Stress and Anxiety -

Theory, practice and measurement

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Foreword

The selection of peer-reviewed chapters in this edition of Stress and Anxiety addresses three major areas of topical interest: Theory, practice and measurement. Kreitler asks "What is the meaning of stress" and offers a reconceptualization of the topic while Greenglass takes us on a journey across decades of strategies we use to cope with stress. Recommendations for practice based on theory - form a significant part of this edition. Reinhardt et al. and Korajilija & Slavcic provide background and recommendations for those working with people experiencing high levels of perfectionism while Schwanzer & Vöttiner as well as Alcántara et al. consider dispositional factors related to coping and burnout. A focus on children and practice implications at home and in the school are presented by Ashford-Rumph & Katsikitis; Hoferichter & Raufelder, and Begic & Buchwald. While Lucas & Moore and Syed & Moore are concerned with the impact of younger onset dementia on carers and the impact on families of living with a child Autism, respectively. Burk and Buchwald examine the relationship between stereotyped masculinity and the adherence to the study subjects of economics, humanities, law, science and social sciences. The final section deals with measurement where Thomacos presents psychometric support for the translation of the Interview Schedule for Social Interaction – Questionnaire into a self-report version. The papers presented in this volume are not only relevant to theory and understanding factors which influence behaviour but, most importantly, there are significant implications for practice and measurement.

CHAPTER 1

THE MEANINGS OF STRESS

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Abstract

The Meanings of Stress (MOS) questionnaire, based on Kreitler meaning theory, was designed to assess different meanings of stress in terms of its' manifestations and constituents. The objectives of the current study were to examine the validity of the MOS and explore the extent to which different clusters of items of the MOS reflect different aspects of stress. The participants were 183 undergraduates who unanimously completed the Perceived stress scale, The Social Readjustment Rating Scale, the Cognitive Orientation questionnaire of Stress Vulnerability, and the MOS assessing the following four kinds of stress: Actional-dynamic, experiential-cognitive, contextual-situational and sensory-perceptual, on line. Correlations between the MOS and the other scales provide support for the validity of the MOS as a measure of stress. Regression analyses indicated that the four MOS stress types were related to all stress scales: Perceived scale predominantly to experiential-cognitive stress and Social Readjustment mainly to Actional-dynamic stress. The findings suggest that there are different kinds of stress with different manifestations that are related to particular stress scales. It may be that these should be assessed and possibly be treated specifically.

Introduction

Stress is a construct of central importance in psychology, ranging from individual to workplace health, social psychology, family life and emotions. Health is an overall state of the human being, occurring at the crossroads of psychology and physiology, similar to a node in which variables representing body and mind are interconnected. Hence it is not surprising that many different kinds of stress have been identified and discussed in the literature. Many stressors have been defined mainly on the basis of their source, e.g., social, emotional, spiritual, mental, interpersonal, environmental, nutritional, parental, pre-operational, and moral (e.g., Chrisinger & King, 2018; Schaefer & Zoboli, 2019). The kinds of stress differ in their effects which range from negative to positive (e.g., distress and eustress) (Fevre, Koll, & Matheny, 2006), duration (e.g., acute, chronic, short- or long-term) (Lam et al., 2017), and severity (Gillies, Neimeyer, & Milman, 2015).

The multiple distinctions in regard to stress demonstrate that stress is a psychophysiological reaction and as such it depends on the stimulus, namely, the situation, triggering event or input. Stimuli however do not exert their impact automatically but rather in line with the meaning assigned to them by the individual or by society. Even a basically threatening stimulus is not perceived as dangerous to the same degree by all those exposed to it.

There is evidence about the likely role of meaning in regard to stress. For example, the difficulties of migration to urban environments are experienced as less stressful by those whose meaning of migration includes more financial and material gains (Fu, Keung, Wong, & Song, 2008). Similarly, health difficulties are experienced as less stressful when they are attributed to God's will or benign attitude (Pargament & Hahn, 1967). Park and Folkman (1997) proposed a model describing the role of meaning in shaping one's responses to stressful situations and the ensuing coping reactions. Their major thesis is that both global meaning, which consists of general beliefs about oneself and reality, and situational meaning which refers to specific situations, are involved in determining the manner of coping with the stressful situation. When the stressful issue is not amenable to active problem solving, the process of coping through meaning sets in, in particular, the meaning-making process which involves reappraisal processes often resulting in changing the assigned meanings. This approach has been supported by a large body of studies demonstrating the stress-moderating effects of the meanings assigned to the stressful situation. The studies demonstrate this phenomenon in regard to various groups of subjects, including cancer patients with different diagnoses (Ryu et al., 2018; Zhong, Zhang, Bao, & Xu, 2019), diabetic patients (Walker et al., 2015), brain cancer survivors (Rabelais, Jones, Ulrich, & Deatrick, 2019), patients in palliative care (Testoni et al., 2018) migrants (Wong & Song, 2008), adolescents (Li, Salcuni, & Delvecchio, 2019), firefighters (Shrira et al., 2015) and veterans (Holland, Malott, & Currier, 2014). The listed effects refer mostly to improved coping, including lower depression, lower anxiety, less psychological distress, less suicide ideation, better adaptation, and better quality of life (Dulaney, Graupmann, Grant, Adam, & Chen, 2018; Holland et al., 2014; Pan, Wong, Chan, & Joubert, 2008), Ryu et al., 2018; Testoni et al., 2018; Zhong et al., 2019).

However studies about the impact of meaning on stress mostly deal with meaning in a general manner without specifying what kind of meaning is involved. For example, they refer to meaning of life in general (Dulaney et al., 2018; Zhong et al., 2019), purpose, values, understanding, self-worth, action-directed goals, and self-regulation (Masterson et al., 2018; Vos & Vitali, 2018), spirituality (i.e., peace, faith) (Jimenez-Fonseca et al., 2018), but they do not deal with the specific meanings of stress itself. In view of the evidence about the beneficial effects of changes in meanings of stress on coping with stress, it seems advisable to provide a method for characterizing kinds of stress in terms of the meanings assigned to stress. This would enable a deeper insight into how differences in the meanings of stress change or modulate the effects of stress on the involved individuals. It would also enable targeted interventions for controlling the impact of stress.

A previous study dealt with the meanings of the stimuli for stress, namely the stressors (Kreitler, 2017b). Four factors of stressors were identified by the Stressors scale: the factor "self and others" representing stresses related to self, social life/interpersonal relations, and family; the factor of "fulfilment of duties" representing stresses related to work, limited resources (time, money, energy), and daily life arrangement and chores; the factor "threats to wellbeing" representing stresses related to health and environmental issues; and the factor "emotional states" representing emotions, such as negative emotions (e.g., anxiety, anger) and dearth of positive emotions (e.g., not enough entertainment, interest, excitement, adventures, sensation-seeking). The instructions required participants to rate the impact of the stressors

on their life, considering both their frequency and intensity. The study showed that the four factors were related to personality traits, mainly the first factor.

The present study expands the previous work by exploring the meanings of stress by an assessment questionnaire based on the theory and methodology of the meaning system (Kreitler & Kreitler, 1990; Kreitler, 2014). The tool for the assessment of the meanings of stress was named the Meanings of Stress (MOS). It enabled characterizing the manifestations and constituents of stress in contrast to the Stressors scale that focused on the instigators or stimuli for stress. The MOS provides scores on four clusters of meanings that represent the our factors identified repeatedly by factor analyses in studies relating to the meanings of diverse constructs, such as health, body, meaningfulness of life, urban environments, homosexuality, energy, life, the self, the other, and parenthood (Kreitler, 2013, 2015, 2016, 2017a, 2018). The MOS items represent basic content categories used in different cultures for communicating meanings of basic 22 diverse kinds, such as function, causes, emotions, material, location and time (Kreitler, 2020).

The objectives of the study were first, to examine the validity of the MOS and second, to explore the extent to which the four kinds of stress reflect differential aspects of stress. Both objectives depend on analysing the relations of the MOS scores with other measures of stress.

Method

Participants

The subjects were 183 students in the behavioral sciences. The sample included 108 women and 75 men, age range of 21-27 years.

Measures

All participants unanimously completed an online questionnaire containing the following instruments presented in random order.

The meaning-based scale of stress (MOS) (Kreitler, 2020) has 26 items across four clusters: (a) Actional-dynamic aspects (actions, function, manner of operation: 6 items), (b) Experiential-cognitive (thoughts, beliefs, emotions, experiences: 6 items), (c) Contextual-situational aspects (Causes, results, kinds of: 7 items), (d) Sensory-perceptual aspects (physical sensations, state, time, place: 7 items). Participants were requested to check each item from 4 = very important to 1 = not at all important in expressing the meaning of stress. Reliability coefficients for the four clusters ranged from $\alpha = .75$ to .79.

Perceived stress scale - short version (Cohen, Kamarck, & Mermelstein, 1983) has 10 items (e.g., In the last month, how often have you been upset because of something that happened unexpectedly?) answered on a 5-pt Likert scale, 0 = never to 4 = often.

The Social Readjustment Rating Scale (Holmes & Rahe, 1967) is list of 43 stressful life events Participants note the frequency of occurrence of each event during the previous year. The score represents the total of the stressful events according to their occurrence in the previous year.

The Cognitive Orientation (CO) scale of stress vulnerability (Kreitler, 2017b; Kreitler, Barak, & Toren, 2014) is based on the CO theory which provides assessment of motivational tendencies for specific behaviors. It includes four parts referring to beliefs about self (n=22), to general beliefs (n=21), to norms and standards (n=21) and to goals and wishes (n=20), re-

ferring to contents representing 22 themes. It has five factors: assuming responsibility for situations and ongoing events; viewing oneself as strong, endowed with limitless personal resources; disregard for priorities; and sensitivity to time-related pressures. Items are answered on a 4-pt Likert scale from very true to not at all true. Scores are generated for the four types of beliefs. Cronbach's alpha's range from .76 to .82, and for the questionnaire as a whole .79.

Procedure
Following approval from the Ethics Committee of Tel-Aviv University, the questionnaires were administered on line in a google.doc style anonymously to a convenience sample of the university students. The collection of data was discontinued after two months, in accordance.

Results
A preliminary analysis by gender and age showed that there was a gender difference only in regard to one of the variables (women scored higher on Experiential stress, t =3.22, p <.01). Therefore the data were analysed as one sample.

The scales of the Perceived Stress and the Social Readjustment were correlated with each other (r =.48, p <.01) as well as with CO factors: Perceived Stress with goals (r =.33, p <.01) and self (r =.29, p <.01) and Social Readjustment with norms (r =.28, p <.01) and general beliefs (r =.25, p <.01).

The results focus on the relations between the four types of stress and each of the additional stress measures used in the study. The inter correlations presented in Table 1 show that all MOS kinds of stress and the Total were related significantly to Perceived Stress, Social Readjustment and Stress Vulnerability scores. Additionally, regression analyses with the four clusters of stress as predictors and the scores of Perceived Stress, Social Readjustment and three of the four the belief types of stress vulnerability yielded significant results (i.e. all except general beliefs). The results of the regression analyses indicate that the four stress clusters of the MOS account for 46.5% of the variance in Perceived Stress, 35.9% of the variance in Social Readjustment scale. The percentages of variance accounted for in regard to the CO belief types are lower (viz. 27.7%, 33.7%, and 8.53% in regard to norm beliefs, goals beliefs and self-beliefs, respectively). The results concerning the relations between the four kinds of stress assessed by the MOS and the scores of the two stress questionnaires Perceived Stress Scale and the Social Readjustment support the validity of the MOS.

The relations between the four kinds of stress assessed by the MOS and the CO assessed belief types show that the MOS is related also to motivational factors that contribute to the occurrence of stress. The highest correlations were with Goal and Norm beliefs.