people with a fear of vomiting may have an internal locus of control in relation to many aspects of their lives, they may nonetheless be external in emotional and coping domains. The locus of control scales used in Davidson, Boyle and Lauchlan's study may not have explicitly probed these emotional and coping domains thoroughly, leaving these unexplored. Finally, as noted by the authors, there was substantial disparity between the control and emetophobia samples, which could have impacted upon their locus of control scores. Further research is needed to explore and clarify the relationships between locus of control in different domains, desire for control and emetophobia and gain greater understanding of the disorder.

Treatment of emetophobia

There has been little research into the treatment of emetophobia. Veale and Lambrou (2006, p. 139) have reported that *"clinicians generally regard it as challenging to treat because of high drop out or*

a poor response to treatment." Veale (2009) has provided a comprehensive cognitive behavioural formulation for a specific phobia of vomiting, but, as yet, no results have been reported regarding its success. There have, however, been a number of case reports of the successful use of cognitive and behavioural techniques (e.g. Hunter & Antony, 2009; Moran & O'Brien, 2005; O'Connor, 2004; Philips, 1985). Two case studies have also described the use of hypnosis to treat emetophobia (McKenzie, 1994; Ritow, 1979). To date, the largest published study specifically exploring the treatment of a fear of vomiting involved only seven participants (Philips, 1985), highlighting that larger scale studies are needed. Additionally, there is likely to be a reporting bias of successful treatment outcomes within the research literature. Veale and Lambrou (2006) found that twenty-nine percent of their sample of vomit phobics had received some form of therapy for their fear, which overall they rated as largely ineffective.

Within his practice, the first author has developed a cognitive training programme, The Thrive Programme, which has been designed to help sufferers with a wide range of psychological disorders. The programme aims to provide clients with an understanding of how their limiting beliefs and ways of thinking contribute to their symptoms. It encompasses exercises and techniques designed to enable people to alter these detrimental ways of thinking. The programme focuses in particular upon the people's locus of control, social anxiety and self-esteem, with the intention of increasing internality, reducing social anxiety and raising self-esteem. Follow-up of and feedback from clients suggested that the Thrive Programme is highly effective at reducing emetophobia symptoms. The efficacy had not, however, been systematically explored. This study, thus, aimed to explore the effectiveness of the Thrive Programme with emetophobic clients.

METHOD:

Participants

Participants were 35 paying clients with emetophobia, who had undertaken the Thrive Programme. Respondents included 34 women and 1 man. The mean age was 35 years (range 13 to 58 years). A comparison group of 30 paying clients with other psychological disorders and problems (including general anxiety, social anxiety, sexual problems, depression and weight loss) had a mean age of 38 years (range 21 to 72 years) and included 19 women and 11 men.

Procedure

(i) Treatment Protocol

All participants undertook the Thrive Programme, a cognitive training programme, which aimed to provide clients with an understanding of how their unhelpful beliefs and thinking styles were contributing to their phobia, as well as helping them to gradually change these ways of thinking. The programme required clients to complete a workbook, which they were able to do alone, or alongside weekly sessions with a Thrive Consultant, who had been trained to provide guidance and support.

The majority (31, 88.57%) of emetophobic participants visited a Thrive Consultant to complete the programme. The mean number of hour-long sessions they had undergone was 6.63 (range 5 to 9). Most of the comparison group (28, 98.33%) also visited a consultant. The mean number of sessions they had undergone was 5.91 (range 3 to 12). Four emetophobic participants had undertaken the Thrive Programme mainly by reading the Thrive Workbook, although all of these individuals had additionally seen a Thrive Consultant for a single support session. Two of the comparison group had undertaken the programme solely by reading the workbook.

(ii) Survey Questionnaire

The post-treatment questionnaires were self-administered online. The online form explained the purpose of the research and explained that the survey was anonymous.

The questionnaire asked participants to rate the severity of their symptoms before and after completing the Thrive Programme on a four point scale which included: little to no; modest; significant; and severe impact. The emetophobic participants were additionally asked to complete a new measure to assess their emetophobia severity (the emetophobia severity scale, ESS), which had been adapted from other existing measures. Higher scores represented greater severity and impairment (possible range 0 to 30). Finally, all participants were asked to fill in their scores for measures of locus of control, self-esteem and social anxiety, before and after completing the programme. All respondents had completed these three scales as part of undertaking the programme.

RESULTS:

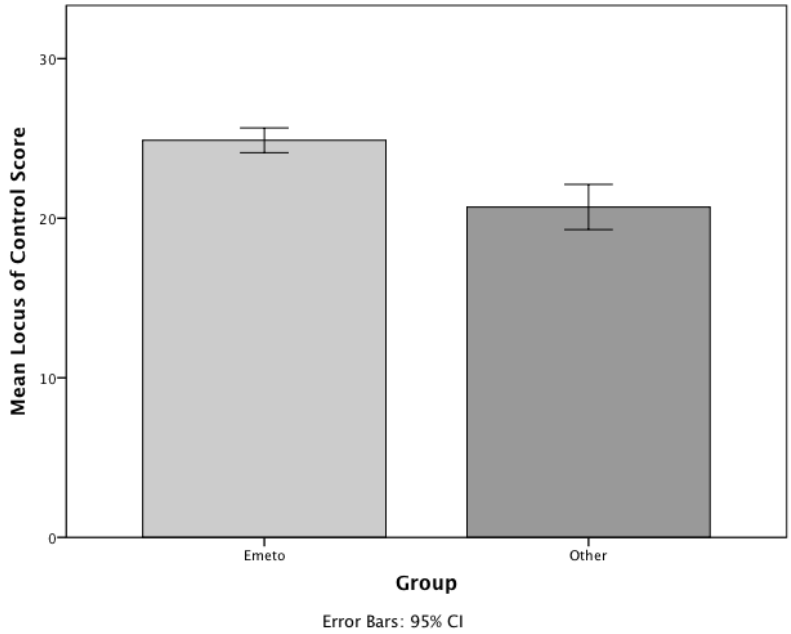
Clinical Features of Emetophobia

The emetophobic participants reported that their phobia had started at a mean age of 11 years (range 6 to 22 years). On average these clients had been suffering from their fear for 24 years (range 4 to 48 years).

All emetophobic respondents rated their phobia as having a severe impact upon their lives (on a four point scale which included: little to no; modest; significant; severe). This was in contrast to the comparison group, of whom the majority (23, 76.67%) rated their symptoms as having a significant impact. Five (16.67%) of the comparison group rated their symptoms as severe and two (6.67%) rated them as having a modest impact on their lives. The emetophobic participants also completed a measure of emetophobia severity (ESS), where higher scores represented greater severity and impairment (possible range 0 to 30). Participants scored an average of 24.31 (range 18 to 30).

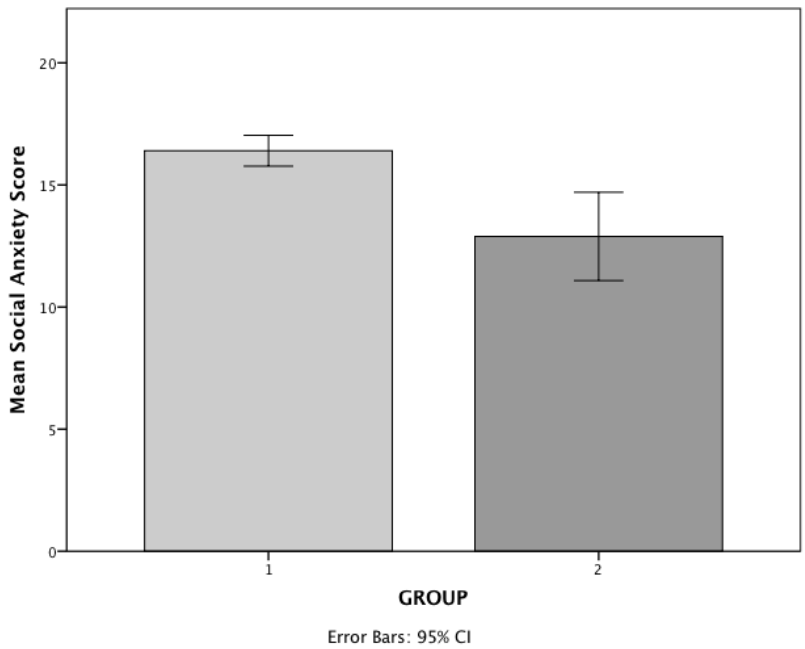
An independent samples t-test assuming unequal variances (Levene's test was significant, $F(1,63) = 9.81$, $p = 0.003$, suggesting violation of the assumption of homogeneity of variance) was used to compare emetophobic and comparison participants' locus of scores prior to undertaking the Thrive Programme. There was a significant difference in the initial locus of control scores of the emetophobic participants ($M = 24.89$, $SE = 0.38$) compared to the comparison group ($M = 20.70$, $SE = 0.70$), with the emetophobes scoring more externally, $t(45.75) = 5.30$, $p < 0.001$, $r = 0.62$. This represented a large effect.

Figure 1: *Mean locus of control scores of emetophobic and non-emetophobic participants prior to undertaking the Thrive Programme*



The initial social anxiety and self-esteem scores of the emetophobic and comparison group were also compared using independent samples t-tests, assuming unequal variances. There was a significant difference in the initial social anxiety scores of the emetophobic participants (M = 16.40, SE = 0.31) compared to comparison group (M = 12.89, SE = 0.88), with the emetophobes displaying higher levels of social anxiety, t(33.70) = 3.76, p = 0.001, r = 0.54. This represented a large effect.

Figure 2: *Mean social anxiety scores of emetophobic and non-emetophobic participants prior to undertaking the Thrive Programme*



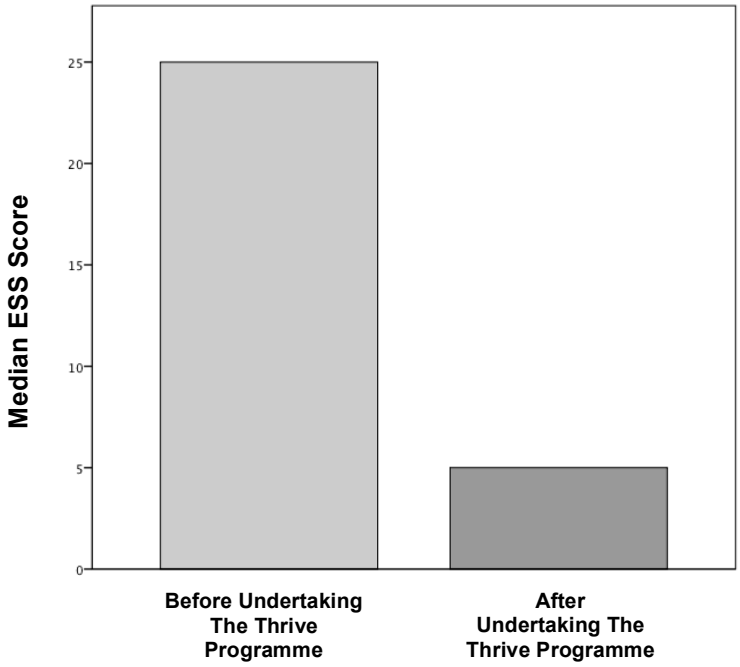
There was no significant difference in the initial self-esteem scores of the emetophobic participants (M = 14.74, SE = 0.39) compared to comparison group (M = 13.73, SE = 0.70), t(48.00) = 1.317, p = 0.19, r = 0.19.

The Thrive Programme Treatment Response

The treatment response of the emetophobic participants was also explored. All participants fully completed the Thrive Programme. After finishing the programme, the majority (30, 85.71%) of the emetophobic participants rated their symptoms as having little to no impact on their lives. The remaining five (14.29%) rated them as having a modest impact.

A Wilcoxon signed-rank test (the non-parametric version of a dependent samples t-test, due to violation of parametric assumptions) found a significant decrease in the emetophobic participants' emetophobia symptom severity scores post the Thrive Programme (*Mdn* = 5) compared to their initial scores (*Mdn* = 25), z = -5.171, p < 0.001, r = -0.87. A higher score represented greater severity of emetophobic symptoms, so participants' severity substantially decreased after completing the programme.

Figure 3: *Median ESS scores of emetophobic participants before and after undertaking the Thrive Programme*



The initial and final locus of control, self-esteem and social anxiety scores of the emetophobic participants were also compared. A Wilcoxon signed-rank test found a significant decrease in the participants' locus of control scores post the Thrive Programme (*Mdn* = 5) compared to their initial scores (*Mdn* = 25), z = -5.171, p < 0.001, r = -0.87. A higher score represented a more external locus of control, so participants, thus, developed a more internal locus of control after undertaking the programme.

A Wilcoxon signed-rank test also found a significant decrease in the participants' social anxiety scores (where a higher score represented greater social anxiety) post the Thrive Programme (*Mdn* = 16) compared to their initial scores (*Mdn* = 4), $z = -5.02$, $p < 0.001$, $r = -0.88$. Finally, a Wilcoxon signed-rank test found a significant decrease in the participants' self-esteem scores (where a higher score represented lower self-esteem) post the Thrive Programme (*Mdn* = 15) compared to their initial scores (*Mdn* = 3), $z = -5.03$, $p < 0.001$, $r = -0.85$, suggesting that the participants' self-esteem increased.

DISCUSSION AND CONCLUSIONS:

The findings of this study in many ways supported prior research into emetophobia. The emetophobic participants reported that their phobia had started at a mean age of 11 years, which agreed with other findings that emetophobia tends to start in childhood (Lipsitz et al., 2001; Veale & Lambrou, 2006). In this study, participants had been suffering from their fear for a mean duration of 24 years, in line with research has suggested that the condition often has a chronic course (Lipsitz et al., 2001; Veale & Lambrou, 2006).

All the emetophobic participants rated their phobia as having a severe impact upon their lives, which is consistent with the findings of other studies. Lipsitz et al (2001, p. 150), for example, found that, *"Over 90% of respondents said they experienced distress from emetophobia symptoms 52 weeks a year. Over 70% said they were distressed 6 to 7 days a week."*

The results of this study disagreed with those of Davidson, Boyle, & Lauchlan (2008), who found that emetophobes have a more internal locus of control than participants with other psychological disorders. Here the emetophobic participants appeared to have a more external locus of control than a comparison group of participants, with other psychological disorders. This finding agreed with the first author's clinical experience. There could be a number of reasons why, if those with emetophobia actually have a relatively external locus of control, the study by Davidson, Boyle and Lauchlan (2008) found a more internal locus of control in those with a fear of vomiting. Emetophobics' strong desire for control could mask their externality. Additionally, although some people with a fear of vomiting may have an internal locus of control in relation to many domains in their lives, they may nonetheless be external in emotional and coping domains, which may not have been explicitly probed in Davidson, Boyle and Lauchlan's study. Finally, there were disparities between the emetophobic and control samples. It should, however, be noted that there were, also, a number of limitations to this study, which may have affected the findings. Firstly, although the locus of control scale used was based upon other existing scales, it has not been validated. Further research is required to thoroughly investigate the reliability and validity of this locus of control scale. Additionally, the comparison group here was comprised of individuals with a diverse range of disorders, which may have influenced findings.

Findings within this study also indicated that the emetophobic participants had high initial levels of social anxiety, indeed higher than the comparison group, some of which had consulted specifically for social anxiety. This suggests that social anxiety plays a role in emetophobia and/or is increased by having a fear of vomiting. There were no significant differences found in levels of self-esteem between the emetophobia and the comparison groups. Further research is needed to explore these findings, since, although the scales used in this study were adapted from other existing scales, they have not been validated.

The results of this survey also suggested that the Thrive Programme is a highly effective treatment for emetophobia, as all participants with a fear of vomiting reported significant improvements in their condition. Significant improvements were also seen in the participants' emetophobia symptom severity (ESS) scale scores, with emetophobic clients scoring substantially lower on the ESS after completing the Thrive Programme compared to their initial scores. These initial results support the notion that interventions that challenge emetophobics' unhelpful beliefs and thinking styles can be successful in substantially improving symptoms. It should be noted that the emetophobia symptom severity scale needs further research in order explore reliability and validity. Improvements in the ESS scores in this study do, however, agree with the participants' reported improvements in the extent to which their fear impacted upon their lives, providing validity evidence. Long term follow up of the emetophobic participants has not yet been conducted, although future research will address this.

One strength of this study is that it involved a larger sample than other research exploring the success of treating emetophobia. Previously, the largest study specifically exploring the treatment of a fear of vomiting involved only seven participants (Philips, 1985). Veale and Lambrou (2006) noted that clinicians tend to regard emetophobia as challenging to treat due to high drop out or a poor response to treatment, but, in this study, all participants completed the programme and all reported a substantial improvement in their symptoms. The results of this study, therefore, highlight the potential for wide scale successful treatment of emetophobia.

Although the findings suggest that the Thrive Programme is a highly promising intervention, there were limitations to the study, which have not already been discussed. Due to the fact that the study took place in a clinical setting with paying clients there was no control group who did not receive treatment. The chronic nature of emetophobia, as indicated by other research (Lipsitz et al., 2001; Veale & Lambrou, 2006), as well as in this study, however, suggested that it is unlikely that many of the emetophobes in this study would have seen substantial improvements without intervention. Additionally, as mainly paying clients took part in the treatment and survey, the results may only be generalisable to other clients willing and able to pay for treatment. Paying for a session is likely to provide a degree of motivation throughout the treatment programme.

Future research into emetophobia is now planned to further examine the relationship of locus of control, self-esteem and social anxiety to emetophobia. Additionally, continued research into the Thrive Programme will be carried out, enabling its efficacy to be further explored, facilitating evidence based practice and the development of the programme.

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