

### 1: Psychobiological Processes and Health in HIV/AIDS – University of Miami's Research Profiles

*To investigate the psychosomatic impact in male infertility, we analysed relationships among psychological (life events, personality attitudes) and biological (gonadotrophins, sex steroids, seminal parameters) variables in husbands of barren couples.*

Page 59 Share Cite Suggested Citation: The National Academies Press. Integrating Epidemiological and Psychobiological Approaches to the Assessment of Biological Indicators Michael Marmot and Andrew Steptoe The Whitehall II study of British civil servants was set up with the explicit purpose of testing hypotheses as to the causes of the social gradient in cardiovascular and other diseases Marmot and Brunner, ; Marmot et al. The scientific questions arose from key findings of the first Whitehall study: That is to say, the lower the position in the social hierarchy, the higher the mortality from cardiovascular disease and from a range of other major causes of death. Although the social gradient was defined in the Whitehall study by grade of employment, similar patterns emerge with classification on the basis of income or education Mensah, Mokdad, Ford, Greenlund, and Croft, This gradient provided a particular challenge to explanation. Something else had to be going on. We hypothesized that the social gradient in disease occurrence could be attributed to psychosocial factors. In order to test this hypothesis, we set up the Whitehall II study: Participants were recruited from the entire range of occupational grades, from senior civil servants responsible for large government programs to clerical workers, porters, and messengers. In the biomedical world, the idea of social causation sounds mystical. An important part of the research agenda for Whitehall II is therefore to show how social and psychosocial factors influence biological pathways to cause social inequalities in disease. Epidemiological studies are one, but not the only, research strategy to target this goal. Development and testing of hypotheses linking psychosocial factors to biological pathways come also from psychobiological studies see below in which smaller numbers of individuals are studied intensively, either in the laboratory or under naturalistic conditions, to link changes in emotion and behavior with changes in relevant biological markers. This is closely integrated with our overall scientific aim of understanding inequalities in health by studying civil servants from different levels of the hierarchy. There is thereby a conceptual link from Whitehall II to the psychobiology studies. We also have a keen scientific interest in linking health, well-being, social participation, and economic and social circumstances in older people. The sample in ELSA comprises 11, men and women ages , with an additional partners under 50, and 72 new partners were interviewed, leading to a total sample size of 12, The plan is to interview them at home every two years, and every second interview i. The nurse visit will allow physical function to be measured by a trained observer and blood samples to be drawn for biochemical analysis. The drawing of blood samples every four years means that these biomarkers can be assessed repeatedly and newer ones measured according to the scientific questions being addressed. This chapter details the scientific insights that can be gained from measuring biological indicators in population studies and presents a rationale for complementing the observational epidemiological approach with more intensive psychobiological investigations. Biological indicators in Whitehall II and ELSA The importance of biological markers can be illustrated by showing how they shed light on two issues of causation. Working with economists, we have found that the link between socioeconomic position and health has two major explanations. Public health scientists tend to start from the position that social circumstances associated with socioeconomic position lead to ill health. Economists tend to start from the position that health, or some resilience factor, leads to socioeconomic position. To sort between these competing positions, it is helpful to have further specification of a causal model. We, for example, posit that low social position is associated with increased exposure to psychosocial factors, which in turn activate the autonomic nervous system and the hypothalamic-pituitary-adrenal axis to influence metabolism and disease risk. We do not, in other words, view the body as a black box with social conditions going in at one end and disease coming out the other or vice versa. Rather, we seek to gain evidence to support or refute our causal model. One major candidate to explain the social gradient in disease is the group of factors characterizing the metabolic syndrome: We performed this at the Phase 3 5-year examination of the Whitehall II cohort, repeated it at

Phase 5 year examination , and again at Phase 7 15 years. A further step in the causal model was to conduct a nested case- control study, the cases being people with the metabolic syndrome and the controls a sample from the Whitehall II cohort without. We also examined heart rate variability to see if the metabolic syndrome was related to this indicator of adverse autonomic sympathetic-parasympathetic balance. We found that heart rate variability was less in cases of metabolic syndrome. Involvement of autonomic function was shown further by the finding that low employment grade was associated with low heart rate variability. The link to psychosocial factors was made explicit by the finding that people with low control at work had lower heart rate variability high risk than those with high control Hemingway et al. These findings shed light also on the question of confounding. When we showed, in Whitehall II, that low job control appeared to be an important link between low socioeconomic position and risk of coronary heart disease, we had to confront the question of whether low job control was confounded by some other causal exposure that was linked to socioeconomic position Marmot et al. This independent association completes an important link in the causal chain from chronic work stress to congenital heart disease and illustrates the strength of complementing observational epidemiological studies of social factors with biomarker assessment. We are only now beginning to make use of the biological markers in ELSA. One example illustrates their usefulness. We were struck by the finding of a higher rate of morbidity in the United States, even among affluent groups in the two countries. The possibility of higher levels of diagnosis and reporting in the United States had to be considered. These results suggest that there is genuinely more illness in the United States. If we had an isolated finding of, say, higher levels of glycosylated hemoglobin in the United States, this would have raised the possibility of laboratory differences across countries. The facts that each of our biomarkers were adverse in the United States compared with England and each of the reported morbidity measures were higher make it likely that the intercountry differences are valid Banks, Marmot, Oldfield, and Smith, Each discipline would have been impoverished without the input of the others in decisions of what to measure, how to measure them, how to analyze data, and interpretation. A limitation of large-scale epidemiological studies that investigate biological pathways is the difficulty of examining the dynamics of biological markers. For example, if the interesting information will come from examining not the resting level of a biomarker but how it responds to a stress in the system, we may miss some relationships by using one measurement of a biomarker. It took a great deal of effort to measure how glucose and insulin responded to a glucose load administered in the fasting state. It would be difficult to repeat this by examining in 8, people how other biomarkers responded to a psychological stressor. To conduct this sort of investigation, smaller scale intensive studies are appropriate, although they have the drawback that they do not have the statistical power to examine disease end points. There are two basic strategies used in psychobiological research. The first is psychophysiological or mental stress testing, in which biological responses are measured in response to standardized psychological or social stimuli Steptoe, A wide range of challenging stimuli is employed, including cognitive and problem-solving tasks, simulated public speaking, and interpersonal conflict. These tests are usually carried out individually in the laboratory or clinic, with continuous monitoring of cardiovascular activity, sampling of saliva for the measurement of stress hormones like cortisol, and periodic blood sampling. The value of this experimental approach is that biological responses to psychosocial stimuli can be evaluated under environmentally controlled conditions, reducing many of the sources of confounding that might otherwise be present. Sophisticated measures can be employed that are difficult to assess in large-scale studies; for example, we have found that psychological stress stimulates transient disturbances of vascular endothelial function thought to be important in the development of coronary atherosclerosis , up-regulation of the genes controlling release of inflammatory cytokines, and activation of blood platelets Brydon et al. A more direct way of assessing responses in everyday life is to use a second strategy, namely ambulatory or naturalistic monitoring. The purpose of these methods is to investigate biological function in real life at work, at home, and in other situations, rather than when people are tested in the screening clinic or laboratory. We can also study the covariation between biology, activities, emotions, and behavior. The design depends on the availability of unobtrusive measures of biological activity in everyday life, with techniques depending on the health problem under investigation. Research into cardiovascular diseases primarily uses ambulatory monitoring devices for the measurement of

blood pressure, heart rate, and heart rate variability. Research on stress often involves saliva sampling for the assessment of cortisol, while studies of musculoskeletal problems and pain utilize lightweight monitors of electromyographic activity muscle tension. The Whitehall psychobiology study used both mental stress testing and naturalistic monitoring to explore the dynamic relationships between the social gradient, psychosocial stress factors, and biological responses relevant to coronary heart disease. We focused on the hypothesis developed in the full Whitehall II study that biological stress responsivity is greater in lower than higher socioeconomic status groups and partly mediates differences in disease risk Steptoe and Marmot, We recruited middle-aged men and women from the Whitehall II cohort to take part in this study. We excluded individuals with known coronary disease or diabetes, a task that was made simple by the detailed data collected from each person for more than a decade as part of the main Whitehall II study. The response rate was 55 percent. Participants attended a psychophysiological stress testing session and carried out ambulatory monitoring of blood pressure, heart rate, and salivary cortisol over a normal working day. Recruitment of the sample was relatively easy because participants were familiar with the Whitehall study setup. However, some of the people we asked did not take part since they thought it would be difficult to commit the time to this more intensive investigation. The psychobiology study has generated interesting results relating psychosocial factors such as work stress, depression, and loneliness with biological function, but the main emphasis has been on socioeconomic position. An intriguing result was that, by and large, the social gradient was not strongly related to the magnitude of biological responses to standardized tasks. However, lower socioeconomic status was characterized by delayed recovery or prolonged stress activation, so that biological responses remained elevated after tasks had been completed, rather than returning back to baseline levels promptly. For example, in comparison with high-status individuals, we calculated that the odds of impaired poststress recovery in the lower status group were 3. These findings have led us to think again about the role that biological stress responses might play in mediating social gradients in cardiovascular disease risk. Two simple models come to mind. The first is that there are differences in the magnitude and duration of biological responses between social groups that have developed through a lifetime of differential psychosocial challenge. The association between lower socioeconomic position and prolonged activation after tasks have ended is a manifestation of this pattern. The second possibility is that adverse health effects arise out of differential exposure to adversity. The higher levels of activation both during stress and at rest observed in several biological parameters listed in Box will contribute to increased disease risk. Naturalistic monitoring studies complement the psychophysiological stress testing results while demonstrating how these processes play out in everyday life. We have found that ambulatory blood pressure was greater in the lower than higher occupational grade groups in the mornings of working days, even after controlling for physical activity levels, body weight, smoking, and other factors Steptoe et al. Early morning blood pressure levels have special significance for cardiovascular disease since there is a blood pressure surge soon after waking, which coincides with an increased incidence of cardiac events Giles, We also found that the cortisol awakening response, the rise in cortisol over the first 40 minutes after waking in the morning, is greater in lower status groups Kunz-Ebrecht, Kirschbaum, Marmot, and Steptoe, A heightened cortisol awakening response is also found in people experiencing work stress, financial strain, and depressive symptoms, and it appears to be an indicator of stress-related hypothalamic-pituitary-adrenocortical dysfunction Steptoe, There are two important limitations to the psychobiological studies that we have carried out so far. The first is that, although the study was quite large from the perspective of laboratory science, the sample size was still limited for addressing socioeconomic issues. Second, we have not shown associations with cardiovascular disease outcomes. Much larger samples need to be tracked over many years to document a relationship between disturbed stress responsivity and coronary heart disease end points, such as myocardial infarction or cardiac death. However, newer methods of imaging the coronary arteries have given us the opportunity to study the progression of subclinical coronary disease. A fresh study with a larger sample that began in is measuring psychobiological responses along with coronary artery calcification quantified using nuclear imaging. We will repeat this imaging of the coronary arteries after three years to provide direct evidence of the clinical significance of these processes. Although the Whitehall II study is rooted in observational, population-based

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epidemiology and the psychobiology study has its origins in laboratory psychophysiology, each has gained from the association. For example, laboratory psychophysiological research has generally paid rather little attention to the sampling framework. Much work in this tradition continues to be carried out with select samples notably college students , assuming that findings in such unique groups can be generalized to the rest of the population.

### 2: Offender profiling - Wikipedia

*Psychobiological Profiles*, This is volume two of the PRAEGER INTERNATIONAL COLLECTION ON ADDICTIONS. See the comments above for volume one of this four book series.

Received Mar 5; Accepted May Copyright Reinders et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are properly credited. This article has been corrected. This article has been cited by other articles in PMC. Associated Data Supporting Information S1: Fantasy proneness in dissociative identity disorder. How well are the dissociative identity disorder simulating healthy controls doing? Research findings and clinical observations suggest that DID involves an authentic mental disorder related to factors such as traumatization and disrupted attachment. A competing view indicates that DID is due to fantasy proneness, suggestibility, suggestion, and role-playing. Here we examine whether dissociative identity state-dependent psychobiological features in DID can be induced in high or low fantasy prone individuals by instructed and motivated role-playing, and suggestion. The controls were instructed to enact the two DID identity states. Twenty-nine subjects participated in the study: Autonomic and subjective reactions were obtained. Differences in psychophysiological and neural activation patterns were found between the DID patients and both high and low fantasy prone controls. Thus, important differences regarding regional cerebral bloodflow and psychophysiological responses for different types of identity states in patients with DID were upheld after controlling for DID simulation. They indicate that DID does not have a sociocultural e. Introduction Despite its inclusion in the Diagnostic Manual for Mental Disorders [1], the genuineness of dissociative identity disorder DID continues to be disputed. Supporters of the diametrically opposed trauma-related and non-trauma-related views have been engaged since decades in a passionate debate regarding its validity as a mental disorder, and whether it is related to traumatization or to fantasy proneness, suggestibility, suggestion, and simulation [2] – [10]. Fantasy proneness and suggestibility are highly correlated [18], [22] – [25], and dissociative symptoms were found to be correlated with fantasy proneness, heightened suggestibility, and susceptibility to pseudomemories [11], [26]. To date, the position that DID is caused by sociocultural factors and personal features such as fantasy proneness has not been tested in studies involving DID patients, and evidence that the complex phenomenology and psychobiology of DID can be created and sustained over time by these factors is lacking [27] – [30]. Despite this lack of empirical support, the sociocognitive and fantasy based model of DID is influential in contemporary psychiatry and there have been proposals to prevent the inclusion of DID in the DSM-V [31]. In this view DID is thought to be at the far end of the spectrum of trauma-related psychiatric disorders, i. Holders of the trauma-related view acknowledge that: However, they also note that there are differences between authentic and imitated DID and that there is no evidence that DID can sub- consciously be created by sociocultural factors [27]. Furthermore, even if DID symptoms can be created iatrogenically or enacted [14] this does not mean that genuine trauma-related DID does not exist [38]. This theory defines dissociation as a division of personality into different types of subsystems, each with their own first-person perspective, that is, their own point of view as to who they are, what the world is like, and how they relate to that world [42]. As NIS DID patients concentrate on functioning in daily life, commonly try to hide their pathology, and have not sufficiently integrated e. That is, NIS fails to relate the trauma-related nature to its self [39]. In contrast, TIS does have conscious access to these memories, recalls them as personal experiences and is bodily and emotionally affected by them. That is, as TIS the patients are fixated in traumatic memories and engage in defensive actions such as freeze and flight, when they are or feel threatened [41], [43], thereby activating fast subcortical response routes in the brain [40], [44]. TIS who engage in active kinds of physical defence e. Proponents of the sociocognitive view have argued that the different patterns of subjective, psychophysiological, and neural activity for NIS and TIS in response to a trauma-memory script that Reinders et al. Obtaining independent proof of childhood traumatization in adulthood is most difficult. However, the claim that the previously reported results constitute effects of fantasy proneness, suggestion, and role-playing

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is open to test. The a priori hypotheses of the current study were: Results Twenty-nine subjects participated in the brain imaging study: The controls were instructed to enact the two DID identity states: DID patients, as well as high fantasy prone and low fantasy prone controls were studied in the two different types of identity states during a memory script MS driven neutral or trauma-related autobiographical texts imagery paradigm. The brain imaging data of the three groups was statistically analyzed in SPM5 in a three-by-two-by-two factorial design which allows for the assessment of various effects, e. Autonomic and Subjective Reactions Statistical results of the autonomic and subjective reactions analyses between the three groups are presented in Table 1. Mean values and the direction of the responses are depicted in Figure 1. Table 1 Between group: Subjective and autonomic reactions.

### 3: RMLSweb - Login Page

*The Praeger International Collection on Addictions: Volume 2, Psychobiological Profiles (Abnormal Psychology) by Browne-Miller, Angela. Praeger. Used - Very Good.*

### 4: PS4, PS3 & PS Vita Games â€¢ [www.enganchecubano.com](http://www.enganchecubano.com)

*Background. Dissociative identity disorder (DID) is a disputed psychiatric disorder. Research findings and clinical observations suggest that DID involves an authentic mental disorder related to factors such as traumatization and disrupted attachment.*

### 5: Psychobiological influences on maternal sensitivity in the context of adversity â€” NYU Scholars

*Over the past decade, psychobiological research on adult attachment has increased dramatically. We review recent findings regarding associations between attachment style and patterns of reactivity in the hypothalamic-pituitary-adrenocortical axis and the autonomic nervous system.*

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*Advanced Semiconductor Manufacturing Conference and Workshop Asmc, 1996 Ieee/Semi Robin Vals Love Story Yuletide Child (Expecting! (Harlequin Presents, No. 2070) The philosophy of the novel Social Status and Cultural Consumption Knots (De Gruyter Studies in Mathematics) Classic Hot Rod Style The travail of Julians youth Theory of superconductivity schrieffer Prisoner Of The Stars Grim fandango puzzle ument. Pamphlets, printing, and political culture in the early Dutch Republic The Modern Ayurvedic Cookbook Exercise and cellular mechanisms of muscle injury Cast criticism as / Edit a for eraser Thermal engineering question bank At first sight Mladen Dolar Rapture Red Smoke Grey More wealth without risk A series of unfortunate events 6 Strategic Sales in the Building Industry Improve your Spanish Vitamin D affects most tissues in the body Bipan chandra books in tamil Playing piano for beginners The Rape (Charity Memorial Hospital) Western Civilization Volume 1 7th Edition And Sources Volume 1 5th Edition And Western Society Mosaic Web Law express contract law revision guide Colour atlas of the surgery and management of intestinal stomas Techniques of value analysis and engineering Trusty Five-Fifteen Literature in Vienna at the Turn of the Centuries The unchastened woman, by L. K. Anspacher. Multivariate data analysis in sensory and consumer science Planning local economic development theory and practice 5th edition Fierce Milly and the Amazing Dog Constitutionalism and democratisation in Kenya, 1945-2007 I wish dreams and realities of parenting a special needs child Waging Peace in the Nuclear Age*