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Social Psychology in Action

Klaus Jonas and Carmen Lebherz

KEY CONCEPTS

affective commitment attitude towards the advertisement brand extension cognitive appraisal comparative advertising contextual performance coping coping resources counterproductive work behaviour critical life events distributive justice emotion-focused coping fear appeals health education job attitudes job satisfaction modification of the incentive structure perceived organizational support problem-focused coping procedural justice protection motivation theory stress task performance three-orders hierarchy model transtheoretical model



CHAPTER OUTLINE

We begin by addressing how social psychology can be applied to real life, what methodological issues are involved in this endeavour, and how application can inform social psychological theories. We then describe the application of social psychology to three important topics: advertising, the workplace and health.

First, we discuss social psychological foundations of advertising. After reviewing some of the major theoretical models developed by advertising researchers, we argue that these models can be fruitfully subsumed under the more general dual-process approach to attitude change (introduced in Chapter 7, this volume). To illustrate the usefulness of the dual-process approach, we then discuss several advertising techniques in terms of dual-process theories of attitude change. Second, we apply social psychology to the workplace. We show how individuals form attitudes about their jobs, the organizations in which they work and the fairness of everyday work life. We discuss how to increase employees' job satisfaction levels, how to motivate them to be supportive towards their colleagues, and how to increase their commitment towards the organization. Finally, we turn to matters of health. We describe social psychology's important contributions to the prediction of health behaviour and to bringing about change of maladaptive behaviours, and the important role of social psychological factors in coping with stressors.

Introduction

This chapter begins with some thoughts on how we can apply the wide array of social psychological theories and research to our everyday lives, including attempts to find remedies for individual and societal problems as well as providing instruments for increasing the effectiveness of economic or political endeavours. This involves both methodological questions and the relationship between basic and applied research. We then move on to three specific areas of everyday life that have benefited greatly from social psychological research.

The first area involves advertising, i.e., attempts to influence our attitudes and behaviour regarding consumer products. Billions of Euros are invested every year with the aim of influencing consumers to buy items for daily consumption, luxury goods, technical products, services and so on (Solomon, 2004). Marketers and advertisers have long been developing influence strategies, some of which are more intuitive, while others are more scientifically based. Of course, advertising has many points of contact with social psychological theories of persuasion (see Chapter 7, this volume). One of the most effective theoretical frameworks in persuasion is the dual-process approach. Social psychologists developed dual-process models during the 1970s, long after advertisers began to practise successful advertising. We will show below, however, that most, if not all, types of advertising can be better understood by being analysed within the conceptual framework of dual-process models. Thus, we will argue that familiar advertising techniques such as comparative advertising or publicizing brand extensions are instances of processes operating under the high or low elaboration mode, respectively.

The second major part of this chapter deals with organizational behaviour. Workplace activity is inherently social in nature. Indeed, most employees spend a large proportion of their work time communicating with colleagues, evaluating their organization's fairness and forming an opinion about their team's work atmosphere and support. Every day, team members make decisions that directly affect work outcomes, e.g., whether to fill in for an overloaded colleague to ensure that the work gets done. We will look at the major work outcomes of organizational behaviour and how they are affected by employees' attitudes, job characteristics and the social processes common in the workplace. Although organizational behaviour appears to bear few similarities to advertising and consumer behaviour, we will illustrate how both areas have profited greatly from social psychological research on attitudes. Of course, much of organizational behaviour also has to do with the issues of group processes and leadership; these questions have already been dealt with in Chapter 13, this volume.

As a final example of addressing real-life problems by means of social psychological theorizing, we will address the topic of health. Health and illness are among the most pressing concerns of today's society, given the increasing costs of health services and the demographic trends according to which populations all over the world are becoming increasingly older. Social psychological theories can help us to identify the determinants of health-impairing behaviours, such as smoking or having unprotected sex, and to design interventions aimed at changing these behaviours. Apart from maladaptive behaviour, a major threat to the health and wellbeing of today's populations is stress. We will show how social psychological research generates predictions regarding stressameliorating factors such as coping styles as well as social support from one's partner, friends or colleagues. We will place special emphasis on stress at the workplace, thus linking our coverage of health to the preceding discussion of organizational behaviour, because of the large number of hours that many members of today's population spend working.

APPLYING SOCIAL PSYCHOLOGY

Social psychology and its relation to the 'real world'

Why is social psychology important to our society's most crucial issues?

Social psychology is the discipline within psychology that focuses on how social situations determine human behaviour. A major aspect of situations is the presence of fellow humans: if two or more individuals come together, a social context for individuals develops. Recall Gordon Allport's (1954a) definition from Chapter 1: 'Social psychology is the attempt to understand and explain how the thoughts, feelings, and behaviors of individuals are influenced by the actual, imagined, or implied presence of other human beings' (p. 5). As humans are a thoroughly social species, large parts of our lives take place in the company of others: we grow up in families, kindergartens and schools; we play on sports teams, attend committees and form work teams; we communicate face to face or via telephone, letters or email with family and friends, colleagues and supervisors.

Indeed, social psychology is ubiquitous in our daily lives, and this is why social psychology is readily applicable and has been widely applied to the 'real world'. For example, medical emergency teams have to make decisions of utmost importance under great time pressure, and social psychology has suggested how team members should be coordinated to prevent bad decisions (e.g., Tschan et al., 2006). Aggression is prevalent in hooligans who gather to attack opposing groups or destroy property, or in neo-Nazis who attack immigrants (see Chapter 8, this volume); social psychology helps us to understand how prejudice shapes behaviour, what instigates intergroup aggression and how to reduce such hostility (see Chapter 14). Applying social psychology to some



Plate 15.1 Medical emergency teams have to make vital decisions under great time pressure.

of our society's most pressing social problems and phenomena comes naturally. Indeed, throughout the previous chapters, we have already introduced many successful applications of social psychological knowledge.

Applied social psychology and its relation to basic research

How do basic and applied research benefit from each other?

Applied social psychology is the part of the discipline of social psychology that takes what we have learned from basic research and seeks to apply it in real life. In part, social psychology helps to solve, or at least ameliorate, social problems. To do so, applied research asks about the causes of a social problem and designs, implements and evaluates interventions accordingly. For example, alcohol consumption on student campuses is a huge problem in many countries. Especially 'binge drinkers', i.e., those who have more than four drinks in a row, are likely to experience alcoholrelated problems such as missing classes, having unprotected sex or being physically injured (Wechsler et al., 2002). When traditional interventions such as awareness campaigns failed to reduce drinking rates, social psychological evidence on the influence of norms on behaviour came into play.

Recall that norms are rules that prescribe attitudes and behaviours appropriate in a group (see Chapters 11 and 12, this volume). Social psychological research has shown that group members tend to conform to group norms because norms become part of the individual's belief and value system (Turner, 1991). Furthermore, norms can be misperceived. With regard to alcohol consumption, research has shown that when students consider other students, they assume that more of them binge drink than is actually the case (Perkins & Berkowitz, 1986; see also Chapter 3, this volume). Thus, a misperception of an 'on-campus drinking norm' exists ('everybody binge drinks') that leads students to conform to the norm. If this hypothesis is correct, changing perceptions of the norm should lead to decreased drinking on campus. This is indeed what researchers and health practitioners found

(a)



(b)



Plates 15.2a and b When students consider other students, they assume that more of them binge drink than is actually the case.

when they first intervened and tried to change norms by way of flyers, posters and advertisements (Haines & Barker, 2003; Haines & Spear, 1996). Figure 15.1 depicts a poster that shows the actual norm as found in surveys, i.e., that most students drink alcohol rather moderately. By informing students about these facts, moderate drinking behaviour is normalized and normative pressure to drink among students decreases.

Whereas basic research develops and tests theories that explain relationships between social constructs, e.g., the influence of (misperceived) norms on behaviour, applied social psychology centres around a social problem and searches for solutions to this problem, e.g., binge drinking on campus. Only if we can identify the social causes of behaviour can we predict future behaviour and develop interventions aimed at changing that behaviour. We need sound theories in order to derive sound hypotheses about how to intervene in a real-life problem.

Thus, real-life problems profit from basic research in that theories, paradigms, concepts and basic research results guide the search for solutions. Theories and research results restrict the wide range of possible actions to a set derived from prior scientific knowledge. With regard to binge drinking, hypotheses about which intervention to choose after others had failed were not developed in a vacuum but deduced from theories of social norms, which also summarize how misconceptions of norms develop and why individuals adapt their behaviour to such norms. Can successful application also improve basic research and theory?

We can think of the relationship between basic and applied social psychology as a reciprocal process, like the one depicted in Figure 15.2. Theories (box 1) that have been developed and tested in basic research (box 2) are applied to social problems (box 3). These theories can provide important insights into the nature and causes of these problems, insights that can help to suggest solutions (box 4). Based on these theoretical ideas, interventions are

DRINKING AT NIU

MOST

NIU students (72%) drink 5 or fewer drinks when they "party"

MOST

NIU students did not cause physical harm to self (80%) or others (91%) as a consequence of drinking.

NEARLY ALL

NIU students (97%) disapprove of drunkenness which interferes with responsibilities.

*A DRINK = a bottle of beer, a glass of wine, a wine cooler, a shot of liqueur or a mixed drink



Figure 15.1 Changing the social norm of drinking (www.socialnorms.org).



Figure 15.2 The relation between theory and practice.

developed with the aim of reducing or solving the social problem (box 5). The process does not end here, however. The efficacy of these interventions has to be evaluated (box 6), and the information gained from this evaluation reflects on the validity of the theory on which the intervention has been based and thus might lead to modification of that theory (box 1). Empirical confirmation in a real-life setting increases our confidence in the predictive power of that theory, whereas disconfirmation often shows us ways to improve the theory and thus promotes theoretical advancement. Improved theories will enable us to suggest better solutions for change, or optimization, when faced with future practical problems.

Sometimes applied social psychology starts from theories developed in basic research. At other times the starting point is in the real world, with a pressing social issue at hand and an observation that leads to an initial hypothesis and, later, theory building. Whatever the starting point, however, basic and applied social psychology should never be viewed and implemented separately, but in a way that promotes the advancement of both. We can thus complement Kurt Lewin's famous statement that 'there is nothing so practical as a good theory' (1951, p. 169) by adding that 'there is also nothing so good for theory as practice and application'.

Methodological differences between basic and applied social psychology

How do we adapt our methods to real-life situations?

Note that we described the experiment as the dominant research method in social psychology (see Chapter 2, this volume) because it can identify whether a manipulated (independent) variable causes a change in the measured (dependent) variable. We also pointed out that random assignment of participants to experimental conditions was the key feature of experimental research. In applied research, however, there are three major barriers to the use of random assignment which make it necessary to adapt our methods to the circumstances. First, in some situations random assignment is impossible for ethical or practical reasons. For example, if we want to investigate school bullying (e.g., Smith & Brain, 2000), we cannot randomly assign pupils to the roles of victims and bullies. Similarly, if we want to study the impact of marital bereavement on health, we cannot assign participants randomly to bereaved or nonbereaved conditions (Stroebe, 2001). In these situations, we have to rely on quasi-experimental studies, which are in fact crosssectional or longitudinal observational studies that compare groups that experience a given stressor (e.g., bullying or partner loss) to matched control groups that did not suffer this stress experience.

Second, there are also situations in which random assignment would be possible in principle, but difficult or impossible to implement in practice. For example, if we want to study the effects of job rotation at an assembly line, we could, in principle, implement rotation in 10 departments with an assembly line and compare the productivity and work satisfaction of workers in those departments with those of workers in 10 other departments with assembly lines, but without job rotation. The problem with this plan is that even large organizations rarely have 20 departments that use comparable assembly lines. Furthermore, even if an organization had sufficient departments for such a study, the time and effort of doing this research would be prohibitive. In practice, we would therefore end up with one or two intervention departments where we rotated jobs and one or two control departments where we did not. Since these departments would differ in many other respects, we would be conducting a quasi-experiment rather than a proper field experiment.

Third, in the real world the external context in which we conduct our study often changes, subjecting research participants to sources of influence that are beyond the control of the researcher. For example, the organization in which we do our research might implement organization-wide changes, or some people will leave departments during the study and new people will come in. In community interventions that assess the impact of health campaigns, the problem frequently arises that mass media or government sources may provide additional health information that affects both the intervention and the control communities (e.g., Luepker et al., 1994).

Thus, although applied researchers conduct experiments, some in the laboratory but mostly using field settings, they have greater difficulty than basic researchers in safeguarding the internal validity of their studies. Fortunately, they have at their disposal sophisticated statistical methods that allow them to deal with many of the threats to the internal validity of their research. Furthermore, applied research gains from being more externally and ecologically valid than laboratory studies because it is conducted in the field and under natural circumstances. Since the different strengths of basic and applied research complement each other, the reciprocal link between these two approaches is of great value for progress in social psychology.

SUMMARY

It comes naturally to social psychology to help develop solutions for some of the major problems of today's society, such as unhealthy or aggressive behaviour. Sometimes a pressing problem stimulates interventions and only later advances theory building. At other times, theories already exist and guide practitioners to new paths that will bring improvements. In either direction, basic and applied research, theory and practice, work together and complement each other. As field research does not allow for as much control over situational circumstances as laboratory research, applied researchers have to deal with different methodological issues than basic researchers. It is more difficult to establish causality in applied studies conducted in the field than it is in laboratory experiments. However, applied studies often benefit from high external validity and bring the satisfaction of helping to solve problems and implement change.

SOCIAL PSYCHOLOGY AND ADVERTISING

Models of advertising effectiveness

How does advertising influence consumers? What are the similarities and differences between models of advertising and general theories of persuasion?

A recent video clip on MySwitzerland.com, the official homepage of the national Swiss tourism organization, contains a photo session and an interview with Michael Schumacher, famous Formula 1 driver, after he landed by helicopter on the spectacular Aletsch glacier in the Swiss Alps. The interviewer asks him to describe his



Plate 15.3 Could a famous personality such as Michael Schumacher be used to sell a product, such as taking holidays in Switzerland?

image of Switzerland. His answer includes associating Switzerland with terrific landscapes, freedom and security. Do you think this clip will advance tourism in Switzerland? If so, why? You have already read an introduction to the topic of attitude change and persuasion (see Chapter 7, this volume). The earlier chapter paid particular attention to dual-process models and relevant supportive evidence. In this section, we will show that dual-process models are also powerful for guiding advertising campaigns and interpreting their effects.

But before we discuss this topic, we will give a brief overview of the main theoretical approaches that have been developed specifically for advertising. As we will see, over the last decades advertising specialists have abandoned the unrealistic conception of a recipient who always attends to, and thinks deeply about, the information and arguments contained in an advertisement. Given the millions of advertisements recipients are exposed to, it is unlikely that they will be able or willing to devote attention to most of them. Thus, the development of advertising research shows parallels to the development of more general theories of attitude change, which – by adopting the dual-process framework – also conceded that recipients might often lack motivation and/or ability to process messages systematically. Of course, apart from parallels between persuasion research and advertising, advertising has some unique features that are not found in other types of persuasion, such as speeches delivered by politicians or lifestyle advice dispensed by physicians. But as we will see, even the seemingly specific features of advertising can be dealt with successfully by the dual-process framework. We will explore these issues now by considering some of the most influential models of the effects of advertising.

Hierarchy of effects models Lavidge and Steiner's six-step model. Lavidge and Steiner's (1961) model is one of the oldest and most influential models in advertising. It argues that successful advertising must bring about a sequence of six steps among consumers: awareness \rightarrow knowledge \rightarrow liking \rightarrow preference \rightarrow conviction \rightarrow purchase. For example, to successfully influence the prospective buyer of a new camera, (1) an advertisement must create awareness that a certain new camera model exists (e.g., a digital camera from a certain manufacturer); (2) the advertisement must transmit some *knowledge* of what qualities the camera offers (e.g., good pixel quality); (3) building upon this knowledge, the potential buyer must develop *liking* for the product; (4) not only must she like the camera, she also has to develop a preference for the product over all other possibilities (e.g., other digital cameras); (5) she must couple her preference with a desire to buy and the conviction that it is wise to purchase; and (6) she must actually *purchase* the product.

Thus, Lavidge and Steiner (1961) assume, as does McGuire's (1968, 1985) information processing model, that the recipient of an advertisement has to go through a number of steps until he or she carries out the intended behaviour change. Lavidge and Steiner argue that each of the intervening steps is a necessary condition for subsequent steps; omitting a step will effectively prevent progress to the following steps. Thus, for example, the process may stop at the awareness step (e.g., due to lack of information), or before purchasing (e.g., due to lack of money). Many practitioners see this step model as helpful because each step offers a possible starting point for designing campaigns (e.g., increasing awareness by increasing publicity for the respective product, designing persuasive TV commercials to convince consumers of the advantages of the product). Meanwhile, however, doubts have been cast on step models by evidence that recipients can be influenced without going through all of the specified steps. For example, recipients may develop a positive attitude towards a product without comprehending the arguments contained in the message (e.g., because the advertisement shows an admired celebrity endorsing the product; cf. Greenwald, 1968; Petty & Wegener, 1998a). Furthermore, recipients may be influenced by subliminal persuasion without showing conscious attention towards the ad or the TV commercial, and without learning much about the respective product (e.g., Karremans, Stroebe & Claus, 2006; Strahan, Spencer & Zanna, 2002; see Chapter 7, this volume).

Ray's three-orders hierarchy model. In Lavidge and Steiner's (1961) and McGuire's (1985) models, learning about features of the product is seen as the basis for developing a positive attitude towards the product, which in turn is regarded as the determinant

Learning hierarchy (learn-feel-do)	Dissonance- attribution-hierarchy (do-feel-learn)	Low-involvement- hierarchy (learn-do-feel)
If recipients are	lf recipients are	If recipients are not
involved and	involved, but	involved and
alternatives are clearly	alternatives are not	alternatives are not
distinguishable	clearly distinguishable	clearly distinguishable
1. learning	1. behaviour change	1. learning
2. attitude change	2. attitude change	2. behaviour change
3. behaviour change	3. learning	3. attitude change

Figure 15.3 The three-orders hierarchy model (Ray, 1973, 1982).

of subsequent behaviour (e.g., purchase). In his *threeorders hierarchy model*, Ray (1973; see Figure 15.3) calls this sequence of steps the 'learning hierarchy', i.e., learning about the features of the object is followed by attitude change, which is fol-

three-orders hierarchy model a model according to which people undergo different orders of cognitive, evaluative and behavioural reaction processes in response to an advertisement, depending upon whether they are involved and whether clear alternatives between the products can be distinguished

lowed by behaviour. According to Ray (1973, 1982), the learning hierarchy ('learn-feel-do') accurately describes only situations in which the audience is involved (i.e., interested in the product) and when there are clear differences between alternatives (e.g., a recipient who is looking for a new car sees an advertisement that offers a 10 per cent discount for a car if it is bought before the end of the year). In this situation, recipients thoughtfully examine the information shown, make evaluations and then carry out the respective behaviour.

Requiring recipients' involvement and the existence of clear differences between alternatives already sets limits on the applicability of the learning hierarchy, because people are typically exposed to many advertisements in a given day and are unlikely to devote attention to most of them. Therefore, Ray (1973) specifies two additional sequences or hierarchies of steps that can lead to advertising effectiveness and that differ from the conditions underlying the learning hierarchy. First, there are situations where even involved recipients have difficulties in discerning the advantages and disadvantages of the products offered. For example, a customer may have to choose between different banks or services without having adequate knowledge or while being under time pressure. For such situations, Ray predicts the dissonanceattribution hierarchy ('do-feel-learn'), i.e., behaviour constitutes the first step (e.g., time pressure may enforce a purchase even before learning has taken place). In turn, the fact that the behaviour has been carried out induces attitude change (Festinger, 1957) or triggers self-perception processes (e.g., 'I bought this product, therefore I seem to like it'; cf. Bem, 1972; Olson & Stone, 2005). In addition to dissonance reduction or self-perception processes, direct experience associated with the consumption of the product may give rise to new information about the product, its assets and disadvantages. For example, the customer may find out that there are certain 'hidden' costs of the bank account that she did not anticipate. Therefore, in the dissonance-attribution hierarchy, not only is the order of steps different from the learning hierarchy, but also the 'learning' involved is different: rather than receiving indirect knowledge about the product through an advertisement, the consumer gains *direct* knowledge, and information processing may be guided by dissonance reduction or self-perception.

The second alternative hierarchy distinguished by Ray (1973), the low-involvement hierarchy ('learn-do-feel'), is based on a notion developed by Krugman (1965). According to Krugman (1965), TV audiences are often passive and not really involved, mainly when they are exposed to advertising for trivial products that have little or no advantage over competing products (e.g., different brands of sweets, detergents, toothbrushes). Nevertheless, in these cases, advertisements might influence viewers by improving their recognition of the brand name or image. The next time they are in a shop, they might prefer to buy this product rather than one of its competitors due to its increased accessibility (see Chapter 4, this volume). The subsequent direct experience with the product may then change their attitude towards it, provided it turns out to be a good product that serves its function. In this case, the proposed sequence is learning-behaviour-attitude change, where the 'learning' is somewhat superficial and much less elaborate than envisaged in the learning hierarchy. Thus, for low-involvement products, the three-orders hierarchy model recommends that advertisers invest money in advertising with the aim of maximizing mere exposure and/or accessibility of the respective brand. This should give the brand an advantage in situations where the consumer has to choose among different brands from the same product category, for example when faced with an array of products in a supermarket aisle (Solomon, 2004).

It should be obvious that the low-involvement hierarchy parallels the notion of peripheral or heuristic processing (see Chapter 7, this volume) if the assumption is made that the improved recognition of the brand is accompanied by processes of mere exposure and/or by a heuristic such as 'I like what I know'. The learning hierarchy corresponds closely to the notion of central or systematic processing in the dual-process framework. In contrast, the dissonance-attribution hierarchy cannot be unambiguously related to either peripheral/heuristic or central/systematic processing, because it constitutes a mixture of peripheral processing (selfperception; e.g., 'I must like it since I chose it') and more elaborated processing (information gathered from direct experience with the product). To sum up, the three-orders hierarchy model anticipated key assumptions of dual-process theories, but its conceptual clarity seems lower than that of the elaboration likelihood model (ELM; Petty & Cacioppo, 1986a) and the heuristicsystematic model (HSM; Chaiken, Liberman & Eagly, 1989). The dissonance-attribution hierarchy involves both peripheral and central processes, yet since peripheral and central processes have been shown to have different antecedents and consequences (Petty & Wegener, 1998a), they should be kept theoretically separate, as is the case in the ELM and HSM.

The integrated information response model Although Ray's (1973) concept of the dissonance-attribution hierarchy is somewhat difficult to categorize in terms of dual-processing theories, its more general idea, that the sequence of steps aimed at influencing consumers often involves the consumer's own behaviour, is well taken. Frequently, marketing practitioners supplement advertisements by providing consumers with direct experience with the product, such as a free trial of the product, a trial subscription or a test drive. Advertisers hope that this combined strategy will increase the resulting influence. Precisely this position is held in the integrated information response model (Smith & Swinyard, 1982), which takes into account information from two sources, information from the advertisement and information from direct experience with the product. Smith and Swinyard argue that low involvement among advertisement recipients is by far the most common situation because, with thousands of advertisements vying for their attention, consumers cannot be expected to examine all of them carefully. It may therefore be wise for advertisers to provide consumers with direct experience with the respective product in addition to indirect experience such as an advertisement. For example, consumers can be given a small sample of a new chocolate bar or persuaded to take out a trial subscription to a magazine. This (supplementary) strategy may be effective in cases when advertisers can be sure that the information resulting from this experience will be positive and when the adoption of this strategy is cost effective (as is the case with cheap products such as samples of sweets or with letting consumers test drive a new car).

Smith and Swinyard (1982) assume that exposure to advertising will normally generate only minimal message acceptance because recipients show a lack of interest or perceive advertising as being guided by a vested interest of the source. Therefore, recipients will discount the message, derogate the source or begin to counterargue (cf. Obermiller & Spangenberg, 1998). As a result, advertising in this case will produce only a weak positive evaluation, which is insufficient to motivate the consumer to buy the product. However, the positive evaluation of a product due to a skilfully produced advertisement should at least be strong enough to induce recipients to *test* the product. This test, on the other hand, yields direct experience, leading to stronger convictions and stronger (positive) evaluations, which may result, finally, in commitment. Smith and Swinyard (1982) ascribe the stronger effects of direct



Plate 15.4 *Providing free trials of a product is one advertising strategy to increase influence on consumer behaviour.*

experience as compared to advertising to the fact that people tend to trust their own senses more than persuasion by other parties, and that direct experience is more vivid and leads to better recall.

Basic research yields support for Smith and Swinyard's (1982) reasoning. Research on attitudes has shown that direct experience produces stronger attitudes than indirect experience, that is, a higher correlation between attitudes and behaviour, attitudes that are more persistent, more resistant and more likely to guide information processing (Fazio, Chen, McDonel & Sherman; 1982; Priester & Petty, 2003; Regan & Fazio, 1977). This is a good example of the fruitfulness of basic research in generating a theoretical explanation for (commercial) practice.

Attitude towards the advertisement and the dual mediation hypothesis Advertisements are complex messages that combine arguments with humour, music and/or attractive visuals, integrate story elements and thus try to persuade, irritate, relax or soothe (Batra & Ray, 1985). Given this variety of effects, it is not surprising that advertising researchers postulate that not only do

attitude towards the advertisement evaluation of the advertisement (rather than the product itself) that is determined by its characteristics (e.g., visual, acoustic,

humorous).

recipients' attitudes towards the advertised product predict their purchasing intentions, so too do their *attitudes towards the advertisement* itself (e.g., Yoo & MacInnis, 2005). This is especially likely when

advertisements themselves achieve a kind of cult status, be it footballer Thierry Henri promoting Renault cars, or model Claudia Schiffer dispensing with her clothes before getting into a Citroën. Indeed, as a meta-analysis by Brown and Stayman (1992) shows, the attitude towards the advertisement exerts an influence that is independent of the attitude towards the product itself. The fact that these two different attitudes have to be taken into consideration is a unique feature of the advertising domain.

Relevant research shows that the attitude towards the advertisement can assume at least three different roles (e.g., Gardner, 1985; Park & Young, 1986). (1) Affective reactions to the advertisement may influence the attitude towards the brand, as in classical conditioning or in priming when a positively evaluated stimulus in the advertisement (e.g., a beautiful woman) improves the perceivers' evaluation of the brand (see also MacKenzie, Lutz & Belch, 1986). In terms of the ELM, this would be regarded as a peripheral effect. (2) The exposure to the advertisement elicits the expectation that using the brand will result in positive consequences (e.g., a TV commercial for a food product creates the expectation of the pleasures of cooking or eating the food; cf. Gardner, 1985). In terms of the ELM, in this case, the advertisement (or parts thereof) functions as an argument for using the product. (3) The attitude towards the advertisement can facilitate or bias the processing of the message (e.g., when a celebrity is depicted in the advertisement, it attracts attention, or pleasant music facilitates its elaboration; cf. Park & Young, 1986). In terms of the ELM, such variables influence the elaboration of a message by increasing the extent of argument processing (Petty, Cacioppo, Sedikides & Strathman, 1988).

Brown and Stayman's (1992) meta-analysis also found evidence for a twofold influence of attitude towards the advertisement upon the attitude towards the brand, namely, a direct and an indirect



Figure 15.4 The dual mediation model (Brown & Stayman, 1992).

influence. The direct influence consisted of a significant relationship between attitude towards the advertisement and attitude towards the brand. The *indirect* influence consisted of (1) a significant relationship between attitude towards the advertisement and brand-related beliefs on the one hand, and (2) a significant relationship between brand-related beliefs and attitude towards the brand on the other. Taken together, these two influences are called the dual mediation model (e.g., Brown & Stayman, 1992; Coulter & Punj, 2004; MacKenzie et al., 1986; see Figure 15.4). Brown and Stayman (1992) did not analyse the psychological processes underlying the two paths of the dual mediation model, but both are consistent with the analysis above. The direct effect is presumably due to affective processes such as conditioning or to aspects of the advertisement acting as arguments for using the brand. The indirect effect is possibly due to variables that influence the extent and/or direction of processing, such as elements of the advertisement including celebrity endorsers or attention-grabbing effects that influence the extent or direction of processing.

According to the results of research on the dual mediation model, advertisers should use either (or a combination) of the following strategies: advertisements should try to transfer positive affect to the respective product (e.g., by showing beautiful landscapes), but they should also try to create positive expectations in the recipients if they use the respective product (e.g., by portraying a character who shows how easy it is to install a new piece of furniture from IKEA in one's home and/or by trying to present a well-known actor in the advertisement who increases the recipients' interest in listening to the message). Returning to our previous example involving Michael Schumacher, the designers of the video clip seem to have achieved all three aims by associating Switzerland with beautiful landscapes and portraying an attentiongrabbing celebrity who argues that visiting or living in Switzerland will increase one's quality of life.

The dual-process perspective

What is a brand extension?

How might comparative advertisements increase the persuasive impact of an advertisement?

As can be seen from the above description, the dual-process approach is suitable as a framework for the different models and concepts described above. Advertising situations can be assigned to some more or less extreme point of the elaboration continuum: direct experience (which is assumed to be an important source of information in the integrated information response model) can be regarded as increasing the elaboration likelihood and decreasing the tendency for biased processing. The concept of attitude towards the advertisement can also be integrated into the ELM: this type of attitude may be related to peripheral cues, to arguments for consuming the product, or it may influence the extent or direction of the elaboration.

As our discussion of the dual-process perspective in advertising is necessarily selective, we will conclude our discussion of the application of dual-process models here by discussing only two additional important mechanisms in advertising. One of them is located on the low end of the elaboration continuum – advertising by using *brand extensions* – while the other is associated with more elaboration – *comparative advertising*.

Advertising under conditions of low elaboration likeli-

hood: Brand extensions We have already addressed low elaboration mechanisms such as classical conditioning and subliminal advertising (see Chapter 7, this volume). An additional low elaboration mechanism has to do with *categorization*. To create a new image for every new product would be much too costly. Therefore, the majority of new products are launched under a well-established brand name such as Adidas, Gucci, Nestlé

brand extension new product that is launched under an already established brand name

or Volvo (Shavitt & Wänke, 2004; Wänke, 1998). Such launches are called *brand extensions* because their aim is that consumers categorize the new product in the established brand category and transfer its associated image to the new product.

One factor facilitating whether a new product is categorized as part of an existing brand is fit, that is, the degree of similarity of the new product to either the brand category or the brand image (Loken, 2006; Wänke, Bless & Schwarz, 1998). For example, a new compact car with typical features of a Volkswagen or a Toyota (such as design of front end, headlights, etc.) fits in the category of other cars from the respective car producer. After consumers have categorized the new product as an extension of the familiar brand, they can be expected to assimilate the image of the new brand member to the image and evaluation of the existing brand. In addition to the degree of similarity, another factor that facilitates the categorization of a new product as a brand extension is simply the brand name given to the extension (Wänke, 1998; Wänke et al., 1998): employing the same name for the extension, independently of physical similarity, may facilitate categorization and thus enhance the transfer of brand beliefs to the extension. An interesting example is the new smaller Volvo, the S40. The shape of the new model differs considerably from the well-established 'square' lines of the redoubtable Volvo (called by its detractors a 'tank on wheels', with its association with safety and reliability). Tellingly, Volvo marketed the new product with advertisements showing its sleek new shape, but alongside the slogan: 'Underneath it's a Volvo' (i.e., with the same motor, safety features, etc.).

Wänke et al. (1998, Experiment 1) found evidence for the assumption that the brand name facilitates the categorization of a new product as a brand extension (see Research close-up 15.1).



RESEARCH CLOSE-UP 15.1

Social psychology and marketing: Categorization and brand extensions

Wänke, M., Bless, H. & Schwarz, N. (1998). Contrast and assimilation in product line extensions: Context is not destiny. *Journal* of Consumer Psychology, 7, 299–322.

Introduction

Often, new products are launched as extensions of already established brands. Marketing departments adopt this strategy in the hope that consumers will transfer the evaluation and/or image of the core brand to the extension. As Wänke et al. argued, this transfer can be conceptualized as a categorization, namely, assigning the extension to the brand category. Such categorization decisions can be influenced by several variables, e.g., by similarity of the extension to the brand, or just by the name assigned to the extension. In two studies (only the first is presented here), the authors investigated whether names of car models that resembled the names of previous models would facilitate the transfer of brand beliefs. The researchers tested two hypotheses:

-lypothesis 1	A new model (e.g., a compact car) should
	be rated higher on attributes typical of a previ-
	ous product line (e.g., a series of sports cars)
	when the name of the new model suggests
	continuation of the previous line rather than
	discontinuation.

Hypothesis 2 A new model should be rated lower on attributes *atypical* of the previous product line when the name of the new model suggests *continuation* of the previous line rather than discontinuation.

Method

Participants

Forty-nine students took part in this study.

Design and procedure

Participants first formed impressions of a fictitious brand of cars ('Winston') by reading descriptions of the company's three recent models. The models were described as sports cars and had the names *Winston Silverhawk*, *Winston Silverpride* and *Winston Silverstar*. After reading the three descriptions, participants read the description of a compact car that was presented as small but roomy and neat looking. There were two experimental conditions. In the first (continuation) condition, the compact car was introduced as *Winston Silverray*. In the second (discontinuation) condition, the car was named *Winston Miranda*. After reading the description, participants had to evaluate the car along 10 dimensions.

According to the results of a pre-test, five of these dimensions typically apply to sports cars (advanced technology, fast, sports car, high quality, great design) and five dimensions typically do not apply to sports cars (safe, family car, roomy, comfortable, practical). According to another pre-test, the different names of the extension did not evoke significantly different evaluations on the 10 dimensions among participants who read the descriptions of the compact car (with the name assignment *Winston Silverray* vs. *Winston Miranda*) but were not exposed to descriptions of the previous models.

In a first step, scores on the five dimensions with high typicality and scores on the five dimensions with low typicality were averaged to yield two reliable indices. These two indices were then analysed in a 2 (continuation vs. discontinuation) \times 2 (typicality for sports cars: low vs. high) mixed design, with continuation as a between-subjects factor and typicality as a within-subjects factor.

Results

Results revealed a significant interaction between the two factors, continuation and typicality (see Figure 15.5). Further analyses showed that participants rated the compact car slightly higher on sports car-typical attributes (and significantly lower on sports car-atypical attributes) when the name suggested continuation rather than discontinuation.



Plate 15.5 This advertisement tries to extend the safety image of the Volvo 200 series to the new S40, although the two models differ considerably in shape.



Figure 15.5 Average evaluation of target car as a function of typical vs. atypical dimensions and continuation vs. discontinuation of product line of a sports car brand (Wänke et al., 1998). Scores reflect a compound measure of five ratings that were all assessed on a scale ranging from 1 (does not apply at all) to 9 (applies very much).

Discussion

The significant interaction between the two factors was generally consistent with the predictions, although the effect was only significant for sports car-atypical attributes (thus confirming only hypothesis 2). In seeking to explain why the result was not significant for sports car-typical attributes, the authors referred to the particular materials used. Some of the dimensions selected as typical for sports cars were not necessarily atypical for compact cars (e.g., high quality, great design). Although this explanation is post hoc, the results of a second experiment with a different design were also consistent with the authors' categorization predictions.

They also argued that the transfer of brand beliefs to a new extension may be influenced not only by perceived fit with respect to features of already established brand names but also by several additional characteristics such as product display, communication strategies or packaging. These strategies may be used individually or in combination. Thus, marketing executives have a wide array of potential tools to influence consumers' perception of a new product under conditions of low elaboration.

Advertising under conditions of high elaboration likelihood: Comparative advertising Comparative advertising

involves one brand (the sponsor brand) comparing itself to another

brand (the *comparison brand*). A famous example of this is the 'Pepsi Challenge' advertisement, used by Pepsi-Cola to challenge its rival, Coca-Cola. In the advertisement,

comparative advertising an advertisement that compares one brand ('sponsor brand') with a comparison brand with the aim of convincing recipients of the sponsor brand's superiority drinkers are shown to prefer the taste of Pepsi in a blind tasting. Several studies have provided evidence that comparative advertising increases elaboration of the advertisement (e.g., Dröge, 1989; Pechmann & Esteban, 1994). Of course, from an advertiser's perspective, increased elaboration is desirable because it fosters rather strong attitudes. Thus, provided that the comparative advertisement offers strong positive arguments for the sponsor brand, we would expect the advertisement to cause strong positive attitudes that eventually lead consumers to purchase the product.

As Priester, Godek, Nayakankuppum and Park (2004) argued, however, previous research did not establish a clear explanation of the facilitative effects of comparative advertising on elaboration. Normally, comparative advertising involves a comparison brand that belongs to the leading market brands. Thus, consumers are quite familiar with such comparison brands and - assuming that the high market share of the comparison brand is due to the positive qualities of this brand - tend to perceive that the comparison brand has some desirable attitudes. But how does this lead to high elaboration of a comparative advertisement? In an attempt to provide an explanation, Priester et al. (2004) argue that often in comparative advertising, not only does familiarity vary between sponsor and comparison brand, so too does similarity. Arguably, an unfamiliar sponsor brand may be seen as 'new' or 'small', whereas the comparison brand may be regarded as dissimilar, e.g. 'old' or 'big', in contrast. Perceiving dissimilarity should enhance elaboration. If this reasoning is correct, comparing two high market share products should lead to less elaboration (because both are perceived as having common attributes such as 'old' and 'big') than comparing a high market share product to a low market share comparison.

To test these predictions, Priester et al. (2004) conducted an experiment with a 2 (brand similarity: high vs. low) \times 2 (argument quality: strong vs. weak) design. They confronted college students with an advertisement that compared a high market share toothpaste brand (Crest) to either another high market share brand (Colgate) or to a low market share brand (Zact). The sponsor brand (i.e., Crest) and the comparison brand (Colgate or Zact, respectively) were presented together in a mock-up advertisement in a health magazine. Both toothpastes were depicted visually on one



Plate 15.6 The 'Pepsi Challenge' is an example of comparative advertising.



Figure 15.6 Attitudes as a function of similarity of brands and argument quality (Priester et al., 2004, Experiment 1).

page, with the comparison brand displayed as about a quarter of the size of the sponsor brand. The text at the top of the page read either 'Why should you choose Crest toothpaste instead of Colgate?' or 'Why should you choose Crest toothpaste instead of Zact?', respectively. Argument quality was manipulated by presenting either strong or weak arguments for Crest toothpaste. As Figure 15.6 shows, the results were consistent with the predictions of Priester et al. (2004). The impact of strong vs. weak arguments on attitudes was greater under conditions of dissimilarity (Crest vs. Zact) than similarity (Crest vs. Colgate), thus indicating greater message elaboration in this condition.

SUMMARY

Advertising has several powerful instruments at its disposal to influence consumers: providing consumers with arguments about the advertised products, working with affective techniques (classical conditioning, mere exposure), creating advertisements that increase the amount and extent of elaboration of the accompanying arguments, supplementing advertisements with direct experience in the form of product trials, and working with brand extensions or comparative advertisements. Each of these strategies represents a potentially powerful instrument provided that the influencing agents ensure the respective antecedent conditions, in terms of motivation and ability of the recipients. As our selective treatment of advertising has also shown, the diverse theoretical approaches that were designed specifically for advertising can be translated into the dualprocess framework. This framework is not only empirically well supported, it is also much more powerful and integrative than the lower-order theories described above and avoids some of their ambiguities.

SOCIAL PSYCHOLOGY IN THE WORKPLACE

If we asked you what was the most important type of behaviour in organizations, the first thing that might come to mind is the employees' (work) performance. Organizations need motivated and productive employees to carry out their jobs and therefore ensure that the organization remains profitable and prosperous. However, organizations are also very social places that involve interactions with colleagues, customers and supervisors, and thus a great deal of interdependence between people - even more so today than in the past because team work has evolved, over the years, as the dominant form of work organization (Ilgen & Pulakos, 1999). In team work, but also in individual work with colleagues and supervisors, maximizing one's own performance does not necessarily lead to the best possible outcome for the team or the organization as a whole; in fact, an exclusive focus on individual performance can make everybody worse off, because people may be unwilling to help each other, share information and pull together towards a common goal. Therefore, research has broadened its focus to include team-supportive performance behaviours such as being helpful or courteous to colleagues, acknowledging the fact that workplaces are social places in which individuals act interdependently.

When we are interested in the social groups that form organizations and the social processes that take place in organizations, we look at how social contexts affect the thoughts, feelings and behaviours of individuals. Recall the view of Floyd Allport (1924, p. 4) that '[t]here is no psychology of groups which is not essentially and entirely a psychology of individuals' (see Chapter 1, this volume). One important social psychological measure that you have become familiar with during the previous chapters is that of attitude. Therefore, we will make a case for the importance of the attitudes that individuals develop in organizational contexts. These attitudes mediate the impact of job characteristics and the social context on work outcomes. Figure 15.7 shows three foci of organizational behaviour research: work outcomes, job attitudes and the determinants of job attitudes. We will first turn to the right side of Figure 15.7 and describe four categories of organizational behaviours that subsume the work outcome in organizations: task performance, contextual performance, counterproductive work behaviour and withdrawal.

Work outcome

Why do we differentiate task performance from contextual performance? What are counterproductive work behaviours?

Task performance Most people would agree that the key outcome variable in work settings is job performance. In former times,

job performance was treated as equivalent to *task performance*, i.e., how well one accomplishes the duties and tasks one is hired to do, what

task performance the degree of accomplishment of the duties and tasks one is hired to do

comprises one's current job description. For instance, car sales personnel need to sell cars, secretaries have to schedule their bosses' agendas and journalists must hand in articles for deadlines. Task performance can be measured in formal or informal performance appraisals, using supervisory or peer ratings or, in some areas such as production or service, in quantifiable, objective measures, e.g., number of units produced or number of incoming calls answered.

Sometimes, however, high task performers still lack what it takes in the workplace. Think, for example, of a computer nerd who develops the most complex codes with great enthusiasm but feels unable to present them to his supervisor and does not consider it necessary to instruct non-experts how to use them.

Contextual performance In our example, the computer nerd

fails to maintain or enhance the context of work for his colleagues and supervisor. This aspect of performance is called *contextual performance*. One important reason for the increasing attention towards

contextual performance an employee's extra-role behaviour, e.g., helping colleagues, which is not part of the job description but which promotes the effective functioning of the organization



Figure 15.7 Determinants of job attitudes and how they relate to work outcomes.



Plate 15.7 Employees have to fulfil individual tasks as well as work together as a team.

contextual performance is that employees not only have to fulfil their individual tasks, they also have to work together as a team and create an environmental context that promotes individual *and* team performance.

Whereas task performance is highly job specific, contextual performance behaviours such as volunteering and cooperating apply to almost all tasks. They support the environment in which task performance occurs. Supervisors attach great importance to contextual performance behaviours. Indeed, an additional reason for the broadened research perspective on performance is the empirical finding that supervisors look at both task *and* context behaviours when evaluating their employees' performance (e.g., Rotundo & Sackett, 2002) or when judging applicant behaviour in the selection interview (Mackenzie, Podsakoff & Fetter, 1991).

The original concept related to contextual performance was suggested by Organ (1988) and named organizational citizenship behaviour (OCB). Since its redefinition by Organ in 1997, OCB has become highly similar to contextual performance (Borman & Motowidlo, 1993), and we will use the concepts interchangeably in this chapter. Thus, contextual performance is an employee's extrarole behaviour that is not part of the job description, which may or may not be explicitly recognized by the organization's reward system but which promotes the effective functioning of the organization. Researchers have proposed several taxonomies concerning the dimensions of such extra-role behaviour. For example, Smith, Organ and Near (1983) asked managers in interviews to identify 'instances of helpful but not absolutely required . . . job behaviour' (p. 656) and to rate how characteristic each behaviour was for the employee. They performed a factor analysis on the ratings and found a specific altruism factor, i.e., helping a specific person in a specific situation, and a generalized compliance factor, i.e., impersonal behaviours such as conforming to organizational norms.

Task performance has been found to correlate at around r = .25 with contextual performance, and we can see from the size of the

correlation that they are indeed distinct performance dimensions: not all high task performers also engage in helpful or courteous behaviour, and not all employees who show strong extra-role engagement earn high scores on formal work appraisals. Contextual performance has been linked to enhanced organizational effectiveness such as increased efficiency and productivity (e.g., Podsakoff, Ahearne & MacKenzie, 1997; Walz & Niehoff, 1996). However, little is yet known about how, precisely, contextual performance affects these outcomes. Theoretically, contextual performance should lead to more efficient use of resources, enhanced coordination between employees and better-qualified employees (because teams with supportive work contexts are more attractive to applicants).

Counterproductive work behaviour Counterproductive

work behaviour is the opposite of contextual performance and

subsumes all voluntary behaviours that violate organizational norms and thus threaten the well-being of the organization. From Chapter 13, you are already familiar with many negative conse-

counterproductive work behaviour all voluntary behaviours that violate organizational norms and thus threaten the well-being of the organization, e.g., sabotage, theft

quences that can be associated with teamwork, such as reduced individual performance (social loafing). Although applied research has, to date, focused on how individual behaviour harms the organization as a whole, while basic social psychological research has focused on small groups, you can easily identify social loafing as one form of counterproductive behaviour in work teams. Other forms of counterproductive behaviour include theft and sabotage, which cause financial losses, or harassment and bullying, which cause psychological problems (see Chapter 8, this volume). Questionnaires such as the 'Workplace Deviant Behaviour Scale' by Bennett and Robinson (2000) assess counterproductive work behaviour by asking employees and/or supervisors about employee behaviour directed against the organization (e.g., 'Taken property from work without permission') and behaviour directed against individuals (e.g., 'Made fun of someone at work').

Withdrawal Withdrawal is another outcome that organizations should be eager to avoid. It subsumes turnover (termination of an individual's employment with a given company), absenteeism and lateness, with lateness being the mildest form of withdrawal and turnover being the most extreme. What makes people drop out of an organization is one of the important questions when we consider organizational behaviour. Recruiting is costly for the organization, and it is also strenuous for the individual employee who is looking for a new job: it involves writing applications, undergoing assessments and interviews, and socializing with a new team and organization.

You are now familiar with the most crucial forms of organizational behaviour, namely task and contextual performance, counterproductive behaviour and withdrawal. Let us now move to the middle box of Figure 15.7 and look at how these behaviours are linked to employees' job attitudes. Can we predict positive and negative organizational behaviour from employees' attitudes?

Job attitudes

What kinds of organizational behaviour can we predict from employees' job attitudes?

What makes employees put in extra effort, cooperate and work together as a team?

Every day, people form, confirm and change opinions about specific aspects of their work situation. They also develop general evaluations of their job situation as a whole. We call such specific and general evaluations *job attitudes*. Just like the social attitudes

job attitudes an employee's evaluations of the job situation, on a continuum ranging from positive to negative reactions, subsuming cognitive, affective and behavioural components

job satisfaction the most general job attitude, regarding how an employee evaluates the job as a whole

you are familiar with from Chapter 6, job attitudes lie on a continuum ranging from positive to negative reactions and have cognitive, affective and behavioural components (e.g., Hulin & Judge, 2003).

The most general measure of how employees evaluate their jobs is called overall *job*

satisfaction. It is important in its own right, because people should be content with their work and workplace. In addition, job satisfaction is an important concomitant of the work outcomes we discussed above, because, as you know, attitudes are related to behaviour and, consequently, job attitudes are related to work behaviour. For example, job satisfaction has been found to correlate at around r = .30 with the contextual performance behaviours that promote teamwork and cooperation (Organ & Ryan, 1995). Because, as is the case for most organizational research, data from several self-report measures of different concepts are gathered at one point and correlated, we do not know whether contented employees engage more readily in contextual behaviours or whether contextual performance causes employees to be more satisfied with their job because the work context is more pleasant and supportive.

The relationship between job satisfaction and task performance has long been a hot topic in applied psychology. From the 1950s to the 1990s, most researchers agreed that there is hardly any relationship at all (Brayfield & Crockett, 1955; Iaffaldano & Muchinsky, 1985). However, the most comprehensive and methodologically sound meta-analysis on this question showed that there is a reliable correlation around r = .30 (Judge, Thoresen, Bono & Patton, 2001). In their influential article, Judge et al. (2001; see Suggestions for Further Reading, this chapter) also discuss all possible causal relationships but state that, just as with contextual performance, we cannot conclude to date whether satisfaction causes performance, whether performance causes satisfaction, or whether they influence each other reciprocally over time.

With regard to turnover, longitudinal studies in which predictors have been measured at an earlier point in time than turnover occurrence found that earlier dissatisfaction with one's job predicts later turnover in a reliable way (Griffeth, Hom & Gaertner, 2000; Sutton & Griffin, 2004).

A more specific job attitude is an employee's commitment to the organization and its goals, an attachment that exists between the individual and the organization. We can further specify affective,



PIONEER

Timothy A. Judge (b. 1962) graduated from the University of lowa and the University of Illinois and received his doctorate from the University of Illinois at Urbana-Champaign in 1990. He was a professor at Cornell University and the University of lowa and is currently at the University of Florida. He has conducted applied research on job attitudes and work outcome, leadership and individual differences, and has published some highly influential meta-analyses and reviews on job attitudes and work outcomes. His work has been influential for both research and organizations because he combines real-world data with psycho-

logical concepts and publishes in psychology as well as in management journals. He has received awards from, among others, the Society of Industrial and Organizational Psychology and the Academy of Management.



continuance and normative organizational commitment, which are influenced by different aspects of the workplace and imply different consequences for work outcomes, but which employees can experience simultaneously to some degree. Figure 15.8 depicts the proposed relationships between the forms of organizational commitment and their determinants and consequences (Meyer, Stanley, Herscovitsch & Topolnytsky, 2002). However, we will restrict our attention to affective commitment because it has received by far the most research attention to date and has been shown to be a good predictor of task and contextual performance.

Affective commitment is an employee's degree of emotional attachment to, identification with and involvement in the organization. Measures of affective commitment con-

affective commitment specific job attitude depicting an employee's degree of emotional attachment to, identification with and involvement in the organization

tain questions on employees' dedication and loyalty. Employees who show strong affective commitment in the questionnaire measures are rarely absent from work and unlikely to quit their job (e.g., Jaramillo, Mulki & Marshall, 2005; Mowday, Porter & Steers, 1982). They are more satisfied with their job (correlations are around r = .60) and score more highly on task performance (correlations are around r = .30) than employees who show weak affective commitment (Van Scotter, 2000). Both turnover and performance are caused by degree of commitment: the more committed employees feel towards the organization, the more strongly they perform and the less likely they are to look for new jobs (Cohen, 1993; Vandenberghe, Bentein & Stinglhamber, 2004). Indeed, meta-analyses of turnover behaviour have established that low affective commitment is, together with job dissatisfaction, the best available predictor of turnover (Griffeth et al., 2000; Sutton & Griffin, 2004).

As you can see, job attitudes predict organizational behaviour rather well, and this is what makes them important for organizations.



Figure 15.8 Three-component model of organizational commitment (Meyer et al., 2002).

Two key questions follow from these links between job attitudes and work outcome: How can organizations ensure that their employees hold positive job attitudes? What can supervisors do to foster high job satisfaction and affective commitment in their teams?

Determinants of job attitudes

- How does group identification influence cooperation within work teams?
- Under which circumstances do employees perceive their organization as fair and rewarding?
- What can supervisors do to ensure their subordinates' commitment to the organization?

Have another look at Figure 15.7. We will now turn to the lefthand box and draw on two major aspects of work to answer this question. First, a job itself, its structure and content, determines job attitudes. Second, the daily social interactions that take place in teams and organizations are significant influences on job attitudes. We will therefore show what a motivating job should look like and describe some of the most influential processes in the employment relationship that affect job attitudes and determine organizational behaviour. **Job characteristics** Job characteristics summarize the situational variables that form a job. A theory that makes concise predictions about the influence of such characteristics on job attitudes is Hackman and Oldham's (1976) job characteristics model (JCM). As you can see in Figure 15.9, the JCM states that there are five



Figure 15.9 Job characteristics model (JCM) (Hackman & Oldham, 1976).

characteristics that make a job satisfying to employees. The first three, task identity, task significance and skill variety, are summed to form a total measure of work content. This sum is maximal if an employee's tasks are comprehensive as opposed to fragmented into small individual units (high task identity), if the tasks are important to oneself, other teams and/or people outside the organization (high task significance) and if the employee is allowed to perform several different tasks as opposed to always having to perform the same or similar ones (high skill variety). Because the three factors are summed to form a work content score, high scores on one factor can compensate for low scores on another. The other two factors of the model, autonomy and feedback, are multiplied by the work content score.

The model therefore states that autonomy and feedback are absolutely necessary characteristics of the job, and if either one is lacking (i.e., score of zero) or if the work content score is zero, job satisfaction, or the job's 'motivating potential' as Hackman and Oldham (1976) called it, is necessarily zero. For example, according to the JCM, a rather dreary job can nevertheless be satisfying if it is very important to many people, e.g., the job of an air traffic controller who observes radar points on a monitor all day, thus ensuring the safety of thousands of air passengers. This is because jobs such as air traffic control create feelings of meaningfulness and responsibility and make employees perceive their jobs as challenging and interesting (Judge, Bono & Locke, 2000).

The model also predicts that a job can never be perceived as satisfying if it totally lacks autonomy concerning how to do the job, or if it totally lacks feedback about how well the job is done, because such jobs cannot lead to such positive psychological states as meaningfulness. Thus, a mathematical function of the five characteristics determines the degree of job satisfaction an employee experiences, and organizations can estimate the motivating potential of each job.

The JCM has received a great deal of empirical support over the years. Employees state that they are satisfied and motivated if their jobs provide task identity, task significance, skill variety, autonomy and feedback. Although the job characteristics of the JCM are also correlated with task performance, the JCM is more powerful in predicting job satisfaction than in predicting task performance (Fried, 1991; Fried & Ferris, 1987; Loher, Noe, Moeller & Fitzgerald, 1985).

The employment relationship What are the most influential social processes in the workplace that affect job attitudes and determine organizational behaviour? Employees react to their work situation cognitively and emotionally. When it comes to job attitudes and satisfaction, it is the employee's perception that counts. Managers in human resources cannot debate with people about how to perceive and interpret management decisions or organizational support, but they can make an effort to understand *how* employees develop attitudes and then suggest interpretations accordingly. If supervisors know what influences their subordinates' impressions, they can design the terms of their relationship in a way that fosters positive job attitudes.

We will now look at three aspects of the employment relationship that can be traced back to social psychological theories and research and that have been successfully applied to the workplace: group identification in teams, the degree of organizational justice and the support employees receive from supervisors and the organization. All predict job attitudes and organizational behaviour quite well, and we will now have a closer look at the underlying processes.

Group identification. Take a moment to think about your own experiences with teamwork, e.g., in study groups or during team assignments. Would you agree that you are more likely to put in a lot of effort to make the assignment a success if you feel a strong sense of belonging to the team? Research has shown that it is especially contextual performance that is enhanced by team members' group identification within the team. It makes a difference to contextual performance whether you think of yourself as a single, autonomous individual who happened to be assigned to a work team based on an organization chart or whether, by contrast, you regard yourself as sharing identification with your team. As you know from social identity theory (see Chapters 5 and 14, this volume), we tend to attribute positive characteristics to members of our own ingroup (e.g., Brewer, 1996). Therefore, the more strongly you identify with your team, the more you will be likely to find your colleagues honest, cooperative and trustworthy. Recall from Chapter 13 that trust between group members facilitates the pursuit of collective instead of individual goals (Dirks, 1999). Thus, employees who strongly identify with their team tend to trust their colleagues, expect them to reciprocate effort and helping behaviour, and are therefore more willing to engage in contextual performance behaviours (Kramer, 1999; Kramer, Hanna, Su & Wei, 2001; Messick et al., 1983).

Organizational justice. Imagine that you have started your first job. You are enjoying the new challenges, you appreciate the team climate and you are very eager to make the project a success. After six months, your supervisor carries out a first performance appraisal, during which she tells you how much she likes your work and how your team colleagues enjoy working with you. She also says that now that the project is doing so well, there will be bonuses for some team members. Although she considers you one of the most productive and hard-working team members, she will distribute bonuses according to seniority, and you therefore have no chance of receiving any reward. How would you feel about this?

Organizational justice concerns how fair members of the organization perceive the resource allocation among employees to be (Greenberg, 1990). Some authors prefer the term 'fairness' over justice, but we will use the terms interchangeably in this

chapter. Justice perceptions can concern how fairly a certain amount of outcome (e.g., income) is *distributed*, quantitatively and relatively between employees or between organizational groups, and is then called *distributive justice*. Per-

distributive justice perceptions in organizations about how fairly a certain amount of outcome (e.g., income) is distributed, both absolutely and relatively, between employees or between organizational groups

ceptions of distributive justice are strong if outcomes are distributed in proportion to an individual's input. In the above example, you might have felt a sting because your supervisor considers you to be one of her best employees but gave rewards to others. Consequently, the input-to-outcome ratio in your team seems unfair. This is supported by research on how social comparison processes are affected by a team's wage dispersion, i.e., the variance of pay within the team. If team members contribute the same amount but dispersion is known to be wide, people at the low end of the pay scale are dissatisfied, reduce their effort and consider turnover (Pfeffer & Langton, 1993).

procedural justice perceptions in organizations about how fair the processes of resource allocation are Justice perception can also concern how fair the *processes* of resource allocation are, and is then called *procedural justice*. The conditions for procedural justice include, for

example, opportunities to express one's view during decisionmaking, consistency of procedures across people and time, and the extent to which all parties' concerns are fairly represented. Recently, a third justice dimension besides distributive and procedural justice has been established. *Interactional justice* concerns the fairness of interpersonal treatment (Bies & Moag, 1986) and encompasses two aspects. First, it reflects how respectfully and politely an organization treats its employees (interpersonal justice), and second, it concerns how well an organization explains and informs about why procedures are as they are, or why outcomes are distributed in the way they are (informational justice). Research close-up 15.2 gives you an example of how fair interpersonal treatment can make a difference in organizations.

Procedural justice in particular has been found to predict job satisfaction and task performance (Cropanzano, Rupp, Mohler & Schminke, 2001; Tekleab, Takeuchi & Taylor, 2005); and both procedural and distributive justice are highly positively correlated with organizational commitment and trust, moderately positively correlated with contextual performance, and strongly negatively correlated with withdrawal and absenteeism. Some longitudinal studies suggest that procedural justice determines the degree of organizational commitment. For example, Kim and Mauborgne (1993) found that unit managers of large international organizations were more committed to, and more willing to comply with, strategic decisions made by their organization when they perceived the decision-making process to be fair. Specifically, they showed high commitment to strategic decisions when decisionmaking processes were consistent throughout the organization, when there was bilateral communication between their units and the overall organization, and when they felt fully informed about the decisions made.

Why and how does the perception of fair procedures lead to more positive reactions? Three answers have been offered to this



RESEARCH CLOSE-UP 15.2

Interpersonal and informational justice

Greenberg, J. (1994). Using socially fair treatment to promote acceptance of a work site smoking ban. *Journal of Applied Psychology*, *79*, 288–297.

Introduction

The adverse effects of smoking concern not only smokers but also non-smokers who inhale secondary, or side-stream, smoke. In recent years, smoking bans have been implemented in more and more public places and organizations throughout Europe and North America. This study is a field experiment that investigates how organizations can increase acceptance among smoking employees when implementing a worksite smoking ban.

Previous research had shown that employees feel fairly treated if supervisors provide explanations of decisions (informational justice) and if supervisors treat them with respect and dignity (interpersonal justice). The author therefore hypothesized that the smoking ban would gain greater acceptance if employees received high rather than low amounts of information, and if the ban were announced in a manner demonstrating high rather than low social sensitivity. In addition, the authors hypothesized that heavy smokers, especially, would show greater acceptance of the ban if high amounts of information were presented and high amounts of social sensitivity were shown.

Method

Participants

Participants were 732 clerical employees who worked in a large financial services organization, most of whom had no managerial responsibilities (63.25 per cent were white, 29.78 per cent black and 5.33 per cent Hispanic; 60.25 per cent were female; 28.96 per cent were smokers). With regard to smoking behaviour, the sample was representative of US national trends and highly similar to samples used in previous research.

Design and procedure

The experimental design manipulated two between-subjects factors and used level of smoking as a third, quasi-experimental factor. The overall design was 2 (social sensitivity: high/low) \times 2 (information level: high/low) \times 3 (smoking: no/light/heavy). Participants were randomly assigned to one of the experimental conditions by being asked to return to one of four different meeting rooms in which they had previously met for a training program.



Figure 15.10 Improving acceptance of a smoking ban by using fair procedures (Greenberg, 1994).

Participants watched a videotape in which their company president announced the new worksite smoking ban (participants thought it was a live broadcast from corporate headquarters). In the tape, the president presented either only the most cursory information about the reason for the smoking ban (low-information condition) or a large amount of detailed information by means of charts and graphs detailing the hazards of smoking, remarks about health risks to smokers and non-smoking co-workers, and information about the costs of smoking to the company (high-information condition).

The president also expressed either little concern about whether the ban might be hard on smokers (low social sensitivity condition) or strong concern by acknowledging that smokers might find it difficult to refrain from smoking, and by explaining the health concerns that prevailed in the decision (high social sensitivity condition).

Immediately after the president's announcement, participants stated their acceptance of the ban in a questionnaire. After the experiment, participants were provided with a thorough explanation of the study. Participants in the low-information and low social sensitivity conditions watched a debriefing tape in which the president provided high amounts of information and social sensitivity. This was done to ensure that all participants, regardless of condition, could yield the expected positive reactions to the smoking ban.

Results

Manipulation checks showed that the author had successfully manipulated both the amount of information and the amount of social sensitivity. Analyses of the main dependent variable, acceptance of the smoking ban, showed that the hypotheses were supported. As depicted in Figure 15.10, both light and heavy smokers showed higher acceptance of the ban when confronted with high as opposed to low information and high as opposed to low sensitivity. The effect was stronger for heavy than for light smokers, as the author hypothesized. Non-smokers rated the ban most favourably, but the manipulations did not further increase their acceptance (although they passed the manipulation check, i.e., they were aware of the fair procedure). Also, when the author looked at the overall sample, without differentiating between smokers and non-smokers, the effect of information and sensitivity was additive, i.e., acceptance was overall greatest in the condition with high information *and* high sensitivity.

Discussion

This study showed that organizations can buffer negative reactions of their employees to new company policies, such as a smoking ban, by providing thorough information and by announcing the policies in a manner that shows considerable awareness of the inconvenience it is likely to cause. The author states that high information provides informational justice, whereas awareness of inconvenience (social sensitivity) shows interpersonal justice. Thus, employees feel fairly treated and respond to such treatment with higher acceptance. Interestingly, it was especially the heavy smokers who significantly increased their acceptance, although light smokers also increased their acceptance, albeit less prominently. One limitation of the study is that the more informative and more socially sensitive message was also considerably longer than the control message. Length of message was thus confounded with the manipulation. question. The original, *instrumental* explanation is that people want to have control over the processes that lead to decisions in order to make sure that the outcome is fair, and that fair procedures suggest that they have such control (Thibaut & Walker, 1978). A second explanation is that people think that procedural justice indicates how much they are appreciated by the team, supervisor or organization, and how well they are accepted in the team or organization (Tyler & Lind, 1992). According to this *relational* approach, people infer their social standing from procedural information and reciprocate this degree of belongingness by being more accepting of outcomes.

The most integrative explanation to date was offered by van den Bos and colleagues (e.g., van den Bos, Lind, Vermunt & Wilke, 1997) in their *substitutability* explanation. They attempted to integrate distributive and procedural justice by suggesting that most everyday situations provide relatively more procedural than distributive information. We will now take a closer look at this explanation.

According to Adams's (1965) equity theory, we judge our outcomes to be fair when our input-to-outcome ratio is comparable to other people's input-to-outcome ratio (see Chapters 10 and 12, this volume). It is therefore not a question of absolute outcome but outcome relative to the individual input. However, as van den Bos (2005) states, we often lack information about others' inputs or outcomes. We often do not know what our colleagues earn, and it is even harder to estimate how much they work and how well they perform. What we do have access to, however, is procedural information. According to van den Bos and Lind (2001), using procedural information as a substitute for missing distributive information is a form of uncertainty management, a heuristic to judge the fairness of outcomes when social comparison information is missing and we are uncertain of the fairness of our share of outcome. The more fair we think the procedures of selection, performance appraisal, resource allocation and so on are, the more satisfied we will be with our personal outcome of these procedures, i.e., the selection decision, our performance ratings and the resources we receive.

perceived organizational support employees' beliefs about how much the organization values their contribution and cares about their well-being Perceived organizational support. The concept of **perceived organizational support** (POS) summarizes the employees' beliefs that their organization values their contribution and

cares about their well-being. POS strongly influences the employment relationship. It is usually measured with Likert-type scales, as in the eight-item short form of the Survey of Perceived Organizational Support (SPOS) developed by Eisenberger, Cummings, Armeli and Lynch (1997) and depicted in Table 15.1.

A meta-analysis by Rhoades and Eisenberger (2002) shows that POS correlates most strongly and positively with procedural justice perceptions. Job conditions such as pay, rewards and promotions, as well as autonomy (a job characteristic you know from Hackman and Oldham's theory of work design and job satisfaction), are related to POS. The degree of support that employees experience should be of interest to supervisors and organizations because it mediates the relationship between perceived justice and work outcome. Thus if employees perceive their organization as

Table 15.1 SPOS 8-item short form (Eisenberger et al., 1997)

Perceived organizational support

- 1 My organization really cares about my well-being.
- 2 My organization strongly considers my goals and values.
- 3 My organization shows little concern for me. (R)
- 4 My organization cares about my opinions.
- 5 My organization is willing to help me if I need a special favour.
- 6 Help is available from my organization when I have a problem.
- 7 My organization would forgive an honest mistake on my part.
- 8 If given the opportunity, my organization would take advantage of me. (R)

(R) denotes that items are reverse scored.

fair, they feel that their organization is supportive, and this then increases their affective commitment to the organization, makes them contribute to the work context more readily and lowers turnover intentions (Moorman, Blakely & Niehoff, 1998; Rhoades, Eisenberger & Armeli, 2001).

Both organizational justice and POS are employees' appraisals of treatment by their organization, and both are based on fairness. They differ, however, in that justice perceptions are based on specific decisions and on how these decisions are made, whereas POS assesses employees' beliefs about the commitment the organization has to them. These beliefs evolve over the course of an individual's tenure with an organization and include many decisions made during that period of time. Thus, a single unfair decision might decrease perceived justice, but not necessarily the more general perceived support.

For human resource managers, POS might be a reliable and attractive way of assessing the quality of the employment relationship, not only because it affects job attitudes, but also because it relates directly to performance. It seems that feelings of support create a feeling of obligation in employees to aid the organization. Recall from Chapters 10 and 12 what you know about social exchange theory. Relationships are based on an exchange of material and psychological goods that follows the reciprocity norm: the more you receive, the more you are inclined to give back to the donor (Gouldner, 1960). If we apply this norm to the employee–employer relationship, employees who perceive their organization as supportive feel obliged to reciprocate and increase both task and contextual efforts (Eisenberger, Armeli, Rexwinkel, Lynch & Rhoades, 2001).

SUMMARY

Organizations should be concerned about the job attitudes of their employees. Employees who are content with their job and committed to their organization are an asset to their organization: they are likely to remain with the organization, fulfil their designated tasks and work beyond job descriptions to support colleagues and further the well-being of their employer.

We have shown that organizations have available the means to foster positive job attitudes. First, organizations can design jobs in a way that demands a variety of skills in the employees, grants high degrees of autonomy and provides feedback on job fulfilment. Second, organizational structures and supervisor team leadership behaviour should be transparent and ensure just procedures. Organizations should be eager to communicate that they appreciate their employees' contributions and support their efforts.

In sum, you have seen that practitioners in the workplace can benefit from basic research and social psychological theories to better understand the social processes in the workplace. Applied researchers have fruitfully extended the well-established concept of social attitudes to job attitudes, and found it useful for predicting work outcomes.

SOCIAL PSYCHOLOGY AND HEALTH

The present section focuses on the contributions of social psychological theories and research to the study of two major sources of health and illness, namely, *patterns of health behaviour* and *psychosocial stress*. First, we will show how social psychological knowledge can be used to explain why people engage in behaviours that are damaging to their health. We will sketch how such detrimental health behaviour patterns can be changed by social psychological means. Second, we will address the topic of psychosocial stress and its impact on health. We will discuss several stress-ameliorating factors such as dispositional optimism and the availability of social support. We will place special emphasis on stress at the workplace, given the many hours that members of the population spend working.

Behaviour and health

What are the major determinants of health behaviour? What are the main strategies of behaviour change?

The impact of behaviour on health No single set of data can better illustrate the fact that our health is influenced by the way we live than the findings from a prospective study, conducted

in the United States, of the association of certain health behaviours with longevity (Breslow & Enstrom, 1980; see also Conner & Norman, 2005). In 1965, participants in this study were asked whether they engaged in the following seven health practices: sleeping seven to eight hours daily, eating breakfast almost every day, never eating between meals, currently being at or near prescribed height-adjusted weight, never smoking cigarettes, moderate use of alcohol and regular physical activity. When the researchers recontacted this sample nine and a half years later, they discovered that those who had engaged in these health practices in 1965, and usually had continued to do so over the intervening years, tended to live longer. The men who had followed all seven health practices had a death rate that was only 28 per cent of that of men who followed three or fewer of these practices. The death rate of women who followed all the practices was 43 per cent of those who followed three or fewer of them. Several other studies have confirmed the association between health behaviours and longevity (see Taylor, 2005).

Determinants of health behaviour Why do people continue to engage in health-impairing behaviours even if they know that they are damaging their health? Is there any way to influence them? This section presents two major theoretical models that provide a framework for the cognitive determinants of health behaviour (for other models of health behaviour, see Conner & Norman, 2005). Such models are eminently important because it is only after we have identified the determinants of a particular health behaviour that we will be able to change it. The two models described below were developed especially to predict health behaviour, although they have much in common with more general models of attitude–behaviour relations such as the theory of reasoned action and the theory of planned behaviour (see Chapter 6, this volume).

Protection motivation theory. According to **protection motivation theory** (PMT), which was developed by Rogers (1983; see also Norman, Boer & Seydel, 2005), exposure to a health threat, or a threat in general, evokes two cognitive processes, namely, threat appraisal and coping appraisal (cf. Lazarus & Folkman, 1984). The concept of threat appra-

protection motivation theory the model assumes that the motivation to protect oneself from a danger is a positive function of four beliefs: the threat is severe, one is personally vulnerable, one has the ability to perform the coping response and the coping response is effective in reducing the threat. Two further beliefs are assumed to decrease protection motivation: the rewards of the maladaptive response are great and the costs of performing the coping response are high

isal refers to a cognitive process targeted at evaluating the severity of a threat and one's individual vulnerability to it. Threat appraisal also includes an assessment of the advantages of continuing the present maladaptive behaviour. For example, a sexually active individual may assess the severity of contracting AIDS when having unprotected sex together with his or her perceived probability of developing AIDS under these circumstances; these two assessments are then weighed against the rewards of practising the maladaptive behaviour, such as, in this example, the perceived pleasures of having sex without a condom.

The second process that is important to the individual according to PMT is coping appraisal. It consists of assessing the response



Figure 15.11 Protection motivation theory applied to the reduction of smoking (Stroebe, 2001; based on Rogers, 1983).

efficacy (effectiveness) of a given recommendation (e.g., using a condom while having sexual intercourse) and one's self-efficacy (Bandura, 1997) in carrying out the respective behaviour, that is, an individual's perception that he or she is able to carry out the pertinent behaviour (e.g., an individual may feel unsure whether she is able to enforce use of a condom for sex with her partner). In addition, the 'costs' of the adaptive response (e.g., perceived awkwardness of using a condom) are subtracted from the assessments of response efficacy and self-efficacy. 'Protection motivation' results from the two appraisal processes. Protection motivation is roughly identical to the concept of intention in the theory of planned behaviour (Ajzen, 2002; see Figure 15.11).

As described, according to Rogers (1983), the factors *within* a process combine *additively* (i.e., threat appraisal is conceived as the sum of severity plus vulnerability minus rewards, whereas coping appraisal is conceived as the sum of response efficacy and self-efficacy minus costs). However, Rogers postulates a *multiplicative* combination *between* the two appraisal processes. This assumption is plausible insofar as threat appraisal should increase protection motivation only if the individual feels able to perform a coping response and this response is effective in reducing the danger. Several studies have tested these predictions concerning the relationship



Figure 15.12 Spiral pattern of the stages of change of the transtheoretical model (Prochaska et al., 1992).

between the variables specified by protection motivation theory, but to date the relationship between PMT variables is far from being clear. Most tests of PMT only consider the main effects of its variables (Norman et al., 2005). PMT has been applied to many different health behaviours such as exercise behaviour, breast selfexamination, AIDS-related behaviour and smoking (for overviews see Milne, Sheeran & Orbell, 2000; Norman et al., 2005). The main predictions of the model have received support, that is, healthrelated intentions (i.e., protection motivation) were significantly correlated with subsequent behaviour and all threat and coping appraisal variables were significantly correlated with intention. However, coping appraisal variables were more strongly related to intentions than were threat appraisal components. Self-efficacy emerged as the strongest predictor of intentions (Milne et al., 2000).

The transtheoretical model. One limitation of theories of health behaviour such as PMT is that they are relatively static. Implicitly or explicitly, they assume that the determinants of an individual's intention are stable. However, observations of smokers and people who are trying to lose weight tell a different story. For example, some smokers may not take the threats associated with smoking very seriously as long as there are no symptoms such as coughing or shortness of breath. In contrast, stage models of behaviour change include a longitudinal dimension and emphasize that the psychological basis of the intention to change a certain

behaviour may change drastically over time (cf. Sutton, 2005). One of the most wellknown stage models is the *transtheoretical model* (TTM) developed by Prochaska,

transtheoretical model a stage model of behaviour change developed to understand how people intentionally change their behaviour

DiClemente and Norcross (1992; cf. also Prochaska, Redding & Evers, 2002; see Figure 15.12). The model describes the process of achieving a particular health goal (such as giving up smoking) as a sequence of five stages that have to be passed successfully (cf. Armitage, Povey & Arden, 2003; Sutton, 2005).

In the *precontemplation* stage, individuals do not even consider changing their problematic behaviour (e.g., smoking, alcohol abuse). For example, a smoker may not deliberate much about smoking, let alone intend to quit. When individuals reach the *contemplation* stage, they do think about their problematic behaviour and its possible adverse consequences. For instance, the smoker in our example may have heard about the possible serious consequences of prolonged smoking and may wonder whether he should quit. The third stage - the preparation stage - consists of mental preparation of a behaviour change, i.e., formulation of intentions and action plans. Thus, a smoker may formulate the intention to stop smoking after his next vacation and may plan to use nicotine gum as a substitute. The fourth stage, the action stage, is characterized by explicit attempts to change or abandon the problematic behaviour, although at this stage relapses are frequent (thus in Figure 15.12 the precontemplation, contemplation, preparation and action phases are repeated). Thus, a smoker may quit several times, interrupted by relapses. The fifth stage, maintenance, consists of maintaining the changed behaviour successfully over a relatively long period of time (often operationalized as a 6-month period without relapse).

The TTM assumes that two important psychological variables accompany the (successful) transition from stage to stage. The first is *self-efficacy* (Bandura, 2001; e.g., an individual's perception that he or she is able to stop smoking). The second variable is the so-called *decisional balance*, a concept borrowed from Janis and Mann's (1977) decision theory. Decisional balance concerns a consideration of the positive and the negative consequences (pros and cons) of a particular (negative health) behaviour such as smoking. According to the theory, the pros and cons are polarized at the precontemplation and at the maintenance stages (that is, primarily advantages of the maladaptive behaviour are seen at the precontemplation stage, but primarily disadvantages are seen at the maintenance stage). Pros and cons are more or less equally strong during the three stages in between.

The TTM has been very influential and has helped to make popular the idea that behaviour change progresses through a series of stages. However, to make it a reliable tool for interventions to induce behaviour change and match these interventions to the respective stage, more theoretical specifications are needed regarding the variables that determine the stage transitions (Sutton, 2005).

Strategies of health behaviour change Given the fact that many people show maladaptive behaviours such as smoking, practising unprotected sex, eating a fatty diet or failing to exercise, the question arises as to how these undesirable behaviours can be changed. Public interventions designed to achieve large-scale

health education the provision of knowledge and/or training of skills that facilitate voluntary adoption of behaviour conducive to health

modification of the incentive structure strategies of behaviour change that influence behaviour by increasing the costs of undesirable (e.g., health-impairing) behaviour and decreasing the costs of desirable (health-promoting) behaviour. Governments often use fiscal measures (e.g., tax increases on cigarettes) or legal measures (e.g., laws enforcing use of seatbelts) to influence behaviour behaviour change rely on two strategies: *health education* or *modification of the incentive structure*. Health education involves the transfer of knowledge and skill. It provides individuals or groups with knowledge about the health consequences of certain lifestyles and the skills to enable them to change their behaviour. This strategy often consists of exposing people to persuasive messages that are designed to motivate them to change their maladaptive behaviours. Thus, persuasive health messages rely heavily upon the principles of persuasion you have already learned about in Chapter 7, and they have much in common with advertising, which we dealt with in an earlier section of this chapter. Strategies that rely on modification of relevant incentives increase the costs of engaging in unhealthy behaviours or decrease the costs of healthy behaviours. Examples are the ban on smoking in restaurants or public buildings that is practised in several countries, the imposition of a fine on people who do not use seatbelts, and free inoculations for certain risk groups.

Persuasion. Persuasive attempts to change people's unhealthy behaviours have often used so-called *fear appeals* or fear-arousing communications (de Hoog, Stroebe & de Wit, 2005; Leventhal, 1970). Fear appeals are com-

fear appeals persuasive communications that attempt to motivate recipients to change behaviour that is deleterious to their health by inducing fear about the potential health hazards and recommending an action that will reduce or eliminate the threat

munications that depict the threats associated with a certain maladaptive behaviour such as smoking and offer a recommendation concerning how to avert the threat (e.g., quit smoking). Early accounts of fear appeals (e.g., Hovland, Janis & Kelley, 1953) placed emphasis upon the amount of fear aroused by a fear appeal as the most important factor determining its effectiveness. Indeed, strong evidence was found for a positive linear relationship between amount of fear aroused and acceptance of the recommendation (Sutton, 1982). However, later social psychological research guided by protection motivation theory (e.g., Rippetoe & Rogers, 1987; Rogers & Mewborn, 1976) helped to establish the fact that it is not the emotion of fear as such that is mainly responsible for this positive effect. Rather, the concomitant cognitive processes such as assessing one's vulnerability to the threat and the effectiveness of the recommended action are more important determinants of acceptance (Das, de Wit & Stroebe, 2003; de Hoog et al., 2005).

Due to the growing empirical support for dual-process theories of persuasion such as the ELM and the HSM, several researchers have also applied these theories to fear appeals (e.g., Gleicher & Petty, 1992; Liberman & Chaiken, 1992). According to these analyses, fear appeals can have two different effects. On the one hand, the threat to which the fear appeal refers (e.g., contracting AIDS due to unprotected sex) motivates the message recipient to process the message intensively and accurately. On the other hand, the threat of being possibly unwell or unsafe induces a defence motivation, because the individual feels threatened by the outcome and his or her inability to cope effectively. Thus, the individual will critically evaluate the message, process information selectively, try to find weaknesses in the argumentation, tend to minimize the impending threat and tend to exaggerate the effectiveness of his or her coping abilities.

The stage model of the processing of fear-arousing communications (Das et al., 2003; de Hoog et al., 2005; Stroebe, 2001) is a particularly promising theory of the effects of fear appeals, because it integrates ideas from dual-process theories of persuasion (cf. Chapter 7, this volume), previous fear appeal theories (e.g., PMT) and cognitive stress theory (Lazarus & Folkman, 1984). According to this stage model, individuals exposed to fear appeals engage in two types of appraisal: (1) the appraisal of threat and (2) the appraisal of coping strategies for reducing or averting the threat. The appraisal of threat is assumed to happen in the first stage, whereas the appraisal of the recommendation is assumed to follow in a second stage. The model assumes that the perception of a severe health risk increases deep elaboration of the fear appeal, because such a threat deserves thorough elaboration. If the individual perceives high severity and low personal vulnerability, the elaboration is assumed to be guided by accuracy motivation. If, however, high perceived severity is combined with high perceived vulnerability, defence motivation is aroused, because the individual feels threatened.

Therefore, the combination of high severity with high vulnerability should lead to deep *biased* elaboration. In other words, the appraisal of the threat in the first stage is assumed to be biased in a *negative* direction (i.e., the individual is motivated to play down the threat and search selectively for flaws in the argumentation concerning the threat). Likewise, an individual perceiving high severity and high vulnerability will be biased in a *positive* direction when evaluating the recommendation and the existing coping strategies. No arousal of defence motivation is assumed for the other two combinations of severity and vulnerability (low severity, low vulnerability: shallow processing and accuracy motivation; low severity, high vulnerability: deep processing and accuracy motivation).

On the basis of these assumptions, these investigators carried out two studies (Das et al., 2003; de Hoog et al., 2005) that involved the manipulation of vulnerability and severity of threat as well as the quality of arguments supporting a protective action recommendation. The depicted threats included the health consequences of stress and of RSI (repetitive strain injury). On the whole, the results were consistent with the model. Higher vulnerability led to higher systematic processing and stronger intention to act. There was also evidence showing that the positive influence of vulnerability on intentions was not moderated by argument quality. This latter result is suggestive of defence motivation, i.e., individuals who were highly vulnerable seemed to be positively biased; they intended to carry out the recommendation irrespective of whether they received strong or weak supporting arguments for the recommendation to attend stress management training (de Hoog et al., 2005).

Changing the incentive structure. Persuasion often turns out to be a relatively ineffective means of changing the behaviour of large numbers of the population. For example, Swedish drivers could not be persuaded to use their seatbelts, so the government decided to introduce a law that made seatbelt use compulsory for frontseat passengers in private cars. This law increased the frequency of seatbelt use from 30 to 85 per cent within a few months (Fhanér & Hane, 1979). A meta-analysis comparing the impact of seatbelt education programs with the effects of legal measures indicated that legal measures resulted in substantially greater behaviour change than did education (Johnston, Hendricks & Fike, 1994). Thus, clearly the incentives (or sanctions) associated with such compulsory strategies are much more powerful than the relatively weak impact of persuasive arguments (Stroebe, 2001). In addition to gaining incentives or avoiding sanctions, the incentive-based strategy of behaviour change may help to establish healthy habits. Thus, behaviours such as putting on a seatbelt or stopping at a red traffic light become habitual if they are performed frequently under

environmental conditions that are stable (Ouellette & Wood, 1998; Verplanken & Aarts, 1999). In addition, after having been induced to perform the requested behaviour, individuals may find that the behaviour is not as bad as they had anticipated. Therefore, the positive direct experience provides them with information about the behaviour and they are induced to elaborate on its consequences. This should lead to strong attitudes that predict the behaviour irrespective of sanctions or incentives (cf. Fazio et al., 1982).

If persuasion turns out to be less effective than alternatives in cases such as seatbelt use, why then bother at all with persuasion, and why not rely completely on changes in the incentive structure? For several reasons, this would be unrealistic and, in addition, undesirable. First, incentive-based attitude change does not apply to all health behaviours. For example, people would not accept a law forcing them to jog daily, and, in addition, such a law would be difficult to enforce. Second, in some cases health education tends to build up an intrinsic motivation to carry out the recommended behaviour (e.g., 'I really do feel better now that I've stopped smoking'). In contrast, the danger of incentive-based behaviour change is that people may attribute their own changed behaviour to the power of the sanctioning or reward-providing institution (e.g., 'I still don't think it is necessary to use a seatbelt, but I can't afford to pay a fine'; cf. Lepper & Greene, 1978). Thus, health education is based upon the idea that respondents who are convinced of the advantages of the respective health behaviour will carry it out even in situations (e.g., privately) in which surveillance through sanctioning institutions is absent.

Stress and health

How does stress affect health? What factors moderate the stress-health relationship? What types of stressors exist in the workplace?

Like smoking or eating a fatty diet, leading a stressful life can have an adverse effect on your health. There are two ways in which stress can affect health, namely through changes in health behaviour and through bodily changes (e.g., changes in the immune system). People who are stressed tend to stop eating regularly, increase their alcohol consumption or take tranquillizers and sleeping pills. For example, widows and widowers in the Tübingen Longitudinal Study of Bereavement reported increased use of tranquillizers and sleeping tablets and increased consumption of both alcoholic beverages and cigarettes after the loss of a partner (Stroebe, 2001). However, stress may also have indirect effects upon health, by reducing the body's resistance to diseases. An especially clear-cut study to confirm this mechanism was conducted by Cohen, Tyrell and Smith (1993; see also Cohen et al., 1998). They intentionally exposed healthy participants to a common cold virus, then guarantined and monitored them for the development of (latent) infection and (manifest) clinical colds. Results showed that participants with higher scores on scales of psychological stress were at greater risk of developing a cold. The stress scales that these researchers employed referred to previous negative life events, perception that current demands exceeded capabilities, and negative affect such as feeling distressed and nervous. The

researchers also took numerous precautions to preclude alternative explanations of the effect (e.g., confounding with personality variables, different health practices).

The concept of stress has been made popular through Selye's (1956) research on patterns of bodily responses that occur when an organism is exposed to a stressor such as intensive heat or infection. These ideas were then adapted by psychiatrists, who began to study stressful life events as factors contributing to the development of a variety of physical and mental illnesses (e.g., Cobb & Lindemann, 1943). Basic to this work was the idea that psychosocial stress caused by *critical life events* leads to the same bodily

critical life events events that constitute major changes in an individual's life, which range from short term to enduring and which are potentially threatening

stress the condition that arises when individuals perceive the demands of a situation as challenging or exceeding their resources and endangering their well-being changes as tissue damage. Critical life events represent major changes in an individual's life, which range from short term to enduring and which are potentially threatening. Examples are major illnesses, divorce or the death of a spouse (Holmes & Rahe, 1967).

Numerous definitions of stress have been suggested. The common element is their emphasis on a process in which 'environmental demands tax or exceed the adaptive capacity of an organism, resulting in psychological and biological changes that may place persons at risk for disease' (Cohen, Kessler & Gordon, 1995, p. 3). Whereas the early research focused on critical life events as stressors, later research has proposed that minor life events ('daily hassles') such as 'misplacing or losing things', 'troublesome neighbours' or 'concerns about owing money' may also have a negative impact on individuals' health and well-being (DeLongis, Folkman & Lazarus, 1988; Kanner, Coyne, Schaefer & Lazarus, 1981). As research has shown, the negative impact of stress on health and well-being includes several illnesses such as coronary heart disease (e.g., Hemingway & Marmot, 1999; Siegrist, 1996), disorders of the immune system (e.g., Cohen et al., 1993; Steptoe, 2001) and musculoskeletal ailments (e.g., Hemingway, Shipley, Stansfield & Marmot, 1997). The evidence of healthimpairing effects is clear-cut for critical life events and for workrelated stress (see below), but more ambiguous for daily hassles.

What makes stressors stressful? One of the most influential psychological theories of stress is the transactional stress model developed by Lazarus (1966; Lazarus & Folkman, 1984; for other stress models see Edwards, Caplan & van Harrison, 2000; Karasek & Theorell, 1990). As we noted earlier, two central processes

cognitive appraisal the evaluative process that determines why, and to what extent, a particular situation is perceived as stressful

coping the cognitive and behavioural strategies that individuals use to manage both a stressful situation and the negative emotional reactions elicited by the event

determine the extent of stress that an individual experiences in a given situation, namely, *cognitive appraisal* and *coping* (Lazarus & Folkman, 1984). Regarding appraisal, Lazarus and Folkman distinguish between three types. *Primary appraisal* designates the pro-

cess by which the individual assesses a certain event according to whether it is stressful or harmless. *Secondary appraisal* refers to the individual assessing his or her own coping competencies and resources with respect to the potential threat. *Reappraisal* refers to a reassessment of the situation to find out whether the threatening situation has possibly changed after the individual's attempts to cope with it.

Coping encompasses the cognitive and behavioural strategies that individuals use to manage both a stressful situation and the negative emotional reactions elicited by that event. Lazarus and

Folkman (1984) distinguish two forms of coping. *Problemfocused coping* is instrumental behaviour directed at reducing or eliminating the threat. It is the type of behaviour predicted by models of health behaviour such as protection motivation theory and the transtheoretical model.

problem-focused coping instrumental behaviour aimed at reducing or eliminating the risk of harmful consequences that might result from a stressful event

emotion-focused coping coping strategies that do not focus on the stressful event but on ameliorating the distressing emotional reactions to the event

Emotion-focused coping is aimed at reducing emotional distress. In coping with their emotions, individuals may use cognitive strategies such as reappraising the situation as less threatening or engaging in wishful thinking. But they may also try to 'calm their nerves' by taking tranquillizers or drinking alcohol.

The extent to which a situation is experienced as stressful, as well as the individual's success in mastering it, will depend

on his or her *coping resources*. Lazarus and Folkman (1984) distinguish resources that are primarily properties of the person and resources that are primarily environmental. *Intrapersonal resources* include

coping resources the extrapersonal (e.g., social support) and intrapersonal (e.g., optimism) resources available to the individual for coping with the demands of a critical event

physical resources such as good health and energy, psychological resources such as optimism or a positive self-concept, and competencies such as problem solving and social skills. Examples of *extrapersonal* (or environmental) *resources* are financial resources or social support, i.e., the availability of others (e.g., family, friends, colleagues) who can help the individual to cope with the stressful situation.

Moderators of the stress–health relationship There are tremendous individual differences in the extent to which stress experiences affect people's health. These differences are attributed to the fact that coping resources function as *moderators* of the stress–health relationship. In this case, moderation means that the relationship is obtained only for a low value of the resource (e.g., stress is related to ill health when the individual lacks social support), whereas a high value of the resource weakens the relationship or even makes it disappear (e.g., high social support can prevent stress leading to illness).

Strategies of coping. Several empirical instruments exist for measuring coping strategies, one of the most widely used being the 'Ways of Coping Inventory' (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986). This measures eight distinct coping strategies, three of which are given here for illustration: confrontive coping (e.g., 'Tried to get the person responsible to change his or her mind'), self-controlling ('I tried to keep my feelings to myself')



PIONEER

Susan Folkman (b. 1938) came late to psychology after having studied history and then for a decade concentrating fully on being a housewife and mother of four children. In the mid-1970s, after a second degree in educational psychology, she began her fruitful collaboration with Richard S. Lazarus at Berkeley, first as a PhD student, later as a research member of the faculty. In 1988, she moved to the University of California at San Francisco. She is internationally recognized for her theoretical and empirical contributions to the field of psychological stress and coping. Her 'Ways of Coping Questionnaire' pioneered empirical research into coping processes and has become a widely used instrument in the study of coping. The monograph *Stress, Appraisal, and Coping* (Lazarus & Folkman, 1984) shaped the area of stress research for decades and has become a classic. After her move to San

Francisco, her work focused on stress and coping in the context of HIV diseases and other chronic illness, especially on issues to do with caregiving and bereavement. Since 2001 she has been Director of the Osher Center for Integrative Medicine at the University of California, San Francisco.



and planful problem solving ('I made a plan of action and followed it'). However, this apparent diversity of strategies can be further reduced because the various strategies can be distinguished according to two functions (Lazarus & Folkman, 1984): they are carried out to reduce the risk of harmful consequences that might result from a stressful event (problem-focused coping) or to adjust the negative emotional reactions to the event (emotion-focused coping).

In addition to the functions served by coping strategies, a second dimension of each coping strategy is approach vs. avoidance (Roth & Cohen, 1986; Stroebe, 2001). For example, somebody may confront a possible health threat by undergoing the relevant diagnostic procedures, or they may deny any possible threat. As a general conclusion, frequent reliance on avoidant coping strategies seems to have adverse effects on health (Carver et al., 1993; Epping-Jordan, Compas & Howell, 1994; Stanton & Snider, 1993).

Personality traits. Dispositional optimism is an important personality variable that has been proposed as a moderator of the stress-health relationship (for other individual difference variables see Stroebe, 2001). Scheier and Carver (1987) have argued that optimistic people see positive outcomes as more attainable compared with pessimists. This expectation should protect them from giving up in times of stress and hardship. Expecting that things will turn out positively in the long run should have a calming effect on one's well-being and should encourage one to persist in the face of obstacles. In contrast, pessimists should prematurely abandon their efforts to overcome their respective difficulties. These different expectations should function much like a self-fulfilling prophecy, leading to relatively more positive outcomes and more positive

INDIVIDUAL DIFFERENCES 15.1

Life Orientation Test (LOT)

Scheier, M.F., Carver, C.S. & Bridges, M.W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the life orientation test. *Journal of Personality and Social Psychology*, *67*, 1063–1178.

This scale assesses optimism, the tendency to hold positive expectations for one's future. Optimists differ from pessimists in the way they cope with challenges and in the kind of coping responses they show. Optimists persist longer in their efforts to overcome adversity and adjust more favourably to important life transitions. Although optimism as assessed by the LOT has moderate correlations with neuroticism, trait anxiety, self-mastery and self-esteem, Scheier et al. (1994) show that it is a distinct psychological trait with unique contributions to the prediction of depression and coping. The LOT version described below is an improved version of the original measure (Scheier & Carver, 1985). The complete scale also includes four filler items, not shown here.

Instructions: Respondents are requested to indicate the extent of their agreement with the following items (using the response format: 0 = strongly disagree, 1 = disagree, 2 = neutral, 3 = agree and 4 = strongly agree):

- 1 In uncertain times, I usually expect the best.
- 2 If something can go wrong for me, it will.
- 3 I'm always optimistic about my future.
- 4 I hardly ever expect things to go my way.
- 5 I rarely count on good things happening to me.
- 6 Overall, I expect more good things to happen to me than bad.

Scoring: Items 2, 4 and 5 are reverse scored before scoring. Items 2, 4 and 5 are then summed with responses to items 1, 3 and 6 to compute an overall optimism score (theoretical range: 0-24).

health for optimists. An instrument for measuring optimism developed by Scheier and Carver (1985; revised by Scheier, Carver & Bridges, 1994) assesses the general expectation with which people expect that good things are likely to happen to them (see Individual Differences 15.1).

Several researchers have obtained evidence for the assumption that optimism is indeed associated with less mood disturbance and fewer negative effects of stress on health (e.g., Scheier et al., 1989; Segerstrom, Taylor, Kemeny & Fahey, 1998). An interesting study by Scheier et al. (1989) showed that optimists recovered faster from surgery (bypass patients and women who underwent surgery for breast cancer). There was also a positive relationship between optimism and post-surgical quality of life several months after surgery. Recall that part of the hypothesis regarding the construct of optimism relates to coping as a mediator: optimists are assumed to engage more in problem-focused coping in the face of stressful situations. Several longitudinal studies have provided empirical support for the important role played by active coping among optimists as compared to pessimists and the mediational impact of active coping upon health (e.g., Aspinwall & Taylor, 1992; Segerstrom et al., 1998).

Social support. In the earlier section on social psychology in the workplace, we pointed to the importance of perceived organizational support (POS) for the employment relationship. A more general concept of *social support* is also important in the analysis of stress and well-being: social support is a major resource against stress. Social support reflects the information from others that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligation (Cobb, 1976; for typologies of social support see House, 1981; cf. also Chapter 10, this volume). A literature review by Cohen and Wills (1985) shows that social support does indeed have a moderating ('buffering') effect upon health. There is even consistent evidence that low levels of social support are associated with an increased risk of mortality (e.g., Berkman & Syme, 1979; cf. Stroebe, 2001).

Stress in the workplace The topic of workplace stress provides a link between the topics of organizations and health, which we have so far treated separately. Since people spend a large amount of their lifetime at work, research on organizations has addressed stress due to working in organizations (e.g., Barling, Kelloway & Frone, 2005). Stressors at the workplace may be divided into non-social stressors such as long work hours or innovative or complex work technology (e.g., Coovert, Thompson & Craiger, 2005; Totterdell, 2005) and social stressors such as role conflicts (Beehr & Glazer, 2005) or severe forms of social conflict such as harassment or workplace aggression (Rospenda & Richman, 2005; Schat & Kelloway, 2005; cf. also Chapter 8, this volume). However, the distinction between social and non-social stressors is somewhat crude, since clearly some social aspects (e.g., poor leadership) may be the more distal cause of a 'non-social' stressor (e.g., inadequate introduction of a new technology), and vice versa

Competent leadership is a major factor fostering good work outcomes and higher organizational commitment (see Chapter 13, this volume). But leadership is also important for subordinates' health and well-being. Poor leadership has been implicated as a major factor of stress at work (Kelloway, Sivanathan, Francis & Barling, 2005). For example, Wagner, Fieldman and Hussey (2003) reported that nurses experienced significant increases in systolic and diastolic blood pressure on days when they worked for supervisors they did not like compared to days on which they worked for a supervisor they liked. Indeed, the increases were of such a magnitude that long-term exposure to such stress would put the nurses at serious risk of coronary failure and increased risk of stroke. Kelloway et al. (2005) regard poor leadership as being a 'root cause' of stress in organizational settings. By root cause they mean that poor leadership cannot simply be regarded as another single stressor, such as a high workload or high work demands, because it may give rise to *several* important stressors. Thus, some of the most salient problems created by poor leaders may consist in creating work overload for their subordinates, failing to clarify subordinates' work obligations and neglecting to set specific goals, and failing to intervene in cases of harassment and aggression among subordinates (Kelloway et al., 2005).

Take goal setting as an example (Locke & Latham, 2002). Leaders influence the goals their subordinates set themselves, the pace of work, and the amount of work required. Research has shown that specific, high, but realistic goals are an important determinant of productivity (Locke & Latham, 2002). The achievement of goals, on the other hand, has a positive influence upon individuals' self-efficacy (Bandura, 2001). Thus, by failing to set goals for subordinates, by setting unrealistic or diffuse goals ('do your best'), by showing a lack of individual consideration for the strengths and weaknesses of the respective subordinate in reaching the goals, or by not giving necessary feedback, a passive or incompetent leader may create stress. He or she does so by impairing the subordinates' self-efficacy, or by creating an unrealistic gap between the leader's demands and subordinates' capabilities. These adverse effects may even spill over into subordinates' private life as they 'take home' their stress, thereby creating work-family conflicts (Bellavia & Frone, 2005).

According to Kelloway et al.'s (2005) analysis of leadership as a root cause of stress in the workplace, poor leadership has a *direct* effect upon subordinates' well-being and health. But of course, leadership is also a major factor with regard to social support (or lack of it) and therefore has a *moderating* effect in the stress–health relationship (e.g., Cummings, 1990; Karlin, Brondolo & Schwartz, 2003). For example, the supportive leader may show consideration for a worker (e.g., for his or her dual role as a worker and a parent), offer task-specific help or provide appropriate feedback. By offering these types of support, the amount of stress can be expected to be reduced. Incompetent or passive leaders may fail to provide these kinds of support and may thereby pose risks to the subordinate's health.

It is clear that poor leadership also has close connections with organizational justice, which we discussed in an earlier section. For example, a manager who assigns an unrealistically high workload to his or her subordinates or lacks careful planning will be perceived as unfair (Cropanzano, Goldman & Benson, 2005). Recent research has implicated a lack of organizational justice as a stressor and suggested that perceived lack of justice is associated with an increase in (self-reported) physical symptoms (e.g., De Boer, Bakker, Syroit & Schaufeli, 2002; Elovainio, Kivimäki & Vahtera, 2002).

SUMMARY

Health education professionals can profit a great deal from social psychological research. Research concerning the determinants of health behaviour has shown that coping appraisal, especially one's perceived self-efficacy, is a major factor in predicting intentions to carry out health-related behaviour. Attempts to change health-related behaviour can involve attempts to persuade people, via communicative appeals, or to change the incentive structure. Research on fear appeals has yielded evidence that recipients must feel vulnerable to the respective health threat to be motivated to accept the protective message. But vulnerability may also be associated with recipients' tendencies to downplay the threat. Thus, the threat must be described carefully and convincingly. Changes in the incentive structure, such as introducing rewards or imposing sanctions, may sometimes be more effective than persuasion, but persuasion can be expected to yield more long-lasting, intrinsic changes.

Health is influenced not only by unhealthy behaviour but also by stress. Stress may be engendered by a variety of stressors, such as major critical life events, daily hassles and stress in the workplace, such as stress associated with bad leadership. Bad leadership may function as a 'root cause' of stress in the workplace, because it gives rise to several stressors such as creating work overload, neglecting to set specific realistic goals and failing to give necessary feedback. Several variables moderate stress, such as personality traits and social support.



SUMMARY AND CONCLUSIONS

- Social psychological theory, basic research and applied research have a reciprocal relationship. Theories help us to understand and address real-life phenomena, while confirmation of a theory's central predictions in practice increases our confidence in the theory and enhances its generalizability.
- In this chapter we have described the application of social psychology to three main areas: advertising, the workplace and health.
- The dual-process perspective (e.g., ELM and HSM models) is a powerful framework for explaining the diverse effects of advertising and is suitable for integrating some of the older models that were designed specifically for advertising.
- Because recipients of advertisements typically lack time and motivation, they can often only be influenced by lowelaboration strategies. Among others, such strategies

encompass classical conditioning, mere exposure and categorizing a new product as an exemplar of an already established brand category (brand extension).

- A unique feature distinguishing advertising from other types of persuasion is the role of the attitude towards the advertisement. Because this specific attitude exerts direct and indirect effects upon the brand attitude, it is a main target of advertisers.
- We have stressed that job attitudes are useful in predicting work outcome. Both the most general job attitude, job satisfaction, and one of the more specific job attitudes, affective commitment, determine employees' performance and withdrawal behaviour.
- We have identified job design as one major influence on job attitudes. The job characteristics model predicts that satisfaction is stronger if the jobs require a variety of skills and tasks that are both important and comprehensive; employees will also only be satisfied with jobs that provide a certain degree of autonomy and feedback.
- The employment relationship is also central in determining job attitudes. If employees feel that the organization treats them fairly and supports their efforts, they are more satisfied with their job, more highly committed to the organization and work harder towards task achievement.
- Perceptions regarding procedural justice are influential in the workplace, as explained by the instrumental, relational and substitutability approaches.
- Vulnerability and self-efficacy are important determinants of health behaviour. These variables are given prominent attention in one of the most influential social cognitive models of health behaviour, protection motivation theory. Its further predictors are severity, intrinsic and extrinsic rewards, response efficacy and response costs.
- Modifications in the incentive structure involve attempts to increase the costs of health-impairing behaviour (e.g., by taxes on cigarettes) and decrease the costs of healthpromoting behaviour (e.g., by laws enforcing use of seatbelts). Such attempts to influence health behaviour are often more effective than persuasive appeals, but run the risk that respondents will not internalize their behaviour change.
- Stress has a negative impact upon health and well-being. The impact of stress is moderated by strategies of coping and several intrapersonal (e.g., dispositional optimism) and extrapersonal (e.g., social support) resources.
- For today's workforce, a critical factor determining stress levels is the quality of leadership. Bad leadership is a root cause of stress (e.g., by creating work overload, by neglecting to set specific goals and by failing to intervene in cases of conflicts among subordinates).

Suggestions for further reading

- Conner, M. & Norman, P. (Eds.) (2005). Predicting health behaviour: Research and practice with social cognition models (2nd edn). Maidenhead: Open University Press. A highly readable theoretical and empirical evaluation of the major social cognitive models of health behaviour, including suggestions for their further development and synthesis.
- Greenberg, J. & Colquitt, J.A. (Eds.) (2005). Handbook of organizational justice. Mahwah, NJ: Lawrence Erlbaum.
 This comprehensive reader offers a state-of-the-art introduction to the field of organizational justice. Many experts in the field give their insights, e.g., into the different justice constructs, the process of judging justice and how justice relates to stress and discrimination.
- Judge, T.A., Thoresen, C.J., Bono, J.E. & Patton, G.K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127, 376–407. This influential article gives an excellent review of the possible relationships between job

satisfaction and job performance and summarizes the state of research.

- Priester, J.R. & Petty, R.F. (2003). The influence of spokesperson trustworthiness on message elaboration, attitude strength, and advertising effectiveness. *Journal of Consumer Psychology*, 13, 408–421. An exemplary application of the ELM to the topic of advertising with a special focus on spokesperson trustworthiness.
- Solomon, M.R. (2004). *Consumer behavior: Buying, having, and being*. Upper Saddle River, NJ: Pearson. An excellent introduction to all facets of consumer behaviour and advertising, including important social psychological contributions.
- Stroebe, W. (2001). Social psychology and health (2nd edn). Buckingham: Open University Press. An important, integrative approach to health topics from a socialpsychological perspective.
- Taylor, S.E. (2005). *Health psychology* (6th edn). New York: McGraw-Hill. One of the best textbooks on health psychology, written by a leading researcher in the field.