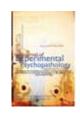


Journal of Experimental Psychopathology



JEP Volume 7 (2016), Issue 4, 528-533 ISSN 2043-8087

Innovations in our Understanding of The Development, Maintenance, and Treatment of Social Anxiety: Introduction to The Special Issue

Peter M. McEvoya,b

^aSchool of Psychology and Speech Pathology, Curtin University, Perth, Australia

^bCentre for Clinical Interventions, Perth, Australia

Editorial for The Special Issue on Social Anxiety Disorder

© Copyright 2014 Textrum Ltd. All rights reserved.

Correspondence to: Peter M McEvoy, Ph.D., School of Psychology and Speech Pathology, Curtin University, GPO Box U1987, Perth, Western Australia, 6845. Email: peter.mcevoy@curtin.edu.au

Received date: 16/09/2016

Introduction

"You probably wouldn't worry about what people think of you if you could know how seldom they do!"

- Olin Miller, 1937

My first encounter with this quote, or at least some permutation of it, was in 2004 while facilitating a social anxiety disorder (SAD) group at the Anxiety Disorders Clinic, St Vincent's Hospital, Sydney. One of my clients piped up in the session and said she'd heard a "great quote" that really fit with her experience. It certainly seemed to eloquently capture what the group had been learning during a series of within-session behavioural experiments. My client attributed the quote to the American television psychologist Dr Phil McGraw. A few years later I opened a fortune cookie in a Chinese restaurant with the same quote. Given that Confucius lived from 551-479 BC, I had assumed that Dr Phil had learned this phrase from him rather than the other way around. However, a quick internet search revealed that a jokesmith named Olin Miller (1937) may have been the true source. Regardless of its origin, the quote beautifully captures the fact that people with SAD overestimate the probability and cost of others' having opinions about them. In truth, people seldom spend inordinate amounts of time scrutinising others, and if they do it seldom matters. When clients learn this in therapy I sometimes read into their (ambiguous) facial expressions that it is at once both thrilling that they no longer need to be preoccupied by others' opinions, and yet strangely disappointing that others are generally too caught up in their own lives to care much about them.

Our understanding of the causes (Rapee & Spence, 2004; Wong & Rapee, 2016) and maintenance (Clark & Wells, 1995; Rapee & Heimberg, 1997; Heimberg, Brozovich, & Rapee, 2014) of SAD has dramatically increased over the last three decades. Contemporary cognitive behavioural models describe how biased within-situation processing can serve to maintain debilitating social anxiety despite repeated exposure to objectively benign social situations. Treatments emerging from these models have demonstrated a high degree of efficacy in research trials (Clark et al.,

2003, 2006; Rapee, Gaston, & Abbott, 2009), and effectiveness in real world community clinics (Lincoln et al., 2005; McEvoy, Nathan, Rapee, & Campbell, 2012; McEvoy & Saulsman, 2014; McEvoy, Erceg-Hurn, Saulsman, & Thibodeau, 2015). Cognitive behaviour therapy (CBT), in both individual and group formats, is associated with large effect sizes and restores a significant proportion of people to normative function, thereby earning its status as a recommended treatment (Mayo-Wilson et al., 2014; McEvoy, Rapee, & Heimberg, 2016; National Institute for Health and Care Excellence, 2013). Despite these considerable strides forward, a substantial proportion of people with SAD do not achieve normative functioning after receiving gold standard treatments (Lincoln et al., 2005; McEvoy et al., 2012), so it is critical that theoreticians and clinical researchers work to improve our understanding of factors that contribute to problematic social anxiety. The studies reported in this special issue were conducted in pursuit of this aim.

Sunderland, Crome, Stapinski, Baillie, and Rapee (2016, this issue) report on factors associated with the onset of avoidance following the development of social fears using data from a large nation-wide epidemiological survey. SAD is one of the most common and earliest onset emotional disorders (Kessler et al., 2005; McEvoy, Grove, & Slade, 2011), so it is critical to improve our understanding of factors that may contribute to the escalation of relatively common social fears in childhood to SAD in later life. Sunderland et al. found that avoidance tended to rapidly ensue after the development of social fears, which is concerning as cognitive behavioural models would predict that avoidance plays an important role in maintaining and exacerbating perceptions of social threat (Clark & Wells, 1995; Heimberg et al., 2014; Rapee & Heimberg, 1997). These findings suggest there may be only a brief window of opportunity to prevent the use of avoidant coping, and thus ameliorate the risk of later SAD. A particularly intriguing finding was that, compared to infrequent alcohol use, regular alcohol use was associated with delayed situational avoidance. However, like situational avoidance, safety behaviours such as alcohol use serve an avoidant function. Avoidance in all its forms can maintain social anxiety by undermining coping self-efficacy, preventing disconfirmation of social fears, and leading to self-fulfilling prophecies, whereby excessive alcohol use can lead to actual negative evaluation (Clark & Wells, 1995; Rapee & Heimberg, 1997; Wells et al., 1995). Delaying situational avoidance by relying on safety behaviours such as alcohol is therefore a false economy that is likely to lead to the same destination - a SAD diagnosis.

The next two studies investigated the boundaries between social anxiety and comorbid symptoms. Versella, Potter, and Heimberg (2016, this issue) examined the relationship between SAD and socially-related versus non-socially-related panic symptoms. The authors explored the hypothesis that individuals with SAD experience more socially-relevant panic symptoms than individuals with panic disorder without comorbid SAD. The data suggested that traditional and social-anxiety related panic symptoms are indeed distinguishable, and the presence of both sets of symptoms is associated with more severe social anxiety. Piccirillo and Heimberg (2016, this issue) noted that a 'fear of others' is shared between social anxiety and paranoia, and investigated post-event processing (PEP) as a potential mechanism that contributes to both symptoms. PEP is defined as a cognitive post-mortem, whereby past social situations are reviewed in an attempt to prevent feared social outcomes in the future (Clark & Wells, 1995; Heimberg et al., 2014). Due to biased in-situation processing, PEP is distorted and reinforces negative beliefs about social performance and thereby increases perceptions of future threat. Piccirillo and Heimberg examined social anxiety, paranoia, and PEP following a social exclusion task, and found evidence that social anxiety and paranoia uniquely contribute to PEP, and that the influence of paranoia on PEP increased at higher levels of social anxiety. These studies raise interesting questions about the boundaries between comorbid disorders and symptoms, and where exactly nature's joints may lie.

Rowa, Gavric, Stead, LeMoult, and McCabe (2016, this issue) also investigated PEP in a clinical sample with SAD. Specifically, these researchers examined the role that PEP plays in influencing performance self-evaluations following a speech task, as well as anxiety about and willingness to complete another speech task in the future. Consistent with cognitive behavioural theory (Clark & Wells, 1995; Rapee & Heimberg, 1997), PEP was associated with less self-reported willingness to engage in a subsequent speech task. Perhaps surprisingly, PEP was not associated with more anxiety about completing a subsequent task, but consistent with predictions PEP was associated with worse self-evaluations over time.

Gkika and Wells (2016, this issue) investigated the potential impact of metacognitive beliefs and anticipatory processing on state anxiety during a speech task in high socially anxious individuals. Metacognitive beliefs include

appraisals of the benefits (positive metacognitive beliefs) or problems (negative metacognitive beliefs) associated with repetitive negative thinking. Like PEP, anticipatory processing involves repetitive negative thinking, but unlike PEP the focus is on future rather than past events. Consistent with cognitive behavioural (Clark & Wells, 1995) and metacognitive (Wells & Matthews, 1996) theory, Gkika and Wells found evidence that anticipatory processing, and both positive and negative metacognitive beliefs, contributed to anxiety in relation to a speech task. Intriguingly, positive and negative metacognitive beliefs appeared to differentially contribute to anxiety before and after the social stressor.

Metacognitive beliefs were also explored by Nordahl, Nordahl, and Wells (2016, this issue). Specifically, these researchers investigated whether metacognitive beliefs and self-imagery from an observer-perspective predicted negative self-evaluations following a social interaction. The observer-perspective refers to imagery of the self from others' perspective, rather than from one's own (i.e., the field perspective). Cognitive behavioural theory (Clark & Wells, 1995; Heimberg et al., 2014) suggests that distorted observer-perspective imagery escalates the perception of social threat as it provides confirmation that, for example, physical symptoms of anxiety (e.g., blushing, shaking) are clearly apparent to others and therefore that negative evaluation will ensue. The novel contribution of Nordahl et al.'s study is the inclusion of metacognitive beliefs as an additional cognitive mechanism driving negative self-evaluations. This study provided evidence that positive metacognitive beliefs and the observer-perspective during the social interaction uniquely predicted negative self-evaluations.

Vogel et al. (2016, this issue) investigated the utility of two attentional training procedures deriving from metacognitive theory for modifying social anxiety, one that is completed without direct exposure to social situations (Attention Training Technique) and one that requires attention to be focused on external objective social cues within social situations (Situational Attentional Refocusing). Vogel et al. were particularly interested in whether these techniques provided additive benefits, and whether outcomes differed depending on which technique was applied first. The combined effects of the interventions were associated with large reductions in social anxiety symptoms and impairment, metacognitive beliefs, and general anxiety. More rapid improvements in some measures were found when Situational Attention Refocusing was used before the Attention Training Technique, which may suggest that modifying attentional biases during exposure produces more rapid improvements than modifying attentional control alone.

The next two studies investigated predictions based on the Bivalent Fear of Evaluation Model of social anxiety (Weeks & Howell, 2012), which includes both fear of negative evaluation (FNE) and fear of positive evaluation (FPE) as unique contributors to social anxiety symptoms. This model suggests that individuals with social anxiety seek to avoid negative evaluation, but also seek to avoid being conspicuous due to positive evaluation because this could lead to conflict by challenging individuals who are perceived to be higher in the social hierarchy (Weeks, Heimberg, Rodebaugh, & Norton, 2008). Extending existing literature demonstrating the unique contributions these constructs make to the prediction of social exclusion and rejection (Weeks & Howell, 2014), Weeks and Zoccola (2016, this issue) sought to examine neuroendocrine, emotional, and cardiovascular responses to a speech task that were associated with both FNE and FPE. These researchers found that both FNE and FPE were uniquely and conjointly associated with higher state anxiety and increases in heart rate in anticipation of a speech task, whereas FPE alone was associated with dampened cortisol in response to the speech task. FPE was also found to be indirectly related to speech self-evaluations via state anxiety. This latter finding supports the intriguing possibility that negative self-evaluations function as a safety behaviour designed to stave off state anxiety by reducing the perceived likelihood positive evaluation. This study provides compelling evidence that FNE and FPE may play complementary roles in maintaining social anxiety symptoms, and thus both may need to be targeted in treatment.

Barber and Moscovitch (2016, this issue) compared FNE and FPE following a speech task across high and low socially anxious individuals and, consistent with the Bivalent Fear of Evaluation Model (Weeks & Howell, 2012), the high socially anxious group reported higher FNE and FPE before and after the speech. Interestingly, participants' expected their anxiety to increase in response to subsequent negative evaluation, whereas they expected their anxiety to reduce in response to positive evaluation. The Bivalent Fear of Evaluation Model would predict an increase in anxiety in response to both types of feedback, as was found by Weeks and Zoccola (2016, this issue), so it may be that expected state anxiety differs from actual state anxiety. An alternative possibility proposed by Barber and Moscovitch (2016, this issue) is that FPE may be important insofar as it draws attention to the individual, thereby

increasing the possibility of negative evaluation, or that FPE may contribute more to PEP rather than anticipatory anxiety. Many important questions remain to be answered as the methods for eliciting and assessing FPE and FNE are refined.

The final two papers in the special issue use novel treatments and methods for investigating factors that influence outcomes. Asnaani, Kaczkurkin, Tannahill, and Fitzgerald (2016, this issue) investigated anxiety sensitivity, rumination, and depression as potential moderators of social anxiety outcomes in a transdiagnostic sample treated within a naturalistic setting. Interestingly, the results suggested that rumination moderated social anxiety outcomes, but not in the expected direction, with high levels of pre-treatment rumination being associated with larger reductions in social anxiety during treatment. This effect was also specific to SAD symptoms, as it was not found for obsessive compulsive disorder, post-traumatic stress disorder, or generalised anxiety disorder symptoms. Rumination and social anxiety symptoms also prospectively predicted each other across treatment. Rumination shares many features with future-oriented (anticipatory processing) and past-focused (PEP) repetitive negative thinking in social anxiety (Ehring & Watkins, 2008; McEvoy, Mahoney, & Moulds, 2010), so these associations with symptoms before and during treatment are consistent with cognitive behavioural theory (Clark & Wells, 1995; Rapee & Heimberg, 1997).

Asnaani et al. (2016, this issue) used a multi-level analytic method for disaggregating between- and within-participant effects, finding much overlap but also differences in factors associated with symptoms at these different levels. Between-participant effects tell us about relationships amongst individual difference factors, but clinicians are most interested in the factors associated with symptom change for their individual clients while they are in treatment. The latter is captured by within-participant effects. Asnaani et al. found that changes in social anxiety symptoms were associated with changes in social concerns about anxiety symptoms, rumination, and comorbid depression symptoms during treatment. Given the valuable insights into processes of change that this analytic approach can provide, Hoffart, Borge, and Clark (2016, this issue) report on a reanalysis of historical data from a randomised controlled trial comparing cognitive and interpersonal psychotherapy. Hoffart et al.'s paper has the dual purposes of describing the multi-level analytical approach including its advantages, as well as reporting new insights into processes of change in the treatment of SAD. Evidence was found that within-person changes on factors in cognitive behavioural maintenance models (Clark & Wells, 1995; Rapee & Heimberg, 1997), including self-focused attention, probability and cost estimates of negative social events, and safety behaviours, were associated with reductions in social anxiety in both cognitive and interpersonal psychotherapies. These findings suggests that mechanisms of change may be common across these forms of psychotherapies, and that therapists and clients are well-served by targeting them in therapy.

The papers in this special issue provide important new knowledge about the development, maintenance, and treatment of SAD. They build on the considerable evidence base for existing models, and suggest innovative directions for extensions to theories, methods, and clinical interventions. The success of this special issue is probably best measured by the number of additional questions it generates, and its capacity to inspire clinical researchers to answer them. Unlike what our socially anxious clients wish for themselves, my hope is that the papers in the issue command attention, are carefully and frequently scrutinised and discussed, and motivate others to address their limitations.

References

- Asnaani, A., Kaczkurkin, A. N., Tannahill, H., & Fitzgerald, H. (2016, this issue). Moderators of change in social anxiety during CBT in a transdiagnostic, naturalistic treatment-seeking sample. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.055416
- Barber, K. C., & Moscovitch, D. A. (2016, this issue). Reactions to prospective positive vs. negative evaluation in the laboratory: a comparison of high and low socially anxious participants. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.055116
- Clark, D. M., Ehlers, A., Hackmann, A., Fennell, M., McManus, F., Waddington, L., Grey, N., & Wild, J. (2006). Cognitive therapy versus exposure and applied relaxation in social phobia: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 74, 568-578. https://doi.org/10.1037/0022-006X.74.3.568

- Clark, D. M., Ehlers, A., McManus, F., Hackmann, A., Fennell, M. J. V., Campbell, H., Flower, T., Davenport, C., & Louis, B. (2003). Cognitive therapy versus fluoxetine in generalized social phobia: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 71*, 1058-1067. https://doi.org/10.1037/0022-006X.71.6.1058
- Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. In R. G. Heimberg, M. Liebowitz, D. Hope & F. Schneier (Eds.), *Social Phobia: Diagnosis, Assessment and Treatment* (pp. 69-93). New York: Guilford Press.
- Ehring, T., & Watkins, E. R. (2008). Repetitive negative thinking as a transdiagnostic process. *International Journal of Cognitive Psychotherapy*, 1, 192-205. https://doi.org/10.1521/ijct.2008.1.3.192
- Gkika, S., & Wells, A. (2016, this issue). The impact of metacognitive beliefs and anticipatory processing on state anxiety in high socially anxious individuals in a speech task. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.054916
- Heimberg, R. G., Brozovich, F. A., & Rapee, R. M. (2014). A cognitive-behavioral model of social anxiety disorder. In Hofmann, S. G., & DiBartolo, P. M. (Eds.) *Social anxiety: Clinical, developmental, and social perspectives* (3rd edition). New York: Elsevier. https://doi.org/10.1016/B978-0-12-394427-6.00024-8
- Hoffart, A., Borge, F., & Clark, D. M. (2016, this issue). Within-person process-outcome relationships in residential cognitive and interpersonal psychotherapy for social anxiety disorder: a reanalysis using disaggregated data. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.056116
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*, 593-602. https://doi.org/10.1001/archpsyc.62.6.593
- Lincoln, T. M., Rief, W., Hahlweg, K., Frank, M., von Witzleben, I., Schroeder, B., & Fiegenbaum, W. (2005). Who comes, who stays, who profits? Predicting refusal, dropout, success, and relapse in a short intervention for social phobia. *Psychotherapy Research*, *15*, 210-225. https://doi.org/10.1080/10503300512331387834
- Mayo-Wilson, E., Dias, S., Mavranezouli, I., Kew, K., Clark, D. M., Ades, A. E., & Pilling, S. (2014). Psychological and pharmacological interventions for social anxiety disorder in adults: a systematic review and network meta-analysis. *Lancet Psychiatry*, 1, 368-376. https://doi.org/10.1016/S2215-0366(14)70329-3
- McEvoy, P. M., Erceg-Hurn, D. M., Saulsman, L. M., & Thibodeau, M. A. (2015). Imagery enhancements increase the effectiveness of cognitive behavioural group therapy for social anxiety disorder: a benchmarking study. Behaviour Research and Therapy, 65, 42-51. https://doi.org/10.1016/j.brat.2014.12.011
- McEvoy, P. M., Grove, R., & Slade, T. (2011). Epidemiology of Anxiety Disorders in the Australian General Population: Findings of the 2007 Australian National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, *45*, 957-967. https://doi.org/10.3109/00048674.2011.624083
- McEvoy, P. M., Mahoney, A. E. J., & Moulds, M. L. (2010). Are worry, rumination, and post-event processing one and the same? Development of the Repetitive Thinking Questionnaire, *Journal of Anxiety Disorders*, *24*, 509-515. https://doi.org/10.1016/j.janxdis.2010.03.008
- McEvoy, P. M., Nathan, P., Rapee, R. M., & Campbell, B. N. C. (2012). Cognitive behavioural group therapy for social phobia: Evidence of transportability to community clinics. *Behaviour Research and Therapy, 50*, 258-265. https://doi.org/10.1016/j.brat.2012.01.009
- McEvoy, P. M., Rapee, R. M., & Heimberg, R. G. (2016). A clinician's quick guide of evidence-based approaches: social anxiety disorder. *Clinical Psychologist*, *20*, 103-104. https://doi.org/10.1111/cp.12096
- McEvoy, P. M., & Saulsman, L. (2014). Imagery-enhanced cognitive behavioural group therapy for social anxiety disorder: A pilot study. *Behaviour Research and Therapy*, *55*, 1-6. https://doi.org/10.1016/j.brat.2014.01.006
- Miller, O. (1937). Logansport Pharos-Tribune, Walter Winchell On Broadway, Quote Page 8, Column 1, Logansport, Indiana. (NewspaperArchive). Downloaded from http://quoteinvestigator.com/tag/olin-miller/ on 09/09/2016
- National Institute for Health and Care Excellence (NICE, 2013). Social anxiety disorder: recognition, assessment and treatment. NICE clinical guideline 159.
- Nordahl, H. M., Nordahl, H., & Wells, A. (2016, this issue). Metacognition and perspective taking predict negative self-evaluation of social performance in patients with social anxiety disorder. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.055616
- Piccirillo, M. L., & Heimberg, R. G. (2016, this issue). Dealing with rejection: post-event processing in social anxiety and paranoia. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.054816

- Rapee. R. M., Gaston, J. E., & Abbott, M. J. (2009). Testing the efficacy of theoretically derived improvements in the treatment of social phobia. *Journal of consulting and Clinical Psychology*, 77, 317-327. https://doi.org/10.1037/a0014800
- Rapee, R. M., & Heimberg, R. G. (1997). A cognitive-behavioral model of anxiety in social phobia. *Behaviour Research and Therapy*, 35(8), 741-756. https://doi.org/10.1016/S0005-7967(97)00022-3
- Rapee. R. M., & Spence, S. H. (2004). The aetiology of social phobia: empirical evidence and an initial model. Clinical Psychology Review, 24, 737-767. https://doi.org/10.1016/j.cpr.2004.06.004
- Rowa, K., Gavric, D., Stead, V., LeMoult, J., & McCabe, R. E. (2016, this issue). The pernicious effects of post-event processing in social anxiety disorder. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.056916
- Sunderland, M., Crome, E., Stapinski, L., Baillie, A. J., & Rapee, R. M. (2016, this issue). From fear to avoidance: factors associated with the onset of avoidance in people who fear social situations. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.055216
- Versella, M. V., Potter, C. M., & Heimberg, R. G. (2016, this issue). Socially-relevant panic symptoms in social anxiety disorder. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.056916
- Vogel, P. A., Hagen, R., Hjemdal, O., Solem, S., Smeby, M. C. B., Strand, E. R., Fisher, P., Nordahl, H. M., & Wells, A. (2016, this issue). Metacognitive Therapy Applications in Social Anxiety Disorder: An Exploratory Study of the Individual and Combined Effects of the Attention Training Technique and Situational Attentional Refocusing. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.054716
- Weeks, J. W., Heimberg, R. G., Rodebaugh, T. L., & Norton, P.J. (2008). Exploring the relationship between fear of positive evaluation and social anxiety. *Journal of Anxiety Disorders*, 22, 386-400. https://doi.org/10.1016/j.janxdis.2007.04.009
- Weeks, J.W., & Howell, A.N. (2012). The bivalent fear of evaluation model of social anxiety: Further integrating findings on fears of positive and negative evaluation. *Cognitive Behaviour Therapy, 41,* 83-95. https://doi.org/10.1080/16506073.2012.661452
- Weeks, J.W., & Howell, A.N. (2014). Fear of Positive Evaluation: The neglected fear domain in social anxiety. In J.W. Weeks (Ed.), *The Wiley-Blackwell Handbook of social anxiety disorder.* John Wiley & Sons, Ltd: Chichester, UK. https://doi.org/10.1002/9781118653920.ch20
- Weeks, J. W., & Zoccola, P. M. (2016, this issue). Fears of positive versus negative evaluation: distinct and conjoint neuroendocrine, emotional, and cardiovascular responses to social threat. *Journal of Experimental Psychopathology*. http://dx.doi.org/10.5127/jep.056016
- Wells, A., Clark, D. M., Salkovskis, P. M., Ludgate, J., Hackmann, A., & Gelder, M. G. (1995). Social phobia: the role of in-situation safety behaviours in maintaining anxiety and negative beliefs. *Behavior Therapy*, 26, 153-161. https://doi.org/10.1016/S0005-7894(05)80088-7
- Wells, A. & Matthews, G. (1996) Modelling cognition in emotional disorder: The S-REF model. *Behaviour Research and Therapy*, 34, 881-888. doi: 10.1016/S0005-7967(96)00050-2
- Wong, Q. J. J., & Rapee, R. M. (2016). The aetiology and maintenance of social anxiety disorder: a synthesis of complimentary theoretical models and formulation of a new integrated model. *Journal of Affective Disorders*, 203, 84-100. https://doi.org/10.1016/j.jad.2016.05.069