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Brief Report

The social world of the socially anhedonic: Exploring the daily ecology of asociality

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ABSTRACT

The need to belong is fundamental to human motivation. The significance of needs for relatedness and intimacy can be highlighted by examining aberrations in these needs. Social anhedonia, a component of the schizophrenia spectrum, represents a lack of reward from social interaction. The present research examined the everyday social worlds of the socially anhedonic. A week-long experience-sampling study found that people high in social anhedonia were more likely to be alone. When alone, they were likely to prefer solitude and to be alone by choice, not because they felt excluded. When with other people, they were likely to be in bigger, less intimate groups and to feel asocial. Socially anhedonic people felt more positive affect and less negative affect when alone, indicating a genuine preference for solitude. Because social anhedonia is a liability for psychopathology, it is the exception to the need to belong that proves the rule.

1. Introduction

Social psychologists are perhaps more circumspect than other scientists when it comes to proposing scientific laws, but recent years have seen a growing discussion of what social psychology's foundational principles might be (Fiske, 2003; Leary, 2007). Most researchers would agree that a need to belong is one of social psychology's foundational principles. Evidence from many areas of psychology suggests that humans are innately motivated to form close and meaningful relationships with other people (Baumeister & Leary, 1995; McAdams, 1989).

The present research examines the operation of the need to belong in people's everyday social worlds. Unlike past work, however, our study uses a psychopathology approach to understanding belonging: psychology can clarify the nature of normal human functioning by studying aberrations and pathologies. We thus examine the social worlds of the socially anhedonic, the few people who appear to find social interaction genuinely unrewarding Kwapil, 1998.

2. Social anhedonia

We have proposed that the trait of *social anhedonia* represents a deficient need to belong: socially anhedonic people fail to get normal pleasure from social interaction Kwapil, 1998; Kwapil, Barrantes-Vidal, & Silvia, 2008). Although social anhedonia is relatively new to social–personality psychologists, it has a long history in the study of personality disorders. Social anhedonia is a component of the subclinical liability for schizophrenia-spectrum disorders, known as schizotypy. The base rates of social anhedonia are low (Horan, Blanchard, Gangestad, & Kwapil, 2004), consistent with the view that social anhedonia is an abnormal expression of a need to belong.

If the need to belong is a rule of social motivation, then social anhedonia is an exception that proves the rule. Socially anhedonic people find social interactions unrewarding, but they are not leading lives of content, well-adjusted solitude. People high in schizotypy are at risk for developing schizophrenia and related disorders, although most of them will not decompensate. Of the dimensions of schizotypy, social anhedonia is the strongest predictor of the development of schizophrenia-spectrum disorders. In a longitudinal study, for example, Kwapil, 1998 found that 24% of college students high in social anhedonia were diagnosed with a schizophrenia-spectrum disorder 10 years later; only 1% of people in a control group had such a diagnosis (cf. Gooding, Tallent, & Matts, 2007).

In our recent work, we have explored the nature of social motivation in social anhedonia. Thus far, we have found that social anhedonia is not merely another form of social anxiety. zSocially-anxious people have an intact need to belong, but this need is frustrated by the belief that other people are rejecting or threatening. Self-report measures of social anxiety and social anhedonia are modestly related (Brown, Silvia, Myin-Germeys,

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Lewandowski, & Kwapil, 2008), and recent experience-sampling data show that social anhedonia and social anxiety have different consequences for daily interaction. For example, socially anxious people, but not socially anhedonic people, are more likely to feel self-conscious during social encounters (Brown, Silvia, Myin-Germeys, & Kwapil, 2007). Social anhedonia and social anxiety thus represent different ways that belongingness needs can go awry.

3. The present research

The present research examined social anhedonia in daily life. Past research has differentiated social anhedonia from other dimensions of social impairment (Brown et al., 2008) and gained some early daily-life evidence (Brown et al., 2007), but thus far we do not have a detailed picture of the social worlds of the socially anhedonic. Experience-sampling methods offer insight into how psychological traits are manifested in people's everyday environments. In this study, we sought a fine-grained look at everyday social interactions, such as how often people were alone, people's experience of solitude, the kinds of interactions people had, and the emotional experience of solitude and interaction.

4. Methods

4.1. Participants

Usable data were collected from 56 students—40 female, 16 male—enrolled in psychology courses at the University of North Carolina at Greensboro. The mean age was 22.1 years (SD = 4.7), and the sample was 77% Caucasian and 23% African-American. Men and women were similar in ethnicity and age. An additional 10 people (five men, five women) participated but were omitted. Four people were dropped because of elevated scores on an infrequency scale; two people's ESM data were lost due to equipment failure; and four people didn't respond to least 15 beeps. Participants received course credit. The data were collected across 4 months, mostly during the summer. Participants who completed at least 70% of the ESM questionnaires were entered into a drawing for gift cards from an electronics store. On average, people completed 45 ESM questionnaires (76%). Neither social anhedonia nor the other dimensions of schizotypy predicted compliance rates. Small effects appeared, however, for gender and age: women and older participants responded relatively more often.

4.2. Materials and procedures

4.2.1. Initial assessment

Participants attended a one-hour initial session to complete questionnaires and receive training in the ESM procedures. The measures included a demographic questionnaire, a brief infrequency scale, and self-report measures of Social Anhedonia, Physical Anhedonia, Magical Ideation, and Perceptual Aberration. The Revised Social Anhedonia Scale has 40 true-false items that assess asociality and indifference regarding interpersonal relationships (Kwapil et al., 2008). Coefficient alpha was .87, which is similar to larger samples Kwapil, Crump, and Pickup, 2002. The distribution of scores on the Revised Social Anhedonia Scale for males and females was comparable to normative data for college students. The interquartile range for males was 3–12 in the present sample and 5–13 in the normative sample (n = 1331). The interquartile range for females was 4–9 in the present sample and 4–10 in the normative sample (n = 4370).

The three additional components of schizotypy were measured for purposes of statistical control. The Physical Anhedonia Scale (61 items) measures a lack of sensory and aesthetic pleasure; the Magical Ideation Scale (30 items) measures beliefs in unlikely or invalid causation; and the Perceptual Aberration Scale (35 items) measures schizophrenic-like perceptual and bodily distortions (for scale details, see Kwapil et al., 2008). Finally, the Infrequency Scale contains 13 items (e.g., "I go at least once every two years to visit either northern Scotland or some part of Scandinavia") that were designed to screen out people who responded in a random, inattentive, or "fake bad" manner. We omitted participants who endorsed more than two items, which is a standard cut-off for exclusion (Brown et al., 2007, 2008; Kwapil et al., 2008).

4.2.2. ESM data collection

ESM data were collected on palm pilot (model m100, m125, or m130) personal digital assistants (PDA) using iESP software, a modification of the ESP software. The ESM questionnaire inquired about a variety of daily-life events; it took about two minutes to complete. The PDA signaled people to complete the ESM questionnaire eight times daily, between noon and midnight, for 7 days. One signal occurred randomly during each of the eight 90-min blocks that comprised the 12-h window. After a signal, participants had up to 5 min to start the questionnaire and up to 3 min to complete each question. After these time intervals or the completion of a questionnaire, the PDA shut down. The iESP software prevented people from turning the PDA on and off, completing missed questionnaires, or using the PDA for any other purpose. As a result, all ESM questionnaires not completed at the proper time (i.e., started within 5 min and completed promptly) were treated as missing. The ESM procedure was explained to the participants during the initial training session, and a practice questionnaire was completed in the lab. Participants returned to the lab on days two and four of the study to download their data. These visits were scheduled to decrease data loss and to increase compliance.

4.3. Dependent measures

To explore the daily ecology of asociality, we asked a range of questions about people's social interactions and their experience of these interactions. Many of the questions were based on our past experience-sampling research (e.g., Brown et al., 2007). Given the many questions and constructs, we will describe the items in detail in the Results section, for the sake of simplicity. In brief, the ESM questionnaires gathered information about people's current social contexts. People were asked if they were alone or with other people; their answer to this question branched toward more detailed questions about their experience of solitude or their experience of the social situation. Each questionnaire also assessed people's momentary feelings of positive affect (PA) and negative affect (NA).

5. Results

5.1. Analytic model

Experience-sampling data have a nested structure: features of daily life (a within-person level) are nested within features of people (a between-person level). The observations are thus interdependent. Multilevel models—also known as hierarchical linear models—can estimate simultaneous within-person and between-person effects, so they are typical for the analysis of experience-sampling data. In addition to a multilevel structure, our data also have a multivariate structure. Some outcomes, such as PA and NA, are correlated, so they ought to be modeled together instead