

Peer-Reviewed Letter

ETIOLOGICAL BELIEFS ABOUT CHRONIC WORRY

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Generalized anxiety disorder (GAD) is one of the most commonly diagnosed anxiety disorders, with a lifetime prevalence of 4.1–6.6% in the general population [Blazer et al., 1991; Kessler et al., 1994]. The core feature of GAD is excessive and uncontrollable worry that causes significant distress or interference in one's life. While chronic worry and its physical correlates may be a recognizable phenomenon in the mental health profession, conceptualizing worry as a treatable clinical disorder is relatively new in the lay population.

In the context of a larger study, we explored etiological beliefs about worry, taking the view that such beliefs might play a significant role in whether or not people who worry seek treatment for this problem. Furthermore, the views that people hold about the origins of their difficulties with worry can influence the kind of treatment they seek out and how they eventually will respond to treatment. While this exploration was very limited in scope, it is our hope that it heightens interest in these general issues, which at the present time have been all but ignored in the research on GAD and more generally in the research on anxiety disorders.

Students enrolled in psychology classes at a large Southern university took part in a broader study on emotional expressiveness and family functioning in the development of chronic worry [see Eng and Roth, 2002]. Participants in the study completed a questionnaire packet that included standard assessments of worry [including the Penn State Worry Questionnaire, PSWQ; Meyer et al., 1990], open-ended questions on risk and protective factors for worry, and questions on emotional expression and family functioning [reported in Eng and Roth, 2002]. After completing the initial questionnaires on worry, participants were asked: "This questionnaire packet has asked you a lot about worrying. Now that you have given a lot of thought to this topic, would you describe yourself as a 'worrier'? If yes, what factors do you think have contributed to you becoming a worrier?" Students who did not describe themselves as worriers were asked: "What factors do you think have prevented you from becoming a worrier?"

In total, 122 students completed questionnaire packets. Four students were excluded from the final data analysis because they were clear age outliers and three were excluded due to missing data. As such, the final sample consisted of 117 students. The mean age of the participants in the study was 20.62

(SD=2.36) and the majority of participants were female (82.1 %).

Participants' narratives on factors that contributed to them being worriers or non-worriers were coded into six categories: genetics (e.g., "Genetics—my mom is a worrier;" "I feel that maybe genetics...caused me to be easy going myself and not to be a worrier."); family influences (e.g., "Factors pretty much include my mom. She was always a worrier when I was growing up and still is. Her thoughts were always scared and I eventually picked up on it too," "I was raised in a house with a very easy-going dad."); personality factors (e.g., "I have always been high strung and anxious for as long as I can remember;" "I am just laid back about things."); social/interpersonal factors (e.g., "Lack of social support network," "Good friends support me."); life events (e.g., "I was really not a worrier till this semester of school. I am taking 15 hours this semester. I am also working 20 hours per week and I am married," "A positive outlook on life through a good education at a private school and growing up in a youth leadership organization."); and religious factors (e.g., "My faith in God."). Two individuals who were blind to participant's worry status (worrier/non-worrier) completed the coding. There was very little disagreement on coding; any disagreement was resolved through verbal discussion.

Of the total sample, 72 students identified themselves as worriers (61.54% of the full sample) and 43 students identified themselves as non-worriers (36.75% of the full sample). Students who defined themselves as worriers scored significantly higher on the PSWQ than students who defined themselves as non-worriers ($M=58.19$, $SD=9.34$ for the worriers and $M=35.93$, $SD=9.32$ for the non-worriers, $t(113)=-12.38$, $P<.0001$). The PSWQ measures a person's general

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propensity to worry excessively and has been found to be a useful tool for identifying individuals who have generalized anxiety disorder [Brown et al., 1992; Meyer et al., 1990]. While the self-defined worriers in our sample scored lower on the PSWQ than GAD patients [$M=67.66$, $SD=8.86$; Molina and Borkovec, 1994], the relatively strong endorsement of PSWQ items by our worriers suggests that worry is experienced by them as distressing, chronic, and difficult to control.

Of the 72 worriers in our sample, 67 (93.06% of self-identified worriers) students provided etiological attributions for their worry. The majority of the worriers attributed their symptom to personality factors ($N=44$, 65.67%), followed by family environment ($N=24$, 35.82%). Less common causal factors were life events ($N=10$, 14.93%), genetics ($N=3$, 4.48%), and social/interpersonal factors ($N=1$, 1.49%).

Of the 43 students who identified themselves as non-worriers, all but one (97.67% of the self-identified non-worriers) providing information on their perceived protective factors against developing chronic worry. The most common protective factor given was personality factors ($N=32$, 76.19%), followed by family environment ($N=17$, 40.48%). Seven participants (16.67%) reported that their faith/religion also played a protective role. Less common preventive factors were social/interpersonal factors ($N=5$, 11.90%), life events ($N=1$, 2.38%), and genetics ($N=1$, 2.38%).

Overall, it seems that college students view the phenomenon of worry as being most influenced by personality factors. They report that something inherent in their disposition either leads them to have problems with chronic worry or protects against it. Family factors were also considered to play a large role in determining whether or not participants developed problems with worry.

It is important to note that attributions were coded as "family factors" if they pertained to the family environment. For example, if participants reported growing up in homes where both parents were worriers, this would be coded as a family factor. That suggests that participants are more likely to see modeling or learning within the family system as a salient "family" factor, rather than focusing on biological family factors like genetics.

Nowadays, it appears that the lay population acquires information about psychological disorders and treatment options largely from the media, such as television and print advertisements. Recent advertisements endorsing the use of paroxetine (Paxil®) for generalized anxiety disorder state that "paroxetine works to correct the chemical imbalance believed to *cause* the disorder" (italics added for emphasis; GlaxoSmithKline print advertisement, September 2001). It is certainly possible that as more people are exposed to advertisements that suggest that pharmacotherapy is an effective approach to treating worry, it might become more common to attribute such

problems to biological factors. However, in our study, not a single participant attributed their worry to a chemical imbalance. In fact, genetics was the only biological factor mentioned by our participants and was reported in relatively low frequencies in both the worriers and non-worriers alike. Of the three worriers who mentioned genetics in their etiological attributions, only one worrier cited genetics as the sole contributing factor.

A limitation of our study is that participants were not asked if they saw their worry as a problem for which they would seek treatment. One interesting issue for further research is whether people believe that they should seek treatment for a problem that they see as inherent to their personality. It is also interesting to consider what kind of treatment worriers might seek if their attributions are primarily characterological in nature.

Furnham [1995] reported that people's beliefs about the etiology of a problem and approaches to treatment for that problem are typically congruent. People might not see pharmacotherapy as a reasonable treatment for a "personality" problem, and if personality is viewed as stable and enduring over time, worriers might not see therapy as a particularly viable option either. A recent meta-analysis looking at the effectiveness of five empirically-supported therapies for GAD [Westen and Morrison, 2001] reported that while therapy for GAD seemed to yield a good initial effect, only 52% of patients who completed treatment were considered to have improved. The potential mismatch between etiological factors and treatment orientation/model may be an important area of investigation.

This small survey elucidates some interesting issues for future work. Knowing that people see problems with worry as being caused mostly by personality factors, it seems important to assess whether worry is seen as a problem amenable to treatment. If it is not, it is important to disseminate treatment options and to tailor this information to the beliefs that lay people hold about the etiology of worry.

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