



Editorial

Performance Anxiety Disorder: Developing a Proposal for an Inventory, According to the Cognitive-Behavioural Therapy Rationale

George Varvatsoulias*a

[a] Surrey Borders NHS Trust, Barnet IAPT, Edgware Community Hospital, North London, United Kingdom.

Abstract

This editorial aims at the presentation of a proposal regarding an inventory about performance anxiety disorder in a cognitive-behavioural therapy (CBT) framework. It provides some initial understanding as to that condition and how CBT could assist in the consideration of it counter to social anxiety disorder. At first, there is an introduction to performance anxiety in line to social anxiety/phobia and some questionnaires that have been developed which include performance anxiety as an element of social anxiety/phobia. Then, I am presenting the proposal, both in view to the rationale for that and the construction of an inventory with items drawn from elements that performance anxiety is related with, such as uneasiness about worry, self-focus issues of perfectionism and internal/external shame ideas. The statements in the inventory refer to hypothetical examples in life so inventory to be easily responded to, when administered to participants. This proposal closes with the conclusion that the questionnaire will be pilot-studied in the future by the author so the feasibility of it and/or possible changes to be considered when empirically studied.

Keywords: cognitive-behavioural therapy, performance anxiety, self-focus perfectionism, shame, inventory

Psychological Thought, 2017, Vol. 10(2), 236–246, doi:10.5964/psyct.v10i2.232

Published (VoR): 2017-10-20.

Handling Editor: Stanislava Stoyanova, South-West University "Neofit Rilski", Blagoevgrad, Bulgaria

*Corresponding author at: Edgware Community Hospital, Burnt Oak Broadway, Edgware, London, HA8 0AD, UK. E-mail: george.varvatsoulias@outlook.com



This is an open access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Performance anxiety has a somehow inexistent literature in the evidence-based research for cognitive-behavioural therapy - CBT for short. When I say 'somehow', I mean that not many papers have been written, or chapters on it, in psychology and/or anxiety disorders books. Sometimes, performance anxiety is being interpreted as an 'excitement process' towards tasks that involve the presence of an audience (Brooks, 2014). Performance anxiety is addressed as a symptom within explanations for social anxiety, or social phobia disorders. In DSM-5, performance anxiety is explained as a "behavioural performance that is underestimated by socially anxious individuals" leaving "negative outcomes in social situations" (Foa, Franklin, Perry, & Herbert, 1996; Heimberg et al., 2014, p. 474; Rapee & Lim, 1992; Stopa & Clark, 1993). Performance anxiety has also been noted as reduced self-esteem, affecting one's presence in an environment, especially if one has to deal with others' real or assumed expectations about oneself (Leahy, Holland, & McGinn, 2012).

The condition that is chiefly regarded as covering what anxiety is about or how anxiety should be symptomized as a disturbance is the generalised anxiety disorder - GAD (Clark & Beck, 2011). In psychological literature, a

measure that is used for anxiety to be identified as a condition in the human population, is the GAD-7 questionnaire comprised of seven statements to explore general anxiety in one's life (Spitzer, Kroenke, Williams, & Löwe, 2006). In this editorial, I will attempt to approach performance anxiety as a disorder closer to uneasiness worry, self-focus perfectionism, and internal/external shame, rather than to general anxiety, social anxiety or social phobia (Antony, 1997).

What it is meant by performance anxiety does not only outline one's presence on stage and in full fright to complete a task which one has prepared oneself to, such as music performance (Most literature on performance anxiety is written for music performers, e.g., Barbar et al., 2014; lusca & Dafinoiu, 2012; Papageorgi et al., 2011), but any presentation, contribution to a task, or preoccupation of the self that involves the presence of others. Performance anxiety is a common disorder in modern societies. Its main psychological symptoms are: self-criticism, reduced self-efficacy on tasks, pleasing others, lack of concentration, low self-esteem, low self-confidence (Blöte, Kint, & Westenberrg, 2009). Physical sensations accompanying it are: palpitations, chest pain, dizziness, high blood pressure, sweating, hot flushes, tiredness, fatigue. Performance anxiety is considered as one of most widely-occurred conditions in modern societies (McConnell, 2009).

The rationale behind performance anxiety is that this condition operates as a cover-up disturbance to social anxiety and social phobia, but not to generalised anxiety disorder. The explanation to that, is that performance-anxious individuals demonstrate heightened levels of social phobia before, during, and after their preoccupation with anxiety expectancies, such as speaking in public, speaking in people of authority, showing passivity and/or aggression when speaking to others, especially before individuals they don't know, going to parties, socialising and interacting (Arroyo & Harwood, 2011).

Present Methodology for Performance Anxiety Disorder

The main psychotherapeutic methodology that is employed nowadays for the treatment of performance anxiety disorder is cognitive-behavioural therapy. CBT focuses on performance anxiety either in line to social phobia antecedents, the client might have, such as the ones mentioned above, or in line to social anxiety when performance on tasks takes place in the presence of others (Chartier, Walker, & Stein, 2003). As it stands today, CBT hasn't introduced a rationale for looking at performance anxiety as an individual condition, lacking in this way to outline important elements in its preoccupation with it. The aim of this editorial is to present a rationale for a protocol for performance anxiety disorder and discuss the aspects that need to be taken into consideration for this condition.

Anxious individuals are faced with intolerance to uncertainty (Dugas & Robichaud, 2007) which enhances worry, poor problem orientation and cognitive avoidance (Ladouceur, Blais, Freeston, & Dugas, 1998). Individuals who worry, demonstrate vulnerability subject to rumination; individuals who show poor problem orientation exhibit rumination in association with procrastination; individuals who avoid cognitively to examine intolerance to uncertainty, display doubt in decision-making and problem-solving. Worry is therefore about inherent fear; poor problem orientation is therefore about lack of concentration in the problem at hand; cognitive avoidance is about considering more costs than benefits in a decision to be made (Williams, 2015).

Performance anxiety could characterise all those three above, that is why the individual does not wish, or avoids to participate, in activities should one become the centre of attention in time and space (Barry, Vervliet,



& Hermans, 2015). It's easy to consider that performance anxiety is because individuals ruminate, procrastinate, and don't engage in decision-making. This order of psychological thinking is what occurs in one's mind before, or at the time a performance is about to begin, or during this is taking place. The question, however is whether rumination, procrastination and lack of decision-making is what justifies performance anxiety, or elements of psychological behaviour that could relate to something more important so performance anxiety to be the case (Clark & Beck, 2011).

Measures and Tools for Performance Anxiety Disorder

In order, such psychological thinking to be explained, performance anxiety was attempted to be socially evaluated in terms of a rating scale - The Social Performance Rating Scale, SPRS (Fydrich, Chambless, Perry, Buergener, & Beazley, 1998) for the assessment of behavioural indicators of anxiety over social situations, where gaze, voice quality, level of discomfort, conversation flow, and length of discussion were measured, so individual performance to be investigated in line to social endeavours. That rating scale was drawing ideas about performance anxiety from social anxiety and/or phobia observations, mainly during set, rather than live encounters (Harb, Eng, Zaider, & Heimberg, 2003).

In this way, behavioural indicators, such as the above, was thought would be easier to outline performance anxiety, for on one hand they could be associated to physical prompts of cognitive content and vice versa; and on the other, with behavioural elements following social encounters. The outcome was that the above rating scale ended up investigating the social framework of engagement, such as success or failure after a performance occurred, and not one's degree of engagement, i.e. an action to take place and the repercussions to one's personality after that action has been successful or not. In others words, what hasn't been explained was whether anxiety over performance had to do the decision towards an action, or how one would look like before others if success or failure would be the outcome of one's action.

Another questionnaire that is employed to study performance anxiety, was the Social Phobia Inventory - SPIN (Connor et al., 2000) that is dealing mainly with symptoms of social phobia, such as meeting with strangers, working, shopping, fear of criticism, and/or appearing incompetent. The SPIN questionnaire looks to evaluate how fear and embarrassment affect one's social life and influence one's difficulty in establishing interrelationships, or how low self-esteem could affect performance in social situations. In this questionnaire, performance anxiety is regarded as a situation where symptoms of fear, embarrassment, and difficulty in the onset and maintenance of relations with others originate. In this way, performance anxiety is explained as a foundation for the above symptoms. However, could that possibly be that way? Performance anxiety is about an action over an activity not to be undertaken. In order, an activity not to be undertaken it implies that fear and embarrassment are already there and hinder performance to be culminated, it is not the other way around. For that reason, SPIN cannot be considered as a valid questionnaire to study performance anxiety, for it lacks postulates able to identify that condition out of the symptomization of it to other disorders.

A final questionnaire that is also used to the study of performance anxiety is the Penn State Worry Questionnaire - PSWQ (Meyer, Miller, Metzger, & Borkovec, 1990). In this questionnaire, what is measured is internalised worry and how can affect social anxiety disorder (Hirsch & Mathews, 2012). Internalised worry is an important element for performance anxiety and very useful to be thought of when discussing engagement and commitment to an action in a certain milieu. It also reminds us of the generalised anxiety disorder protocol for



CBT that is centralised around worry. However, what is not presented in this inventory is how worry becomes internalised. When I say 'presented', I mean statements and items to this questionnaire which could outline an explanation to the internalisation of worry, not just an understanding how worry becomes internalised when there is social anxiety involved in human interrelationships. Also, this inventory is concerned not so much about performance activities, but how an individual could behave in case a need for performance arises.

Rationale for the Construction of a Questionnaire for Performance Anxiety Disorder

In all the above questionnaires that we have discussed about their relevance to performance anxiety, what is generally missing is the presence of hypothetical situations that could relate to performance actions. The items in all those questionnaires point to the direction of hypothetical incidents but not examples. Participants in reading and filling in such questionnaires cannot affiliate themselves to hypothetical events should those were to happen to themselves, that is why performance anxiety cannot be studied through them (Vitasari, Wahab, Othman, Herawan, & Sinnadurai, 2010). In terms of performance anxiety, it is significant to think of an inventory able to generate hypothetical examples from everyday life, so when pilot-studied to construct a useful validity when this is to be administered in studies regarding performance anxiety.

In a performance anxiety rationale, what has not been taken into consideration so far, is the introduction of a questionnaire that could include uneasiness around worry (Clark & Beck, 2012), self-focus engagement when an individual comes to self-evaluation of his/her performance - perfectionism (Maloney, Egan, Kane, & Rees, 2014), and the shame that results as an outcome for performance to be considered a consequence that makes an individual not to decide to participate to an action/activity (Tangney & Dearing, 2002). All the latter, are important postulates for the understanding of performance anxiety because:

- 1. Uneasiness around worry means that an individual is not concerned about what he or she will be engaged to, but what would be the thoughts associated to worry when engagement to performance is in process.
- 2. Self-focus perfectionism means an individual during his/her performance internally criticises oneself during what one says or does while performing an action/activity.
- 3. Shame means that during performance an individual think of oneself as being judged by others during an action/activity, and/or about the outcome of what he/she is engaged to, in case others feel pity of him/her, or not invite him/her to perform again in their presence.

To contemplate what I have said above about construction of a questionnaire that will present performance anxiety through items that will be hypothetical examples, based on uneasiness around worry, self-focus perfectionism, and internal/external shame, I will consider the following four fields for such a questionnaire:

- 1. Everyday activities that people anxiously perform on
- 2. Speaking in public
- 3. Interrelationships with authority figures
- **4.** Interaction performance around communication

Performance anxiety items will be about hypothetical examples, i.e. assumptions about something that took place. Following hypothetical examples, participants could think of own performance in case that was occurring in their own present. Hypothetical examples could demonstrate performance anxiety elements:



- 1. of how one would feel like in a hypothetical situation (uneasiness following worry).
- 2. of enhanced level of self-criticism deriving from a performance one would like to go well, so others to construe a good idea about his/her person (self-focus perfectionism).
- 3. of how one would feel about oneself in case performing an activity one were to fail (internal/external shame).

Items will be situation-specific assumptions around contingencies in the here-and-now. All items should start with the personal pronoun 'I' so participants' responses to have a personal involvement to each item of the inventory. Items will embrace the cognitive-behavioural therapy rationale, i.e. they will be construed following the ABC model of the cognitive analysis/perspective (*automated thinking*, *beliefs*, *consequence*, following an event); and the ABC model for the behavioural perspective/functional analysis (*antecedent of the behaviour*, *behaviour*, *consequence of the behaviour*) (Watson & Tharp, 2007).

Below, I will underline some ideas should they be used as hypothetical examples around performance, based on what we have discussed so far:

- **1.** Everyday activities: Waking up early to go to work; going for shopping and having forgotten my wallet; working long hours at work.
- **2.** Speaking in public: Presentation before an audience of like-minded professionals; judging me over a presentation I did and they didn't like it; asked questions in which I was unable to answer.
- **3.** *Interrelationships with authority figures*: Finding difficult to meet with the line manager; stressed out when meeting with the stakeholders of the organisation; afraid to open the emails sent by the Head of the office.
- **4.** Interaction performance around communication: My friends laugh at me when telling my opinion on things; every time the phone rings I don't pick it up; it seems that I have the problem since my brother doesn't communicate with me.

CBT Inventory for Performance Anxiety (CBT-I-PA)

To put the above hypothetical examples in a context, there will be introduced twenty statements, four to each hypothetical example, so a new inventory for performance anxiety disorder to be suggested to the cognitive-behavioural therapy paradigm. Each of the four items of that inventory will ask about participants' performance in terms of thinking, feeling and behaviour as well as possible reasons and consequences following that behaviour. The rating of that inventory will be according to the Likert Scale (Likert, 1932) identifying a five-level scores like: (1) strongly disagree; (2) disagree; (3) neither agree nor disagree; (4) agree; (5) strongly agree. The inventory will have the title: *CBT Inventory for Performance Anxiety (CBT-I-PA)*.

A. Everyday Activities

- 1. It is difficult for me waking up in the morning and heading for work.
- 2. I went to the shops and I realised I forgot my wallet. I felt angry at myself.
- 3. I have stopped submitting applications for jobs after interviews I attended and been unsuccessful.
- 4. Working long hours at work reduces my ability to concentrate on the job.



B. Speaking in Public

- 1. I have a presentation to make in a few days and I feel it will be a disaster.
- 2. One of the delegates of the audience corrected me over a mistake I did when presenting. That made me so depressed.
- 3. One of the questions I was asked in that presentation was difficult to answer, but I made it up to look like answer. After I left the venue, I thought to myself that they will sooner or later find out that my answer was wrong.
- 4. I have felt ashamed about myself that though I could do better in that presentation, I finally have failed.

C. Interrelationships With Authority Figures

- 1. I had an appointment with my line manager, but I found an excuse not to go.
- **2.** I had a meeting with one of my superiors at my office; he told me there were complaints against me and that made me really sad.
- 3. I came back from holiday but I don't open my emails in case the Head of the office asks me to go to his room.
- 4. The line manager told me he is satisfied by my work, but I don't think he tells me the truth.

D. Interaction Performance Around Communication

- 1. When I am with my friends, I am afraid to tell my opinion on things in case they laugh at me.
- 2. Every time I speak to my brother, he doesn't pay attention to me, and that makes me feeling depressed.
- 3. I don't pick up the phone in case my wife/husband starts complaining about me.
- **4.** I went out with friends and they started picking on me. I decided not to go out with them again because I don't trust them.

This inventory resulted from what I have discussed above about performance anxiety disorder. It doesn't mean it is the ultimate idea of what I have argued, but just a starting point that could offer more insights as to this condition. In order, this inventory to be tested, there is needed to be pilot-studied so to consider internal reliability of the statements, and meaning which of those to keep and which not.

Everyday Activities

Statement 1: In the first item, anxiety to perform at work is understood as a reaction with cognitive and behavioural derivatives should the person make up his/her mind and not go to work as well as getting frustrated of possible consequences for him/her going finally to work. Uneasiness of the individual is clear here for it makes one worried about going to work.

Statement 2: In the second item, performance anxiety could be regarded as an outcome following the decision the individual has gone to the shops without looking if he/she has taken wallet. As consequence to that is that the person becomes angry at him/herself the reason being he/she felt uneasy and worried about the wallet he/she forgot to have it.



Statement 3: In the third item, there's an inherent fear to the individual having decided not to fill in new applications for jobs. The fact that he/she considers that any next interview would be a failure again, relates to anxiety in line how one is worried and feeling uneasy in case one's performance would be the same.

Statement 4: In the fourth item, performance anxiety is a thought leading to lack of concentration. The individual seems not to be sure about oneself as to working for long hours. To counter the thought of performance anxiety, he/she tries to justify it by raising the issue of concentration not assisting him/her to do one's job properly.

Speaking in Public

Statement 1: In this statement, the individual has already chosen to become anxious before performing. He/she attempts to explain that by thinking this is going to be difficult and certainly not helpful, if he/she decides to do so. Performance anxiety is around feeling uneasy and worried before or during the presentation.

Statement 2: In this statement, the individual expresses that performance anxiety is the case while doing the presentation. Any response coming from the audience, would make him/her think is 'against' his/her performance, like the possible incident of getting corrected to any of his/her slides. Self-focus perfectionism could be the understanding for such performance anxiety.

Statement 3: In this statement, the individual's performance anxiety is more about the thought that they will find out that his/her answer to a question was made up and wasn't the right one. Performance anxiety in that case could be about fear of discovery followed by self-focus and concentration on perfectionism.

Statement 4: In that statement, shame and self-focus due to a perfectionist stance about oneself are the two elements for the individual's performance anxiety. Self-criticism is also presented in this statement in the form of internal shame.

Interrelationships With Authority Figures

Statement 1: This item is presenting performance anxiety in terms of uneasiness around worry should he/she be attending the meeting and the outcome not to be to his/her favour.

Statement 2: This item is presenting the element of external shame through sadness. It is centralised around the individual's performance and how others have considered it.

Statement 3: This item is about anxiety in meeting with the Head of the office as to possible performance issues communicated with him/her whilst he/she was on holiday. There is an underlying fear of being criticised by a superior for unbeknownst matters to the individual during his/her absence from work.

Statement 4: This item is about perfectionism, for it is associated with the fear of criticism, for the individual seems not to believe he/she's doing a good work. The reason he/she does not accept that is because of the fear his/her performance wasn't that much good to receive a commendation.



Interaction Performance Around Communication

Statement 1: This is about a communication the individual likes, but he chooses to avoid thinking that if he/she says something they will think less of him/her. Performance anxiety is about the fear of not getting accepted by them.

Statement 2: Feeling ignored by his brother means that the individual considers he/she is not taken seriously into account in their discussions. The individual feels ashamed for that, which relates to how his/her performance affects his/her relationship to kin.

Statement 3: Fear of criticism and the possibility of external shame are avoided, for the individual considers that wife/husband would say something that he/she did and they didn't like it.

Statement 4: The individual feels his/her friends pick on him/her, therefore he/she feels embarrassed. He/she decides not to continue going out with them in case they will criticise him/her about things that he/she said or possibly did.

Discussion

The statements for the proposed inventory were constructed, according to the relationship between performance anxiety and uneasiness around worry; performance anxiety and self-focus perfectionism; performance anxiety and shame. This inventory presented a proposal for understanding performance anxiety disorder not in association to social anxiety and social phobia. One by reading the statements, however, could argue that the idea in all of them is also around social anxiety and social phobia. Though the latter is not wrong to be stated, it is nevertheless imperative to explain that what the above inventory illustrates is not the relationship of anxiety in general to the social environment, but the role of performance in the understanding of anxiety in the social environment. It is so, because if the element of performance is removed, anxiety would not be so strong emotion influencing the way people see themselves and others.

Performance is the process through which individuals become anxious, for whatever people do in their social environments is thought to have repercussions in their lives, and that makes them more anxious compared to otherwise. To be more accurate, there is nothing that people do in a social milieu that wouldn't involve some form of performance. Performance is what makes people anxious in their environment; performance is what makes them feeling uneasy around worry; performance is what makes people criticising themselves following perfectionist thinking; performance is what makes people feeling ashamed in the presence of others.

Conclusion

In this editorial, I have presented a proposal for an inventory about performance anxiety disorder. The reason for such a proposal is because so far there haven't appeared questionnaires about performance anxiety per se, for the explanation that the latter is a symptom of social anxiety and/or social phobia. In this editorial, there have also been presented and discussed various questionnaires that include performance anxiety but not as an individualised condition. The proposal for that inventory was based on the elements that performance anxiety



consists of, such as uneasiness around worry, self-focus with emphasis to perfectionism, and internal/external shame affecting and/or presenting performance as an outcome and/or antecedent. As I discussed in this paper, such inventory to be validated needs to be pilot-studied so empirically to consider possible changes and alternations should them be the case. In a future paper, I will put this inventory to question, so to see the feasibility of it to be used, and what could be done further so to be better investigated and developed.

Competing Interests

The author is a member of the Editorial Board of Psychological Thought.

Funding

The author has no funding to report.

Acknowledgments

The author has no support to report.

References

- Antony, M. M. (1997). Assessment and treatment of social phobia. *Canadian Journal of Psychiatry, 42*(8), 826-834. doi:10.1177/070674379704200804
- Arroyo, A., & Harwood, J. (2011). Communication competence mediates the link between shyness and relational quality. *Personality and Individual Differences*, *50*(2), 264-267. doi:10.1016/j.paid.2010.09.041
- Barbar, A. E., Crippa, J. A., & Osório, F. L. (2014). Parameters for screening music performance anxiety. *Revista Brasileira de Psiquiatria*, *36*, 245-247. doi:10.1590/1516-4446-2013-1335
- Barry, T. J., Vervliet, B., & Hermans, D. (2015). An integrative review of attention biases and their contribution to treatment for anxiety disorders. *Frontiers in Psychology, 6*, Article 968. doi:10.3389/fpsyg.2015.00968
- Blöte, A. W., Kint, M. J., & Westenberrg, P. M. (2009). The relation between public speaking anxiety and social anxiety: A review. *Journal of Anxiety Disorders*, 23(3), 305-313. doi:10.1016/j.janxdis.2008.11.007
- Brooks, A. W. (2014). Get excited: Reappraising pre-performance anxiety as excitement. *Journal of Experimental Psychology: General, 143*(3), 1144-1158. doi:10.1037/a0035325
- Chartier, M. J., Walker, J. R., & Stein, M. B. (2003). Considering comorbidity in social phobia. *Social Psychiatry and Psychiatric Epidemiology*, 38(12), 728-734. doi:10.1007/s00127-003-0720-6
- Clark, D. A., & Beck, A. T. (2011). *Cognitive therapy of anxiety disorders: Science and practice*. New York, NY, USA: Guilford Press.
- Clark, D. A., & Beck, A. T. (2012). The anxiety and worry workbook. New York, NY, USA: The Guilford Press.



Connor, K. M., Jonathan, R. T., Davidson, L., Churchill, E., Sherwood, A., Weisler, R. H., & Foa, E. (2000). Psychometric properties of the social phobia inventory (SPIN): New self-rating scale. *The British Journal of Psychiatry, 176*(4), 379-386. doi:10.1192/bjp.176.4.379

- Dugas, M. J., & Robichaud, M. (2007). *Cognitive-behavioral treatment for generalized anxiety disorder: From science to practice*. New York, NY, USA: Routledge.
- Foa, E. B., Franklin, M. E., Perry, K. J., & Herbert, J. D. (1996). Cognitive biases in generalized social phobia. *Journal of Abnormal Psychology*, 105, 433-439. doi:10.1037/0021-843X.105.3.433
- Fydrich, T., Chambless, D. L., Perry, K. J., Buergener, F., & Beazley, M. B. (1998). Behavioral assessment of social performance: A rating system for social phobia. *Behaviour Research and Therapy, 36*(10), 995-1010. doi:10.1016/S0005-7967(98)00069-2
- Harb, G. C., Eng, W., Zaider, T., & Heimberg, R. G. (2003). Behavioral assessment of public-speaking anxiety using a modified version of the Social Performance Rating Scale. *Behaviour Research and Therapy, 41*, 1373-1380. doi:10.1016/S0005-7967(03)00158-X
- Heimberg, R. G., Hofmann, S. G., Liebowitz, M. R., Schneier, F. R., Smits, J. A. J., Stein, M. B., . . . Craske, M. G. (2014). Social anxiety disorder in DSM-5. *Depression and Anxiety*, *31*(6), 472-479. doi:10.1002/da.22231
- Hirsch, C. R., & Mathews, A. (2012). A cognitive model of pathological worry. *Behaviour Research and Therapy, 50*(10), 636-646. doi:10.1016/j.brat.2012.06.007
- Iusca, D., & Dafinoiu, I. (2012). Performance anxiety and musical level of undergraduate students in exam situations: The role of gender and musical instrument. *Procedia Social and Behavioral Sciences*, 33, 448-452. doi:10.1016/j.sbspro.2012.01.161
- Ladouceur, R., Blais, F., Freeston, M. H., & Dugas, M. J. (1998). Problem solving and problem orientation in Generalized Anxiety Disorder. *Journal of Anxiety Disorders*, *12*(2), 139-152. doi:10.1016/S0887-6185(98)00002-4
- Leahy, R. L., Holland, S. J. F., & McGinn, L. K. (2012). *Treatment plans and interventions for depression and anxiety disorders*. New York, NY, USA: Guilford Press.
- Likert, R. (1932). A technique for the measurement of attitudes. Archives de Psychologie, 140, 1-55.
- Maloney, G. H., Egan, S. J., Kane, R. T., & Rees, C. S. (2014). An etiological model of perfectionism. *PLOS ONE*, *9*(5), Article e94757. doi:10.1371/journal.pone.0094757
- McConnell, C. R. (2009). Effective oral presentation: Speaking before groups as part of your job. *The Health Care Manager*, 28(3), 264-272. doi:10.1097/HCM.0b013e3181b3f0bb
- Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research and Therapy*, 28(6), 487-495. doi:10.1016/0005-7967(90)90135-6
- Papageorgi, I., Creech, A., & Welch, G. (2011). Perceived performance anxiety in advanced musicians specialising in different musical genres. *Psychology of Music*, *41*(1), 18-41. doi:10.1177/0305735611408995
- Rapee, R. M., & Lim, L. (1992). Discrepancy between self- and observer ratings of performance in social phobics. *Journal of Abnormal Psychology*, 101, 728-731. doi:10.1037/0021-843X.101.4.728



- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalised anxiety disorder: The GAD-7. *Archives of Internal Medicine*, *166*(10), 1092-1097. doi:10.1001/archinte.166.10.1092
- Stopa, L., & Clark, D. M. (1993). Cognitive processes in social phobia. *Behaviour Research and Therapy, 31*, 255-267. doi:10.1016/0005-7967(93)90024-O
- Tangney, J. P., & Dearing, R. L. (2002). Shame and quilt. New York, NY, USA: The Guildford Press.
- Vitasari, P., Wahab, M. N. A., Othman, A., Herawan, T., & Sinnadurai, S. K. (2010). The relationship between study anxiety and academic performance among engineering students. *Procedia: Social and Behavioral Sciences, 8*, 490-497. doi:10.1016/j.sbspro.2010.12.067
- Watson, D. L., & Tharp, R. G. (2007). Self-directed behaviour (9th ed.). Belmont, CA, USA: Thomson Higher Education.
- Williams, A. S. (2015). Statistics anxiety and worry: The roles of worry beliefs, negative problem orientation, and cognitive avoidance. *Statistics Education Research Journal*, *14*(2), 53-75.

About the Author

Dr **George Varvatsoulias** is a Chartered Psychologist and High Intensity CBT Practitioner. He works at the National Health System in England as a Psychologist/Psychotherapist and deals with cases such as depression, generalised anxiety, post-traumatic stress disorder, performance anxiety, social phobia, perfectionism, obsessive-compulsive disorders and other conditions that are either unipolar or comorbid. He has published 3 books and 67 scientific papers in peer-reviewed journals. His academic interests in academia include cognitive-behavioural therapy, psychology of religion, evolutionary psychology, and interdisciplinary perspectives between the writings of the Church Fathers and modern psychology.

