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TALES OF LOGIC



a self-presentational view
on health-related behaviour

Maria A. Koelen

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1. Voor specifiek gedrag, waarvan objectief is vastgesteld dat het de gezondheid in de weg staat, is het acceptabel personen te overtuigen van de noodzaak tot verandering (dit proefschrift)
2. Het concept 'peer pressure', zoals we dat kennen uit de sociaal wetenschappelijke literatuur, is aan revisie toe (dit proefschrift)
3. Mensen zijn zowel informatie verwerkers als informatie vervormers (dit proefschrift).
4. Het verschaffen van kennis over de negatieve gevolgen van ongezond gedrag is vaak onvoldoende voor het bewerkstelligen van gedragsverandering, aangezien gedrag samenhangt met de uitwisseling van sociale beloningen.
5. De uitkomst van cognitieve verwerking van informatie hangt meer samen met de context dan met de persoon.
6. Artsen en andere hulpverleners kunnen een positieve bijdrage leveren aan het herstelproces van patiënten door hen te helpen bij het maken van attributies (M.A. Koelen & J.G. Withag. 1986. Eigen schuld kwelt het minst, Psychologie, 5 (2), 24-25).

7. Gezondheidsvoorlichting besteedt te weinig aandacht aan bestaand (gezond) gedrag.
8. De opvatting dat informatietechnologie er is voor de mensen mag er niet toe leiden dat de ontwikkelingen op dit gebied worden geremd.
9. Wanneer de Europese grenzen vervagen zullen de taalgrenzen in belangrijkheid toenemen.
10. Voor bestuurders van Universiteiten en Hogescholen is het raadzaam de uitspraken van Deetman te interpreteren in het licht van dit proefschrift.

Stellingen behorende bij het proefschrift *Tales of Logic, a self-presentational view on health-related behaviour*, van Maria A. Koelen. Wageningen, 27 september 1988.

ERRATA

Chapter	page	paragraph	line	
I	7	2	9	Van Woerkum, 1988 has to be: Van Woerkum, 1987
	13	2	2	that which has to be: to which
	17	2	6	Röling, 1987 has to be: Röling, 1988
III	54	1	10	foolproof has to be: full-proof
	71	1	7/8	a reallife actor has to be: an actor
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ter nagedachtenis van mijn moeder
aan mijn vader

CENTRALE LANDBOUWCATALOGUS



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Maria A. Koelen

TALES OF LOGIC

a self-presentational view
on health-related behaviour

Proefschrift

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ABSTRACT

This dissertation questions the informational approach to health education. Many health education programmes are conducted with the implicit assumption that providing individuals with relevant information about the consequences of unhealthy behaviour will lead to a healthier way of life. Evaluations of health education programmes show, however, that rational cognitive appeals often do not seem to possess enough power to motivate people to change their behaviour. This study examines the extent to which health-related behaviour can be explained by the wish to be accepted by others.

Two theories are described: attribution theory and self-presentation theory. In attribution theory it is assumed that individuals are logical information processors. By means of 'naive scientific' analysis of available information, the individual tries to obtain a veridical view of reality. Self-presentation theory assumes that individuals are motivated to create an impression on significant others that will lead to approval and avoid disapproval, by means of, for example, overt behaviours such as expressed opinions and dressing. The results of two experiments show that individuals use attribution statements for self-presentational goals. When an actor perceives that others cannot easily repudiate a boosted self-presentation, the actor tries and succeeds to impress on others by self-enhancing attributions. When others do

have access to possible repudiating information, actors' attribution statements are accurate.

Subsequently, self-presentation theory is applied to health-related behaviour. In two field studies the assumption of many anti-smoking campaigns that smoking adolescents are less capable to resist peer pressure than non-smoking adolescents is questioned. Self-presentation theory appeared to contribute to a fuller understanding of the working of peer pressure. Peer pressure is related to lifestyles, and it should be conceived of as a two-way influence process, in which it is rewarding for both the individual and the group to act in accordance with existing group norms. Peer pressure is equally strong for smokers, intenders and non-smokers.

The results of the four studies show that behaviour often is guided more by self-presentational concerns than by concerns for cognitive consistency. The results of the studies can facilitate a more effective use of the influence of the social environment in health education.

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To say that I am deeply indebted to a number of people who contributed in one way or another to this thesis seems perhaps an overworked cliché. However, it is the best statement I can make.

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ABSTRACT	i
ACKNOWLEDGEMENTS	iii
CONTENTS	iv
CHAPTER I. FORMULATION OF THE PROBLEM	1
1.1 INTRODUCTION	1
1.2 DEFINITIONS of HEALTH	3
1.3 DEFINITIONS OF HEALTH EDUCATION	5
1.4 HEALTH EDUCATION: A PART OF HEALTH PROMOTION	9
1.5 DETERMINANTS OF HEALTH RELATED BEHAVIOUR	13
1.6 INFORMATIONAL AND SOCIAL INFLUENCE ON BEHAVIOUR	15
CHAPTER II. ATTRIBUTION THEORY AND SELF-PRESENTATION THEORY	19
II.1 INTRODUCTION	19
II.2 ATTRIBUTION THEORY	19
II.2.1 The proces of making attributions	22
II.3 SELF-PRESENTATION THEORY	25
II.3.1 Attributional biases and self-presentation	31
CHAPTER III. ATTRIBUTIONAL SELF-PRESENTATION	33
III.1 INTRODUCTION	33
III.2 STUDY 1: ATTRIBUTIONAL SELF-PRESENTATION AND INFORMATION AVAILABLE TO THE AUDIENCE	34
III.2.1 Method	38
III.2.2 Results	46
III.2.3 Discussion	50

III.3	STUDY 2: EVALUATIONS OF ATTRIBUTIONAL SELF-PRESENTATION	55
III.3.1	Method	61
III.3.2	Results	64
III.3.3	Discussion	69
III.4	GENERAL DISCUSSION	71
CHAPTER IV. SELF-PRESENTATION THEORY AND HEALTH-RELATED BEHAVIOUR		
		74
IV.1	INTRODUCTION.	74
IV.2	CONSIDERATIONS FOR APPLICATION	74
IV.2.1	Social norms and consistency	76
IV.2.2	Conclusions	79
IV.3	STUDY 3: PEER PRESSURE AND ADOLESCENT SMOKING BEHAVIOUR	81
IV.3.1	Method	85
IV.3.2	Results	88
IV.3.3	Discussion	96
IV.4	STUDY 4: THE SELF-PRESENTATION FUNCTION OF SMOKING BEHAVIOUR	100
IV.4.1	Method	102
IV.4.2	Results	105
IV.4.3	Discussion	111
IV.5	GENERAL DISCUSSION .	112
CHAPTER V. CONCLUSIONS AND DISCUSSION		
		115
DUTCH SUMMARY		
LITERATURE		
CURRICULUM VITAE		

I. FORMULATION OF THE PROBLEM

I.1 INTRODUCTION

Health education occupies an increasingly important place in the health care system, due to the changing pattern of health problems.

Some decades ago, causes of illness and the spread of diseases were mainly found in the physical environment, for example high mortality rates caused by infectious diseases and highly contagious (epidemic) diseases like typhoid, plague and tuberculosis. Scientifically efficacious cures, such as antibiotics, were not available. Research in health care was mainly directed at the development of medication in order to combat the diseases. Prevention was mainly based on immunisation, and, as far as human behaviour was concerned, authorities relied on rules and legislative measures (Rouwenhorst, 1977). Medical science has been quite successful in combatting those diseases, which is illustrated by, for example, the complete absence of plague, the near absence and, if found, quick cure, of tuberculosis nowadays. Furthermore, nearly all infections can be cured by one or another medicine.

In the years after World War II, industrialized countries have been confronted with high morbidity and mortality rates due to cardiovascular diseases, cancers, and alcohol and drug ad-

dictions. Common to these health problems is the role of human behaviour in their development and maintenance. They are therefore often described as behaviour-related diseases.

In behaviour-related diseases individual and social, as well as economic costs are involved. The individual and social costs can be understood from the mutual relation between health and quality of life. That is, health problems have an impact on the quality of life and, at the same time, the quality of life affects health.

Behaviour-related diseases require great attention. The contribution of purely medical research toward the decrease of these diseases has declined over the years. Successful treatment and prevention of behaviour-related diseases greatly depends on individual and collective behaviour change (De Haes, 1983). Behaviour-related diseases can, therefore, be reduced by encouraging individuals to behave in such a way that the probability of the occurrence of these diseases will decrease. Health education is one of the major instruments for inducing such behaviour change. Health education can positively contribute to quality of life and personal well-being. It may, furthermore, contribute to a reduction in the economic costs for society that behaviour-related diseases bring about.

Health education is the subject of the present study. The aim of the study is to strengthen the empirical and theoretical basis for making de-

cisions about health education. It explores the applicability of self-presentation theory to health education and, more specifically, tests the value of that theory in explaining health-related behaviour, such as smoking.

The present chapter proceeds, first, to define health and health education, and then, to specify the role of behaviour in disease prevention, and concludes by formulating the research problem.

1.2 DEFINITIONS OF HEALTH

In health education, the promotion of health and the prevention of diseases take a central position, but the opinions regarding what has to be understood by health and, consequently health education, differ across and within the health care disciplines. Health in itself is difficult to define in terms of objective, measurable criteria. According to Green et.al. (1980), the fact that health evades a sharp, universally accepted definition is perhaps the best indication of its subjective nature (p.18).

Health can be defined in terms of the absence of physical inability. According to this definition, physically disabled, handicapped people, for example, are not healthy. This biological point of view is sometimes used by physicians (US Dep. of Health, 1979).

An opposing proposition declares that, as long as an individual perceives himself as healthy, he is healthy (e.g. Kessener, 1982). Therefore, an individual, suffering some kind of disease or handicap, or behaving in an unhealthy way, is healthy as long as he perceives himself to be healthy.

The World Health Organization (WHO, 1974) defines health as: a state of physical, mental and social well-being. In this definition, also the social environment plays an important role. The WHO places social environment within a wider framework which includes social relationships, but also incorporates societal influences on health, such as conditions of work, housing and socio-economic status.

This notion is also put into words by the 30th World Health Assembly (1977): the main social target of governments and the WHO in the coming decades should be the attainment of a level of health that would permit all peoples to lead a socially and economically productive life (Philip & Navia, 1987). Their objective is reflected in the WHO's overall goal towards "Health for all by the year 2000". In the Netherlands, the same position is taken in the "Nota 2000" (1986), a paper in which policy options are laid out by the government with respect to health care up to the year 2000. The ideas outlined here are based on Levin's view (1980) that health is not life's highest goal, but happiness.

In our opinion, the first (biological) and second (personal perception) definition are not very helpful for health education. The first one is too narrow, since it only incorporates physical health. The second formulation is too vague, in that it is based solely on individual perceptions and therefore fails to give practical cues. The proposition we wish to express has more affinity with the contents of the later definitions, since these define health in terms of objectives for health policy. Here we define health as the extent to which an individual or group is able to realize aspirations and satisfy needs, and to change the environment or to cope with it (cf. Kickbush, 1986).

1.3 DEFINITIONS OF HEALTH EDUCATION

Where there is no agreement on the definition and conception of health, it is to be expected that there is no universally accepted definition of health education. In fact there are almost as many definitions of health education as there are health educators. Four definitions will be mentioned below. One of them is stated in general terms, the others are related to activities or objectives. Green et.al. (1980) define health education as "...any combination of learning experiences designed to facilitate voluntary adaptations of behaviour conducive to health"

(p.7). This definition can be seen as a general description as far as the scope is involved.

A definition in terms of educational goals has been formulated by the WHO (1974): "...its aims are to encourage people to adapt and sustain healthy life patterns, to use judiciously and wisely the health services available to them, and to make their own decisions, both individually and collectively, to improve their health status and environment". The WHO includes in its definition such aspects as the use of the health care system and the individual and collective responsibility for a healthy environment.

Levin's (1980) definition elaborates on the responsibility of individuals for their own health. According to Levin, health education must turn its attention to strengthening the natural resources of lay people as the basic resource in primary health care. This means that another dimension should be added to traditional goals of health education, namely, supportive health education. That is, education designed to strengthen the care-giving role of individuals, families, and other non-professional health-care resources in the community. In this description the individual's responsibilities and decisions regarding health-related aspects of life are emphasised.

The last definition of health education to be mentioned here is stated in terms of behaviour change. According to Steuart (1965), the essence of health education is "its scientific con-

cern with the role of human behaviour, both individual and societal, in the natural history of health and disease; considered from the special point of view of the determinants of change in such behaviour; with an operational focus on planned influence-attempts which are directed towards maintenance, reinforcement or modification of behaviour; in the extent to which this may demonstrably affect curative, rehabilitative and disease-preventive processes, and the promotion of health" (p. 6). Steuart's definition points out the importance of scientific research on the one hand, where sciences such as epidemiology, psychology and sociology are concerned, and decision-oriented research with respect to programme development and evaluation, on the other hand.

These definitions reflect, more or less explicitly, differences in the approach toward health education. Several authors distinguish different categories of approaches (e.g. Rogers, 1976; Tones, 1981). In our opinion, the distinct approaches are basically reducible to three types: an informational approach, an emancipatory or (self-) empowerment approach and a persuasive approach (cf. van Woerkum, 1988). Other approaches can be derived from these. Briefly, the informational approach focuses on providing the target population with information regarding health-related topics. The individual either can notice the information and do something with it, or ignore the information.

The emancipatory approach is characterized by the opinion that individuals are free to make their own choices. The accent in health education following this approach lies on promoting health through enhancement of self-reliance and self-determination. The objective is not that individuals will behave in a healthy manner, but that they will become aware of possible health-related choices. The objectives of health education are reached when the individual can make a conscious choice, whether the behaviour is healthy or not. Alternatively the objectives of the persuasive approach focus on the maintenance of healthy behaviour and change of unhealthy behaviour. Health education from this perspective explicitly seeks to persuade individuals to adopt healthier lifestyles. It is, therefore, directed towards intervention on the determinants of health-related behaviour. These determinants include personal features such as knowledge and attitudes toward behaviour, features of social environment, such as perceptions, socially-based norms and values, but also the possibilities and impossibilities to behave in a healthy manner (e.g. skills, and accessibility of the health-care system).

The work presented here must be placed within the persuasive approach. It attempts to gain a fuller understanding of the determinants of health-related behaviour, the ultimate goal being to underpin effective attempts to influ-

ence such determinants into the direction of maintenance and reinforcement of healthy behaviour, or alteration of unhealthy behaviour. At first glance this positioning of the work might seem contradictory to the position we previously expressed with regard to the definition of health which stated that people should be able to realize aspirations and satisfy needs, and to change or cope with the environment. This position, however, does not exclude health-education activities based on the persuasive approach. For certain behaviours it is objectively clear that they negatively influence health, and in our opinion it is very well acceptable to attempt to persuade individuals to change such behaviour in a more healthy direction. The individual finally is free to decide whether or not to follow the recommendations, because health education can only induce voluntary change.

1.4 HEALTH EDUCATION: A PART OF HEALTH PROMOTION

Before we proceed on the determinants of behaviour, we wish to position health education within the scope of health promotion. According to Kickbush (1986), health promotion emerged out of health education. An important reason for this is, that it became self-evident that health education can only develop its full potential if

it is supported by structural measures, such as legal, environmental and regulatory measures (Kickbush, 1986, p.322), due to the complexity of health related behaviour. For example, in health education much attention has been paid to the health consequences of smoking. Since the sixties, in industrialized countries one can observe a general decrease in the number of individuals smoking. For example, in the Netherlands the number of smokers decreased from about 80% of the male population and 30% of the female population in the sixties, to 42% for males and 34% for females nowadays (Stichting Volksgezondheid en Roken, 1986). It is not entirely clear what has caused the general decline. Next to health education, several other forces have contributed. For example, the legislative measures, which oblige the tobacco industry to warn the smokers about health consequences of smoking. Furthermore, organizational changes in society, such as restrictions on smoking in sections of trains, airplanes, and other public places have contributed. Also economic measures, such as the raise of taxes on tobacco, have helped.

Health is affected by a multitude of forces, either behavioural or non-behavioural in nature. Factors that can be distinguished are biological (e.g age, sex, heredity), environmental (e.g. air and water pollution), socio-cultural (e.g. housing, income, stress), and behavioural (e.g. smoking, alcohol consumption, use of drugs, sexua-

lity). Besides, health is also affected by such aspects as (the organization of) health care services and the availability of means and facilities (cf. Lalonde, 1974; Blum, 1981; Nota 2000, 1986). All factors and forces are objects of interest in health promotion.

At the first International conference on Health Promotion in Ottawa, November 1986, a 'Charter for action to achieve Health for All by the year 2000 and beyond' was presented, which describes health promotion as: "... the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life styles to well-being" (Charter of Ottawa, 1986).

Green et.al. (1987) placed factors and forces which are of interest for health promotion into a scheme, which is presented in Figure 1. It displays the objects of health promotion and their approximate relationships. Health promotion is placed on the left of this scheme, linked with the inputs of health education and related organizational, economic and environmental

supports. The potential outcomes are placed on the right.

Health promotion, as described above, should encourage and enable individuals to be actively involved with health. The key issue of health promotion is that health cannot be ensured by the health sector alone. It asks for a health promotion policy which can count on a broadly based commitment. It demands coordinated action by governments, health and other social and economic sectors, by non-governmental and voluntary organizations, by local authorities, as well as by industry and media (cf. Kickbush, 1986, 1987; Charter of Ottawa, 1986; Thornton & Draper, 1987; Jonkers *et.al.*, 1988).

It follows that health education is, among other things, an important instrument of health promotion. It can contribute to the maintenance or enhancement of health; basically there where health-related behaviour and the prevention of

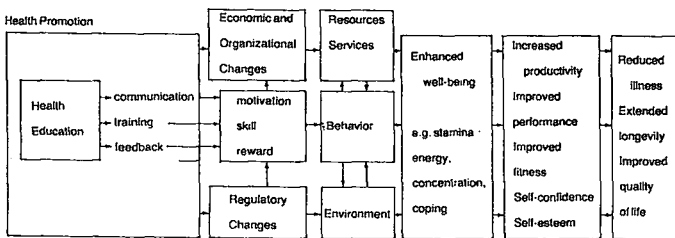


Figure 1: Relationships among objects of interest in health promotion (Green *et.al.*, 1987)

behaviour-related diseases are concerned. In our opinion, the health educator should take into account the available objective data regarding the health consequences of certain behaviour and encourage individuals to change the unhealthy behaviour in a more healthy direction or to maintain existing healthy behaviour. In doing so, health educators can contribute to the goal of the attainment of a level of health that permits people to realize aspirations and to change or cope with the environment.

1.5 DETERMINANTS OF HEALTH RELATED BEHAVIOUR

Prevention of behaviour-related diseases depends on the extent to which health-related behaviour can be modified. Health education is, as stated before, an instrument for such behaviour modification. In order to design and implement effective health education programmes, the behaviours to be affected must be carefully analysed. Behavioural analysis directs attention towards the analysis of determinants of behaviour. According to Green et.al. (1980), three factors are important here: predisposing (e.g. knowledge, attitudes), enabling (e.g. skills, accessibility of the health care system) and reinforcing factors (e.g. social norms and values, social rewards). Behavioural analysis should result in data regarding changeability of

the determinants of health-related behaviour. It enables the health educator to set priorities at determinants to be influenced, either by health education or by health education combined with other measures (e.g. training, legislation).

To introduce changes in already existing behaviour is apparently more easily said than done. As regards smoking for example, the rate of successful stopping is quite low. The decrease in the number of smokers, as mentioned in the previous section, can be explained by the fact that less people start smoking in the first place. About 75% of individuals who attempt to stop start smoking again (Raw, 1978; Leventhal & Cleary, 1980). The same pattern can be observed at changing dietary behaviours. Results from research in the Netherlands, for example, show that about 90% of dieting persons lapse into their former food-pattern and subsequently into their previous (over)weight condition (VoVo, 1985).

These examples show that it is difficult to alter health-related behaviour. Two aspects seem to be of importance: (1) the immediacy of the relationship between a certain form of behaviour and its outcomes, and (2) the objective probability of positive results. With respect to the first aspect, the gains of behavioral patterns related to smoking, alcohol consumption and food consumption are typically immediate, while the costs occur over the long run. The po-

sitive effects health educators promise lie in the future, while the costs of changing existent behaviour are immediate. Healthy behaviour offers deferred rewards. The second aspect refers to the fact that the promises of health education are often probabilistic in nature. An appeal to youngsters not to smoke in order to reduce the probability of incurring heart disease or lung cancer will often prove ineffective as a precautionary measure. Similarly, changing nutritional habits does not exclude cardiovascular disease (cf. Koelen & Vroom, 1986).

With a view to identifying those determinants of behaviour which provide leverage points for health education, theories of behaviour pinpointing such leverage points can, therefore, be very practical but they can also create blind-spots and prevent improving effectiveness of programmes. In the area of health education, the search for good theories is far from complete. This study aims to make a contribution in this respect.

1.6 INFORMATIONAL AND SOCIAL INFLUENCE ON BEHAVIOUR

At this place two groups of theories will be distinguished: theories which accentuate the need for cognitive consistency, and theories

which accentuate the exchange of social rewards.

The former group of theories is based on the notion that individuals process available information in a logical manner and subsequently act according to it. They deal with attitude change as a precondition for behaviour change, where changes in an individual's opinions, attitudes and behaviour result from information and knowledge.

The latter group of theories is based on the assumption that behaviour is caused by social rewards. Individuals emit behaviour (e.g. express attitudes) in order to receive rewards (e.g. acceptance, approval) and to avoid punishments (e.g. rejection, disapproval). Behaviour results from actual or perceived external behaviour-reward contingencies.

In the field of health education much attention has been paid to what we might call the cognitive approach. Based on this approach, several models for communication have been developed and applied in practice, for example the model regarding innovation-decision processes (Rogers, 1962; 1983), and the source-message-channel-receiver model (Berlo, 1960). Several studies, however, have demonstrated that knowledge is an important but not sufficient factor in behaviour change (e.g. Ajzen & Fishbein, 1980; de Haes, 1983; Kok, 1986). Programmes, based on a cognitive approach, i.e. conducted to increase individuals' knowledge

about health consequences of behaviour, often do not lead to behavioural effects, and, if an effect is found, it is usually of small magnitude. Clearly, rational cognitive appeals very often seem not to possess enough power to motivate the individual to change his behaviour (e.g. Leventhal & Cleary, 1980; Koelen & Withag, 1987). For example, it is generally known that smoking constitutes a severe health risk. Still, a substantial number of people smoke. The conclusion, therefore, may be that health-related behaviour can only in part be explained by the wish to behave in a rational and logical manner.

Much (health-related) behaviour occurs or is learnt in a social context. Influences from the social environment, therefore also impinge on the individual's behaviour. Social influences can break through the linear sequence of cognition-affect-behaviour (cf. Rölling, 1987). In our opinion, a great part of health-related behaviour can be explained by the wish to be accepted by others. More specifically we assume that much (health-related) behaviour is based on perceived external behaviour-reward contingencies. This point of view is derived from self-presentation theory which is based on the hedonic assumption that an individual attempts to maximize social or personal rewards (e.g. acceptance, support) and to minimize social or personal punishments (cf. Schlenker, 1975).

Although several studies pay attention to social influence, to our knowledge there has been, by now, no substantial research of the determinants of health-related behaviour which focuses on the human desire to be accepted by others. Yet, when it comes to identifying the determinants of health-related behaviour for purposes of planning health education campaigns, the accuracy of identifying the proper mechanism can have overriding importance for the effect of the campaigns. The present study attempts to explore whether self-presentation theory can contribute to a better understanding of some determinants of behaviour.

The outline of the remainder of the study is as follows. In chapter II two theories will be described: attribution theory, which accentuates individuals as logical information processors, and self-presentation theory, in which individuals are portrayed as hedonists. In Chapter III two experiments are presented, in which the theoretical value of (attributional) self-presentation in explaining public behaviour is tested. Chapter IV reports two field studies in which self-presentation theory is applied to adolescents' smoking-behaviour, in order to gain a better understanding of the processes underlying peer pressure. The last chapter, V, summarizes the conclusions of the four studies and pays attention to the implications of the results for health education.

II. ATTRIBUTION THEORY AND SELF-PRESENTATION THEORY

II.1 INTRODUCTION

In this chapter, two theories will be described, attribution theory and self-presentation theory. In attribution theory, individuals are portrayed as logical information processors. According to self-presentation theory, individual behaviour is guided by the exchange of social rewards.

II.2 ATTRIBUTION THEORY

Attribution theory is concerned with people's everyday explanations of events and experiences. However, there is not one but many attribution theories (e.g. Heider, 1958; Kelley, 1967; 1973; Jones & Davis, 1965; Rotter, 1966). The common notion is that individuals interpret events and experiences in terms of their causes. These interpretations play an important role in determining behavioural reactions to events and experiences. Causal attributions constitute the person's understanding of causal structure of the world and are important determinants of his interaction with that world (Kelley & Michela, 1980, p. 460). Attribution

theorists are guided by the belief that individuals use cognitive schemata (Kelley, 1972) by which they process the available information rationally, and that they use 'naive' scientific methods in order to arrive at veridical causal judgements (Försterling, 1986, p. 275).

The basic principles of attribution theory that will concern us here have been spelled out by Kelley (1967; 1973). He describes the rules that an observer uses to make attributions of causality, either for his own or other person's responses to events. A major principle of Kelley's attribution theory is covariation. This principle states that "... an effect is attributed to the one of its possible causes with which, over time, it covaries" (Kelley, 1973, p.108). In other words, the cause will be attributed to the stimulus which is present if the event occurs and which is absent if the event does not occur. Responses can be attributed either to the person himself (internal attribution) or the environment (external attribution).

In cause - effect analysis three dimensions are important: the entity dimension, the time/modality dimension, and the persons dimension.

The entity dimension contains the stimuli that elicit the response. This dimension gives information about the distinctiveness of the response. A response is distinctive if the individual does not respond to all entities in the way he responded to the present one. For example, a

person laughs (response) if he sees one clown (entity), but not if he sees another clown.

The time/modality dimension includes the time and context in which the response occurred. This dimension gives information about the consistency of the response. A response is consistent if the individual responds to the entity in the same way at different times and at different modalities. So, if the person always laughs when he sees the specific clown, regardless of whether he sees the clown on television or in the circus, his response is consistent.

The persons dimension, including the actor and other persons, provides consensus information. A response is consensual if others react to the entity in the same way as the individual. That is, when others also laugh if they see the specific clown, the response is consensual. If a response is distinctive, consistent, and consensual, it is attributed to the entity. A response which is not distinctive and not consensual, but consistent over time and modality is attributable to the person.

Several studies showed that individuals indeed make use of the three dimensions in inferring causes of events. However, consistency information (time/modality) and consensus have more effect on attributions of causality than distinctiveness information (e.g. McArthur, 1972; Orvis, Kelley & Cunningham, 1975;

Hewstone & Jaspars, 1983). These studies show that both, low consistency information and high consensus information lead to external (stimulus, circumstances) attribution. The effect of low consistency and high consensus information is the strongest when they go together. High consistency information, on the other hand, does, as well as low consensus information, lead to internal (i.e. person) attribution. The effect on internal attribution is the strongest when both types of information go together.

II.2.1 The process of making attributions

A basic assumption of attribution theory is that individuals are motivated to live in a meaningful and structured world. Given this motive, they are seldom (content to be) passive observers of events, but are actively involved in understanding the events they observe. The action is not only important to explain observed events, but also to predict future events, and to be able to anticipate on them. As Kelley (1967) states: "Attribution processes are to be understood not only as a means of providing the individual with a veridical view of this world, but also as a means of encouraging and maintaining his effective exercise of control in that world" (p. 22).

Historically, attribution theorists consider the process of causal inference in the light of logical information processing. Generally, both an actor and an observer make use of the same causal schemata to relate causes and consequences. This implies that an observer, when provided with sufficient information, will arrive at the same attribution of causality as the actor (Kelley, 1972; Bem, 1967). An actors' attribution statements are functionally similar to those that an observer could make.

However, several studies give evidence that attributions can be biased. Attributions are not always logical derivations from information. Individuals seem to be prone to attribute success to their own dispositions and failure to external factors. This so called self-enhancing bias have led to discussions among social psychologists, some advocating a perceptual and cognitive explanation, others advocating a motivational explanation. For example Bem (1972) primarily considers biases in light of differences in information between actor and observer. On the other hand, Schneider (1969), Stevens & Jones (1976) and Snyder et.al. (1976), assume the operation of self-serving or ego-defensive motives. That is, individuals try to protect or enhance their self-esteem by taking credits for good outcomes of behaviour and denying blame for bad outcomes. Miller & Ross (1975) however, question this motivational explanation, and postulate that "... existing data seem rea-

dily interpreted in information-processing terms" (p.224). They explain the occurrence of a self-enhancing effect by a) the tendency of individuals to expect their behaviour to produce success; b) the fact that the perceived covariation between response and outcome may be more apparent in the case of increasing success than in the case of constant failure; c) the tendency of individuals to misconstrue the meaning of contingency. That is, individuals erroneously base their judgements of contingency on the occurrence of the desired outcome, rather than on the actual degree of contingency. Miller and Ross, however, do not completely deny the possibility of a self-serving bias, but, as they state, evidence for this explanation is not unequivocal: some studies seem to support the self-serving bias, while others seem to contradict it. As a reaction on the Miller & Ross article, Weary Bradley (1978) presented a broadened formulation for the motivational explanation. She suggested that self-serving attributions may be viewed as self-presentations, designed to maximize public esteem needs, and that under some circumstances these esteem needs may be best served by accepting responsibility for negative outcomes. The broadened formulation has helped to emphasize the potential influence of contextual factors on causal judgements.

II.3 SELF-PRESENTATION THEORY

Self-presentation is the process of establishing an identity through the appearance one presents to others (Weary & Arkin, 1981). Through their self-presentations, people claim a variety of public images that influence how others regard and treat them in social action (Goffman, 1959; Schlenker, 1975; Leary & Schlenker, 1980). In his book "Presentation of self in everyday life", Goffman (1959), a representative of symbolic interactionism, depicted the world as a stage where people are actors. The central notion in his work is that individuals create the most favourable image for themselves to serve their goals in the situation they are involved. ||

The basic premise in self-presentation theory is that people are hedonistic. They tend to create an impression on others that will lead to approval and avoid disapproval (Jellison, 1981; Schlenker, 1975). It is assumed that individuals, more or less intentionally, control their appearances in order to guide and control the responses made by others towards them. More specifically, individuals try to make a favourable impression on others by manipulating the information they give about themselves, in order to evoke favourable reactions from the social environment. Information can be manipula-

ted by means of, for example, overt behaviour, physical appearance, verbal statements about own attributes and behaviours and verbal descriptions about reasons for one's behaviour.

Self-presentation theory emphasizes the importance of the social environment, as a cause of individual behaviour. The type of public image presented to an audience (i.e. significant others) affects the quality and quantity of material rewards, social approval, and interpersonal evaluations a person receives from social interaction (Schlenker, 1975; Quattrone & Jones, 1978). This, however, also has consequences for the possibilities the individual has in presenting a certain image. There are limits to self-presentation, influenced by characteristics of the others such as status, familiarity, historical knowledge or possible future knowledge, social norms and the presenter's interaction goals (for an overview see Weary & Arkin, 1981).

Research has shown that individuals can vary their self-presentation (Hendricks & Brickman, 1974; Schlenker, 1975; Baumeister & Jones, 1978; Quattrone & Jones, 1978). In these studies, it is assumed that individuals select self-presentation strategies from which they believe they optimize their chances of gaining approval.

Hendricks & Brickman (1974) studied the effects of status and knowledgeability of the au-

dience on the individual's self- presentation. In their study, students stated their grade expectancies for a course to either one of three audiences: the teacher, fellow students or an uninvolved graduate student researcher. In each condition, half of the subjects were told that the audience had access to their grade-point averages (public condition), while the other half of the subjects were told that their stated expectancies would be the only information available (private condition). The results showed that subjects' self- presentations toward fellow students, under both public and private conditions, were modest. Furthermore, subjects displayed greater self-enhancement to the teacher than to the fellow students, regardless of information about prior performances. Toward the informed student researcher, self-presentations were also self-enhancing (comparable to self-presentations to the teacher), while presentations to an uninformed student researcher were modest, i.e. comparable to their fellow students. The results confirm the general hypothesis, that individuals enhance their statement of performance expectancies before an audience with power over their outcomes.

Schlenker (1975) led subjects to believe that they would participate in a group task where their individual performance would either be known to the group (public performance condition) or be completely anonymous (private per-

formance condition). On the basis of bogus feedback from prior tests, subjects expected either to perform extremely well or very poorly on the group task. Before the group task began, subjects were given the opportunity to "get to know one another better". Subjects therefore first completed an "information exchange questionnaire", which contained, among others, questions regarding their competence. Subjects expected that they, after privately completing the questionnaire, had to sit at a round table and to read to one another their responses on the questions. The questionnaire allowed the subjects to vary their self-presentations. The results showed that, under public performance conditions, subjects presented themselves consistently with their expectations of personal performance. That is, self-presentations on competence were consistent with subjects' expectations of actual performance. Under anonymous conditions, however, subjects were uniformly self-enhancing, irrespective of their personal expectations of actual performance. According to Schlenker these results stress the degree to which secret information, known only to the individual can be ignored when selecting a public image.

Baumeister & Jones (1978) studied the effects of receiving positive or negative personality feedback and others' knowledge about this feedback on individuals subsequent descriptions of their personal attributes. Subjects first had

to complete a personality questionnaire. Following this, they were exposed to the results of that questionnaire, containing either a good or bad profile of their personality. This information was either confidential (private condition) or presumably made available to another subject (public condition). Subsequently, subjects had to describe themselves to another subject. The forms used for these self-descriptions asked for self-ratings both on traits that were mentioned in the (good or bad) profile and on traits that were not related to the profile information. If the prior information was believed to be public, subjects in the unfavourable information condition described themselves consistently with that information, but appeared to compensate by enhancing their descriptions on traits about which the target person was not informed. If the transmitted information was more favourable, subjects were generally modest and self-depreciating. Subjects who were privately exposed to the same personality profiles (and thus believed that the target person would not have access to the information) showed no evidence of compensatory self-enhancement. Baumeister & Jones concluded that: "there is a general tendency toward strategic self-deprecation when someone else has authentic favourable information about one's characteristics and toward strategic, but selective, self-enhancement when the information is unfavourable" (p. 618).

The above studies show that a person's self-presentation must strike a fine balance between presenting a favourable public image and being too preposterous to be believed by others. For this reason, individuals will present a public image which is consistent with their self-perceptions under conditions where past, present or future events would publicly repudiate a particular self-presentation. Inaccurate claims to social attributes will often produce disruption of the interaction, which has negative consequences for both the individual and his target. However, when surrounding events portend no public treat to self-presentations, individuals can and will present themselves in a self-enhancing way. The actor therefore needs to have insight in the possible influence of these factors. This implies that the presenter must have the ability to take the perspective of the other (Tetlock, 1981; Schlenker & Leary, 1982). That is, in order to control successfully the responses of others, the presenter must be able to predict the others' perceptions of and reactions to the presenters' assumed identity (Weary & Arkin, 1981). In fact, individuals are actively involved in strategic management of impressions on others. In search for approval of others, individuals choose a strategy which enhances the chance on approval from others who do control such rewards. Therefore, self-presentation to peers can differ from self-

presentation to teachers, and self-presentation to a stranger can differ from self-presentation to acquaintances.

II.3.1 Attributional biases and self-presentation

The point has been made that attribution theory portrays individuals as logical information processors. The theory is primarily based on the assumption that an individual's responses to events and experiences correspond with the results from his private internal cognitive processes. Self-presentation theory, on the other hand, assumes that individuals try to make a favourable impression on others in order to increase the probability of gaining socially mediated rewards. In fact, both theories assume that actors and observers use the same causal schemata. However, from self-presentational point of view, within these causal schemata there are margins for self-presentational purposes. Furthermore, in some situations, causal schemata can not be fully applied for inferences. On these specific situations we will return in chapter IV.

Attributional biases, as described in section II.3, may be caused by self-presentation motives. People frequently communicate their causal interpretations of events to others. Once

expressed to others, attributions become significant social acts (Tetlock, 1981). How others react to an individual often depends on their perceptions of the causes of the individual's behaviour. Publicly stated attributions of causality are social activities.

In the next chapter, two laboratory experiments on attributional self-presentation will be presented. The first study deals with attributional self-presentation from the perspective of the actor. More specifically, it studies whether subjects are inclined to use attribution statements for self-presentation purposes. The second study deals with the perspective of others. The attribution statements of the actor will be evaluated by others (the audience). The studies examine the extent to which self-presentation theory can explain public behaviour and, therefore, seek to establish the importance of self-presentation as a factor in explaining such behaviour. If an individual's need to enhance his public image has an important effect on the things he does, self-presentation theory can be an important basis for health-related behaviour analysis.

III. ATTRIBUTIONAL SELF-PRESENTATION

III.1 INTRODUCTION

In this chapter two studies are presented, conducted to explore the self-presentation function of attribution statements. Both of these studies elaborate on self-serving biases in attributions, that is, the tendency to attribute positive outcomes to oneself (e.g. ability) and negative outcomes to external causes (see chapter II). The first study explores how individuals (actors) handle (privately-held) information if they present themselves to others by means of attribution statements. The second study investigates how attribution statements are evaluated by others (audience). Both studies give evidence for self-presentational effects of biases in attribution.

III.2 STUDY 1: ATTRIBUTIONAL SELF-PRESENTATION AND INFORMATION AVAILABLE TO THE AUDIENCE *

A basic premise of attribution theories is that people seek to understand their environment, they try 'to attain cognitive mastery of the causal structure of the environment (Kelley, 1967, p. 193). A proper understanding of the causes of events fosters adequate action. In Kelley's (1973) words: "When the attributions are appropriate, the person undoubtedly fares better in his decisions and actions than he would in the absence of the causal analyses" (p. 127).

Abilities (whether positively or negatively evaluated) constitute an important factor in causal analysis because the efficacy of decisions and actions often hinges on the person's correct assessment of his abilities. Accurate ability attributions lead to better decisions as to what to endeavour and what not. Reasoning from this perspective, a person's attributions of ability should reflect his best unbiased estimate of his ability, considering the information available to him.

* This study is designed in cooperation with A. van Knippenberg. and published as "Attributional self-presentation and information available to the audience". (1985). *European Journal of Social Psychology*, 15, 249-261.

The central contention of the self-presentation approach (cf. Schlenker, 1975; Jellison and Arkin, 1977; Jellison, 1981) is that people try to make a favourable impression on others in order to increase the probability of gaining socially mediated rewards or to reduce the probability of receiving punishments. These rewards and punishments may be primary (e.g. food; physical punishment) or secondary ones (e.g. liking, status; rejection, contempt). An individual is likely to engage in self-presentation activities which contribute to the impression that he possesses social valued characteristics. Strictly speaking, people need not have the characteristics, it only matters that they can (continue to) make others believe that they have them. "Their self-enhancement is only limited by their perceived ability to 'act' the part they are presenting, not by their actually 'being' the part" (Schlenker, 1975, p. 1031).

In general, a variety of factors may be involved in determining what kind of action will contribute to the creation and maintenance of a favourable public image. In the present study we explore the effect of the availability of relevant information to the audience (i.e. the target) on attributional self-presentation, specifically with regard to ability attributions of performances. Following Schlenker (1975), we postulate that the nature of an appropriate self presentation depends on what the audience already knows or eventually may learn about the actor. If the audience neither possesses nor is

likely to acquire relevant information, then self-serving public ability attributions constitute favourable self-presentations. If the audience does possess reliable and pertinent information or is likely to get such information, the subject may protect or enhance his public image by giving public attributional responses which are consistent with the general drift of that information.

The effect of audience information on public attributions has as yet not been systematically studied. Therefore, direct evidence concerning the effect of audience information is not available. Some suggestive support for the propositions formulated above, however, is provided by a few studies of public self-descriptions in various audience information conditions. Schlenker (1975) and Baumeister & Jones (1978) demonstrated that the anticipation of relevant information to be provided to the audience or the actual spreading of information imposes restrictions on a person's self-presentation and enforces realistic information processing, while the absence of public information elicits indiscriminately favourable self-descriptions (see also chapter II).

Apparently, people adjust their public self-descriptions to what they believe their audience knows or may learn about them. People probably act on the assumption that the expression of self-enhancing statements may improve their

public image unless others can recognize such statements as unrealistic. It is argued here that self-presentation considerations, which seem to be effective in predicting public self-descriptions as a function of audience information, also apply to public ability attribution of task performances. When causal attributions are addressed to an ignorant audience, the subject will present himself favourably by publicly attributing a successful performance to his own ability and by not attributing a poor performance to his own ability, disregarding, if necessary, his private knowledge of his previous performances. In other words, ability attributions addressed to an uninformed audience will be self-serving. However, in situations in which the subject is aware of the fact that the audience is provided with historical information regarding his ability, self-serving public attributions will be inhibited. In such conditions, public ability attributions will be in accordance with the information provided to the audience. In brief, it is hypothesized that public attributions of ability will be self-serving when the audience is uninformed, while public ability attributions will not be self-serving when the audience possesses pertinent information.

III.2.1 Method

Overview of the design

The design of the present study is a 2 x 2 x 2 between-subjects design. Independent variables are test performance (high or low), task performance (high or low), and audience information (i.e. the audience is, or is not, informed about the subject's test performance). The dependent variable is public attribution of task performance to ability.

Subjects

One hundred-and-nineteen male students of a Polytechnic school participated as subjects in the experiment. They were randomly assigned to the experimental conditions. Nine subjects were not included in the analysis because of suspicion with regard to deceptions incorporated in the experiment. These subjects were distributed approximately equally across conditions.

Procedure

Subjects participated in groups of seven. Upon arrival, the subjects were given the impression that they were to take part in two experiments. It was emphasized that these experiments were unrelated and would be carried out by different researchers. The fact that both experiments had somehow to do with 'alertness' (the focal

ability in the present study) was said to be a mere coincidence.

The experimenter conducting the first experiment brought the subjects into separate cubicles. In the cubicles, tape-recorded instructions were given via headphones. The first experiment was introduced to the subjects as being concerned with measuring their 'alertness' by means of a reliable test. Alertness was described as the capacity to concentrate and take quick and adequate decisions, and it was emphasized that it was an important human ability. The alertness test subsequently put before the subjects consisted of three subtests: a speed test requiring quick pressing of unexpectedly lighted push-buttons, a simultaneously administered dots test in which all configurations of four dots in an irregular series of dot clusters had to be encircled, and a figure test in which figures had to be substituted by symbols. In order to enhance the credibility of the manipulated test feedback, subtests were constructed in such a way that subjects had little insight in their real achievements. After completion of these subtests, subjects were told that their subtests scores would be combined into a total alertness score. This alertness score would be in between the theoretical minimum of 0 (not alert) and a maximum of 100 (very alert).

Test performance

Some time after completion of the test, the subjects received manipulated feedback of test results on a form displaying the seven participants' ordinal positions in a pre-printed vertical column consisting of seven rectangles. This test feedback form was used for the experimental induction of the variable test performance. Subjects were randomly assigned to the high or low test performance conditions. Subjects receiving high test feedback were placed at the second position from the top, i.e. their test score was the second best in the group of seven participants. In addition, it was reported on the test feedback form that the subject had 79 points (out of a maximum of 100) on the alertness test. Subjects receiving low test feedback were placed at the sixth position from the top, indicating the second worst test performance in the group. Low test performance subjects were given 21 points on the alertness test. In both test performance conditions, the exact scores of the other participants were not reported on the subject's feedback sheet. Only their ordinal positions were indicated. In addition, it was reported on the feedback sheet that the best score was somewhat above 85 points and the worst score somewhere below 15 points. This feedback procedure was explained by suggesting that knowing how others had performed would help to understand one's own score.

Audience information

The test feedback sheet was also used to manipulate the subject's impression of what the other participants would know about his test score. In the audience-informed conditions, the positions of the seven participants on the test feedback form were indicated by their names, so that the subject would know (assuming that the others would see a similar form) that the other participants would be informed of his test result. In addition, the verbal instructions emphasized that the other participants were informed of his relative position. On the test feedback form, the subject's own name was written in the rectangle on the second or sixth position (depending on the test performance condition he was assigned to), while the names of the other participants were randomly assigned to the remaining positions. In the audience-not-informed condition, the positions on the feedback sheet were indicated by capital letters (A to G). The subject was always indicated by the letter F. Since the participants only knew their own letter code, anonymity of the relative test performance positions was ensured under these conditions. Subjects were also told that test results would be considered private information. They were urged to maintain the strictest secrecy and not to discuss their test scores in or outside the laboratory. After the subjects had been given some time to study the test feedback, they were given a res-

ponse sheet on which they could indicate to what extent the other participants would be able to guess the subjects' test score. Responses were given on a seven-point scale ranging from 'not at all' to 'very well'. This question was meant to serve as a check on the audience information manipulation. After answering this question, subjects were requested to insert the test feedback form and the response sheet in an envelope, which was addressed to the investigator, and seal it shut. The experimenter collected these envelopes and left. The 'first experiment' was terminated.

A ten minute interval separated the two experiments. The subjects stayed in their cubicles while having coffee and listening to some music on their headphones. Another experimenter entered to conduct the 'second experiment'.

The audio-taped instructions, spoken with another voice, commenced by saying that this investigation would be concerned with alertness, specifically with performance on an alertness task and a discussion amongst the participants about it. The fact that both experiments had to do with alertness was said to be purely coincidental. The forthcoming experiment was absolute unrelated to the preceding one. It was stressed that there would not be any exchange of research data between the investigators.

Subsequently, instructions were given about the task the subjects had to perform. This task consisted of a combination of two subtasks: a speed task and an anagram task. Subjects had to solve a series of five-letter anagrams while at the same time responding to an irregular sequence of unexpectedly emitted figures spoken on the audio-tape by pressing corresponding push-buttons. The resemblance of this speed subtask to the speed subtest in the first phase of the study was introduced in order to reinforce the impression that the same ability was underlying test and task. It was explained to the subjects that task performance would be expressed in points ranging from 0 (a very poor performance) to 100 (an excellent performance).

After the task was completed, performance feedback was given on a sheet with a slightly different lay-out from the one used for the test feedback. In all conditions, ordinal positions of the participants were indicated by their names. Thus, as the concomitant verbal explanations emphasized, all task results were public.

Task performance

Subjects were randomly assigned to a high or low task performance condition. In the high task performance conditions, the subject was placed at the second position from the top. Furthermore, it was reported that this task

performance score was 77 points. In the low task performance conditions, the subject was placed at the sixth position from the top, i.e. the one but worst performance. The sheet further revealed that the subject had gathered 23 points on the alertness task.

It should be noted that, in the two phases of the study, subjects in the 'audience-informed' condition were presented with two arrays of participants' names, one for test results and one for task results. The covariance of the positions of the names on the two feedback sheets implicitly conveys an impression of relationship between test and task performance. Therefore, care was taken that in the various arrangements of names on the task feedback sheets the rank correlation between test and task performance was constant across conditions (The Spearman rank correlation was about 0,66 in all conditions).

Public ability attributions

After the subjects had been given some time to inspect their task performance feedback form, it was announced that they were to participate in a group discussion about the alertness task. Prior to this group discussion they were asked to indicate on a response sheet, labelled 'initial contribution to the group discussion', how strongly they attributed their task performance to ability. The question was phrased as follows:

'To what extent is your performance on the alertness task influenced by your real alertness?' Answers could be given on a seven-point scale ranging from 'not at all' (1) to 'very much' (7). These attribution responses constituted the dependent variable of the study. It should be noted that a high score on the attribution measure has a different meaning for high and low task performance. For high task performance a high attribution score implies high ability, while for a low task performance it implies low ability, and vice versa. As attribution responses were given while suggesting that these responses were to serve as an initial contribution to the group discussion, the other participants were staged as the subject's prospective audience. The other participants always knew the subject's ordinal task performance standing and were either informed or ignorant about his test result. The study was segmented into two explicitly unrelated experiments in order to create the illusion that no information could disseminate from the earlier test phase to the subsequent task phase, at least not via the experimenter, and only via other participants if the experimental condition required it.

After the subjects had written down their ability attributions, the response sheets were collected. Then it was announced that the experiment was terminated. Subjects were thor-

oughly debriefed and probed for lack of suspicion.

III.2.2 Results

Manipulation check

The experimental manipulation of audience information seems to have been successful. It appears that in the audience-informed condition, subjects rated the capacity of the other participants to guess their test score much higher (mean 4.38) than in the audience-not-informed condition (mean 2.17; $F(1,102) = 66.83, p < 0.001$).

Manipulation checks on test performance and task performance were not included in the study, that is, subjects were not asked to indicate how well they had performed on the test or on the task. It was felt that such questions might interfere with the dependent measure by building up a subjective commitment with regard to perceived ability. In view of the fact that the feedback on the test and task performance seemed rather unambiguous, checks on these manipulations were considered of less importance.

Ability-attributions

The subjects rated the influence of their ability (alertness) on their public task performance on

a seven-point scale, while they knew they would have to present this attribution to an audience of co-participants. In Table 1 the mean ability attributions given as a function of test performance, task performance and audience information are summarized.

Ability attributions were subjected to analysis of variance. There appear to be three significant effects: a main effect of task performance, an interaction effect of test performance and task performance, and an interaction effect of task performance and audience information.

The main effect of task performance ($F(1,102) = 6.54, p < 0.012$) consists of the attribution of low task performance to ability (mean 4.11) to

Table 1. Mean ability attributions

Test performance	Task performance	Audience information*		
		Audience-not-informed	Audience-informed	Row means
Low	Low	4.21	5.38	4.78
	High	4.50	3.85	4.21
High	Low	2.93	4.00	3.44
	High	5.86	5.38	5.63

* Refers to information about test performance, a high score stands for a strong influence of ability on task performance. The scores range from 1 to 7

be somewhat lower than the attribution of high task performances to ability (mean 4.94). As such, this suggests an overall self-serving attribution effect. It should be noted, however, that this main effect of task performance will have to be reconsidered in view of the task performance x test performance and the task performance x audience information interaction effects.

The test performance x task performance effect ($F(1,102) = 20.11, p < 0.001$) can be interpreted by inspecting the right-hand margin of Table 1. The results show that task performances which are consistent with test performance (i.e. low task performance given low test performance, and high task performance given high test performance) are attributed more to ability than task performances inconsistent with test performances. This overall consistency effect, however, was not predicted.

The results displayed in the right-hand column of Table 1 can also be used to re-interpret the main effect of task performance. Subjects having received low test performance feedback seem to attribute a low task performance somewhat more to ability than a high task performance although the difference is not significant (Simple Main effect: $F(1,102) = 1.78, p < 0.19$). Apparently, the self-serving effect (defined in terms of comparing attributions of high and low task performance) completely

pletely disappears if it conflicts with consistency information. Subjects having received high test performance feedback, however, attribute low task performance much less to ability than high task performance (Simple Main effect: $F(1,102) = 24.53, p < 0.001$). If consistency information coincides with self-enhancement tendencies, the self-serving effect is amplified. Strong effects appear when these forces work in the same direction: effects are cancelled out when these forces work in opposite directions.

The summary table of the task performance x audience information interaction effect ($F(1,102) = 7.55, p < 0.008$) is presented in Table 2. Inspection of the rows of the table shows that subjects who had a low task performance attribute their low score less to ability in the audience-not-informed condition than in the audience-informed condition (Simple Main effect: $F(1,102) = 7.05, p < 0.01$). Subjects

Table 2: Task performance x audience information interaction effect on ability attributions

Task performance	Audience information	
	Audience-not-informed	Audience-informed
Low	3.57	4.69
High	5.13	4.62

Subjects who had a high task performance attribute their high score somewhat more to ability when the audience is not informed of their test result than when it is, although this difference is not significant (Simple Main effect: $F(1,102) = 1.72, p < 0.19$). Comparisons within the columns reveal that when the audience is not informed of the subjects' test results, low task performance is considerably less attributed to ability than high task performance (Simple Main effect: $F(1,102) = 13.58, p < 0.001$). However, when the audience is informed of the subjects' test performance, there is no difference between the ability attribution of high and low task performance (Simple Main effect: $F < 1$). These results show the operation of informational constraints on public ability attribution as predicted in our hypothesis: self-serving distortions, clearly present in attributional self-presentation towards an ignorant audience, are absent if the subject knows that his audience possesses pertinent information. This interaction effect qualifies the main effect of task performance reported above. Self-serving attributions appear to be conditional upon audience information.

III.2.3 Discussion

The results demonstrate the impact of public informational constraints on ability attribu-

tions. Self-serving distortions, strongly present in ability attributions addressed to an ignorant audience, completely disappear when the attributions are directed at an audience which is informed about relevant previous test results. In uninformed audience conditions, public attributions are self-serving, even when it means that subjects have to ignore their confidential unfavourable information to some extent. Apparently, the careful separation of the test and task phase of the study and the assurance that test results will be confidential creates sufficient protection for the subject to give self-enhancing attributions. In informed audience conditions, self-serving biases are totally absent and public ability attributions are in accordance with the consistency of test and task performance outcomes. We assume that the use of an allegedly reliable test, instead of just another 'alertness' task, is primarily responsible for the total absence of self-serving distortions in the audience-informed conditions. The test result probably constitutes an indisputable index of ability which, once made public, completely annihilates the subjective room for attributional liberties. On the whole, the present results provide support for the self-presentation interpretation of self-serving attributions which claims that, unless hampered by the target's knowledge of disqualifying evidence, people give self-serving attributional responses for the purpose of protecting or improving their public image.

One might argue that informational constraints should affect public ability attributions only in situations where the audience possess relevant unfavourable information (e.g. low test results), and not when the available information is favourable for the subject (e.g. high test results). In the latter case, the subject could freely attribute self-servingly since the audience would know the implicit ability claim is justified. In this reasoning, the test performance x task performance x audience information effect ($F(1,102) < 1$) would constitute the appropriate test of the self-presentation prediction. However, the two following considerations argue against this line of reasoning. First, while subjects in the audience-not-informed condition, who have private knowledge of poor test results, are in a position to attribute more self servingly (than subjects in the audience-informed condition having similar test results), those who have private knowledge of good test results need to attribute more self-servingly (than their counterparts in the audience-informed condition) in order to convey the same impression of competence to the audience. Secondly, a strongly self-serving attribution in a situation in which the audience already knows that the subject is competent, might decrease the audience's impression of the subject's likeability (cf. Brickman and Seligman, 1974; Schlenker and Leary, 1982). In view of these arguments, the conclusion that

informational constraints should reduce self-serving attributions in low as well as high test conditions seems to be warranted.

Our results further show an unexpected overall consistency effect. Although we predicted public attributions to be consistent with public information, it was not foreseen that public attributions would also be consistent with confidential information. Yet, attributions in the uninformed audience condition are clearly affected by private test results. Ability attributions of low task performance when given confidential low test feedback (mean 4.21) are not clearly as low as when given confidential high test feedback (mean 2.93). Similarly, ability attributions of high task performance are not as high for subjects with private knowledge of poor test results (mean 4.50) as for subjects with private knowledge of high test results (mean 5.86). Subjects seem to arrive at a compromise between what they know their ability to be and what they want it to appear in public.

Although intuitively the appearance of a consistency effect in the uninformed audience condition may not come as a surprise, it should be noted that from a strict self-presentation point of view it is problematic. As our earlier quotation from Schlenker (1975) suggests, self-enhancement is only limited by public constraints, and not by private considerations.

If we take this literally, why then is there still a consistency effect in the uninformed audience condition? Within the self-presentation framework, there are two explanations which may account for the present finding. First, despite our efforts to prevent it, the subjects may have been apprehensive of a possible leakage of information. The privacy of test information may not have been subjectively perceived as foolproof. Secondly, subjects may have considered the possibility that they would be called upon to perform another alertness task later in the experiment. An attribution, then, which was unrealistic in view of the subject's confidential information, might be embarrassingly invalidated either by information leakage or by an unannounced later task performance. Although the subjects were generally not suspicious with regard to the experimental procedures, we assume that they were cautious enough to ensure themselves against the unlikely event of being caught in a lie.

The finding that private test results affect subsequent public task attributions according to consistency principles can readily be explained if one refrains from the exclusive application of self-presentation notions. It is quite conceivable that private knowledge of high test results boosts the subject's sense of competence, which increases his confidence to make self-enhancing public statements. Simi-

larly, private knowledge of poor test results may lower the subject's confidence which may lead to more cautious public attribution statements. In our view, both the above self-presentation arguments and subjective competence considerations offer plausible interpretations for the effect of private test results on public attributions. Whatever the case may be, the present data do not allow us to verify the validity of these explanations.

III.3 STUDY 2: EVALUATIONS OF ATTRIBUTIONAL SELF-PRESENTATION. *

The results of the first study show that an actor makes use of the perceived lack of information of the audience and that he or she will avoid overt violations of the consistency principle. However, the study does not answer the question whether or not an actor is successful in evoking a favourable image by manipulating attributions of causality. It may be of interest, therefore, to see how an audience actually evaluates an actor as a function of his/her attributional statements. The present study focusses on this issue with respect to liking and competence.

* Study 2 has been designed in cooperation with A. van Knippenberg. A paper on this study is submitted for publication.

According to attribution theory, individuals use causal schemata when making inferences of causality (Kelley,1972). With regard to the communication of attributions of causality, causal schemata (including conventional cause-effect principles as well as social stereotypes) can be considered to have an information processing function, but also a normative function. Since the actor and his social environment make use of the same principles to relate causes to consequences, others (audience), when provided with sufficient information, can examine whether the actor in his publicly stated attribution of causality properly used the attribution principles. It is assumed here that actors who overtly violate attribution rules will face disapproval from their social environment (i.e. normative function).

When others have access to relevant information, they can scrutinize the actor's ability attribution on his use of the consistency principle. If the principle is incorrectly used, the attribution statement may be disbelieved by others. According to Schlenker (1975), a discovered inaccurate self-presentation not only produces embarrassment and anxiety for the discovered actor, "... but also for those who have been duped into believing the misrepresentation and then discover their mistake" (p.1031). Thus, ability attributions which are inconsistent with the consistency principle might produce disruption of the interaction and

the actor may, therefore, be negatively sanctioned. In situations where the social environment does not have access to relevant information, the evaluation proceeds differently from the situations described above. In such situations, the others are unable to examine the proper use of the consistency principle. The actor can freely make self-enhancing attributions, i.e. publicly attribute positive consequences of behaviour to internal causes (ability, effort) and negative consequences of behaviour to external causes (luck, difficulty). When there is no threat of the self-presentation being publicly repudiated, individuals can present themselves as positively as they wish.

Up to now, a sprinkle of research has been carried out on audience reactions to self-presentational expressions. In a study by Brickman & Seligman (1974) it was found that an actor was evaluated more favourably on liking when his publicly stated performance expectation was in accordance with (what was said to be) his private expectation. Furthermore, it was shown that an actor was liked better when his expectation matched his subsequent performance than when it did not. Schlenker & Leary (1982) found that subjects evaluated an actor more favourably on competence and liking when his performance claim was congruent with the actual performance. When subjects were not informed about actor's actual performance, self-enhancing performance claims (claims

above average) were more positively evaluated than claims that were not self-enhancing.

These studies give evidence for the notion that accuracy is appreciated. Furthermore, if sufficient information is unavailable, others apparently give the self-enhancing actor the benefit of the doubt. Brickman & Seligman and Schlenker & Leary investigated audience evaluations of an actor as a function of performance expectations and performance claims. In the present study we focus on evaluations of actors by others, as a combined function of actors' attributions of ability and the knowledge others have of the actors' performance history, i.e. their knowledge about either one or two actual performances of the actor. In accordance with the theoretical views outlined above we hypothesize that others, who are provided with consistent or inconsistent information regarding the actors' performances, will rate an actor whose attribution of ability is in accordance with the consistency or inconsistency of the performances more favourably on liking (hypothesis I) and competence (hypothesis II), than an actor whose attributions are not in accordance with the (in)consistency of the performances. That is, if performances are consistent, internal attributions (attributing the performance to ability) lead to the most favourable evaluation. If performances are inconsistent, external attributions (attributing the performance not to ability) are valued most.

With regard to evaluations on liking, the hypothesized relationship is based on the normative function of causal schemata, in particular the consistency norm. With respect to competence ratings, we assume that deviations from the consistency rule will lead to perceptions of lower competence.

In situations in which the others do not have access to relevant information, i.e. when they know the results of only one performance, ability attributions may function as implicit ability claims. Through self-enhancing attributions the actor can claim higher competence. Since the others are unable to verify the attribution statement by using the consistency principle, due to a lack of information, they may be inclined to give the self-enhancing actor the benefit of the doubt. With regard to evaluations on competence, self-enhancing attributions are expected to be advantageous. That is, partially informed others will evaluate an actor more favourably on competence if the actor makes self-enhancing attributions than if the actor does not make self-enhancing attributions (hypothesis III). Thus: if the actor performs well, internal attributions will lead to higher competence ratings. If the actor performs poorly, external attributions will lead to higher competence ratings.

With regard to evaluation on liking, we expect another process to be at work. Because of the

lack of relevant information others do not have the opportunity to find out whether the actor is lying or honest, bragging or realistic. In such situations, where objective criteria are missing, the evaluation of the actor on liking may be influenced by other factors than the norm of consistency. In the case of publicly stated ability attributions, the so called 'norm of internality' may be existant. According to Jellison & Green (1981), the norm of internality can be defined as: "... a general norm positively sanctioning explanations for behaviour that emphasize internal forces and devaluing explanations that emphasize external factors" (p. 647). The authors found that (1) individuals expressing internal causal attributions receive more social approval (ratings on the liking dimension) than individuals expressing external causal attributions, and (2) subjects given the instruction to make a positive impression describe themselves as having a stronger tendency toward internal attribution than subjects instructed to create a negative impression. Although Jellison & Green used a personality scale (locus of control), we believe that the norm of internality can be generalised to attribution statements. That implies that in situations in which the others have no possibility to examine the correctness of the attribution statement, the norm of internality will be prevalent in liking evaluations. We hypothesize that others, who do not have access to relevant information, will evaluate an actor

more favourably on liking when the actor makes internal ability attributions than when the actor makes external attributions (hypothesis IV).

III.3.1 Method

Overview of the design

The design consists of 2 (sex of subjects) x 3 (actors' test performance on a so called alertness test: low, high, no information) between-subject factors, and 2 (sex of actor) x 2 (actors' performance on an alertness task low, high) x 5 (attribution statement: very much, much, moderately, slightly, not at all influenced) within-subjects factors. The dependent variables concern the evaluation of the actor on competence and liking. Competence is measured by the items not alert - alert and incompetent - competent. Liking is measured on the items not likable - likable and dishonest - honest. The items are presented on 6-point bipolar scales.

Subjects

One hundred thirteen male and one hundred seventeen female students from a secondary school participated in this study, varying in age from 16 to 20 years.

Scenarios

Subjects were provided with information about hypothetical actors by means of scenarios. In fact a close description of the situation was given in the previous experiment. The scenarios depicted actors who participated in a study about alertness, in which the actors first took a reliable test measuring their alertness ability (the alertness tests). The actor either performed well and received 79 points out of 100, or performed poorly and received 21 points out of 100, or no information regarding the actor's test performance was provided. Subsequently the actor performed an alertness task, which measured alertness but which was said to be not as reliable as the previous test. On this task the actor performed well and received 77 points out of 100 or performed poorly and received 23 points. Finally, the actor enrolled in a group discussion regarding the alertness task in which the actor made one of 5 attribution statements, saying that his or her performance on the alertness task was either very much, much, moderately, slightly or not at all influenced by his/her own alertness ability. Information about the actor's sex was provided by two fairly common Dutch first names: the male actor was called Harm, the female Carla. The following example from one of the audience information conditions illustrates how the scenarios were constructed:

"Carla performed well on the alertness test. Her score was 79 points. She also performed

well on the alertness task, for which she received 77 points. In the group discussion Carla told that her performance on the alertness task was very much influenced by her alertness ability".

The scenarios were presented in a booklet containing 2 (sex of actor) x 2 (actors' alertness task performance) x 5 (levels of ability attribution) = 20 scenarios. Within each booklet all the scenarios contained the same test performance information: either low or high or no information. Each scenario was presented on a separate page which further contained the dependent variables. The order in which the scenarios appeared in the booklets was varied at random, across subjects.

Procedure

Sessions were run in groups of 6-12 persons. Subjects were seated in separate cubicles in order to ensure that they worked independently of each other. They received a written instruction which explained that the study concerned "forming first impressions of others when only little information is available". Accordingly, they were informed they would receive a booklet containing 20 short stories about a hypothetical person of about their own age who had participated in a study. Then a description was given of the situation which the actors encountered during the study. The subjects were told in advance that the stories

would differ with respects to actors' task performances and attribution statements. They were asked to read each story carefully. After reading a story, they had to give their first impression of the actor through rating the adjective list written beneath the story. They were asked to work through the booklet from the beginning to the end. Subjects were urged to read each story on its own, independently from the previous and following one.

III.3.2 Results

The results have been analysed for informed others and partially informed others separately, first the results on the liking scale and subsequently the results on the competence scale. In the analyses no effects were found of actor's sex or sex of subjects and therefore these variables are not included in further analyses.

Evaluation on liking

Subjects were asked to evaluate the actor by indicating on 6-point scales how 'likable' and how 'honest' they thought the actor was. Both items were highly correlated ($r = .75$, $p < 0.001$) and revealed similar patterns of results. For the sake of brevity, only the results on the first item are presented.

When subjects were informed about the actor's test and task performance, i.e. the informed other condition, the analysis revealed a main effect of attribution statement: $F(4,144) = 6.30, p < 0.001$, and a three-way-interaction of test performance x task performance x attribution statement: $F(4,144) = 17.62, p < 0.001$. The mean scores are presented in Table 3.

The mean scores in the fifth column of Table 3 suggest that internal attributions invoke decreasing liking but in view of the interaction effect reported below, it appears that the average effect is entirely due to the low/high and high/low test x task performance information.

Table 3: Means on the item likeable *

Test performance	LOW		HIGH		NO			
Task performance	LOW	HIGH	LOW	HIGH	MEAN	LOW	HIGH	MEAN
Attribution statement								
no influence	3.80	4.47	4.93	3.71	4.09	3.22	3.53	3.38
little influence	3.91	4.47	4.54	3.81	4.18	3.73	4.02	3.88
moderate infl.	4.16	4.21	4.49	4.14	4.25	4.05	4.19	4.12
much influence	4.29	3.46	3.68	4.54	3.99	4.76	4.56	4.66
very much infl.	4.34	3.41	3.58	4.51	3.96	4.63	4.23	4.45

* The scores range from 1 (not likeable) to 6 (likeable)

Table 3 shows that actors in the informed other conditions are judged more 'likable' when they attribute consistent performances more to their own ability and inconsistent performances less to their own ability. The mean scores reveal an upward trend in the consistent performance conditions (i.e. higher ratings when making internal attribution), and a downward trend in the inconsistent performance conditions (i.e. lower ratings when making internal attributions). The test of linearity for the three-way interaction shows a significant effect: $F(1,147) = 71.16, p < 0.001$. Within each of the informed audience conditions the Simple Main effects are significant (p 's < 0.001). These results comply with the hypothesis (1) that publicly stated ability attributions which are in accordance with the consistency or inconsistency of the actor's performances will lead to more favourable ratings on liking than attribution statements not in accordance with the consistency principle.

In the partially informed other conditions the analysis revealed a main effect of attribution statement ($F(4,36) = 2.79, p < 0.04$). The mean scores in Table 3 show that actors in both task performance conditions are evaluated more favourably on liking when they make internal ability attributions. The test of linearity for the main effect is highly significant: $F(1,42) = 34.57, p < 0.001$. The Simple Main effects are significant: $F(1,42) = 25.09, p < 0.001$ in the low

task performance condition and $F(1,42) = 7.03$, $p < 0.02$ in the high task performance condition. These results are in agreement with the hypothesis (IV) that if others are only partially informed, they will like the actor more when he makes internal rather than external attributions.

Evaluation on competence

Subjects were asked to estimate the competence of the actor on two items, firstly by asking for a competence rating and secondly an alertness rating. The items were highly correlated ($r = 0.80$, $p < 0.001$) and showed the same patterns of result. Only the results of the competence rating are presented.

Table 4: Means on the item competence

Test performance	LOW	HIGH		NO		
Attribution statement	Task performance *					
	LOW	HIGH	LOW	HIGH	LOW	HIGH
no influence	2.27	3.79	3.79	4.89	2.44	4.52
little influence	2.27	3.77	4.03	4.75	2.91	4.60
moderate influence	2.40	3.73	3.85	4.89	2.89	4.51
much influence	2.36	3.26	3.57	5.27	2.65	4.80
very much influence	2.41	3.36	3.45	5.32	2.73	4.86

* The scores range from 1 (not competent) to 6 (competent)

In the informed other conditions, the analysis revealed a three-way-interaction of test performance x task performance x attribution statement : $F(4,140) = 9.06, p < 0.001$. The mean scores are presented in Table 4.

The mean scores in Table 4 show that actors in the consistent performance conditions are considered more competent if they make internal ability attributions (upward trend). In the inconsistent performance conditions they are rated more competently if they make external attributions (downward trend). The test of linearity reveals that these trends are significant: $F(1,143) = 26.41, p < 0.001$. Within each of these conditions, the Simple Main effects are significant (p 's < 0.001). These results comply with the second hypothesis: that publicly stated ability attributions which are in agreement with the consistency or inconsistency of the performance will lead to higher competence ratings than ability attributions which are not in agreement with the consistency principle.

In the partially informed other conditions, the analysis revealed a main effect of task performance ($F(1,41) = 4.26, p < 0.05$). In Table 4 it can be seen that the actor is rated as more competent when given a high task performance rather than given a low task performance.

The results do not support the hypothesis that an actor who makes self-enhancing ability attributions will be rated as more competent than an actor who does not make self-enhancing attributions (hypothesis III). In fact, the hypothesis predicts an interaction effect of task performance x attribution statement. Although the mean scores in Table 4 are in the predicted direction, i.e. actors in the high task performance condition are rated as more competent the more they make internal attributions, and actors in the low task performance conditions are rated more competent given less internal attributions, the interaction effect is not significant ($F(4,31) = 2.36, p < 0.08$).

III.3.3 Discussion

The results of the study give support to the general notion that information about consistency is an important factor in the evaluation of actors' self-presentational behaviour. Given consistent performances, evaluations (liking and competence) are more favourable when the actor makes stronger internal ability attributions. If performances are inconsistent, external attributions are more favourably evaluated. In sum, attribution statements violating the consistency principle lead to lower liking ratings and lower perceived competence.

These results complement those in the first study. In that study, we found that subjects

actually follow the consistency principle when addressing attribution statements to an informed audience. The second study shows that they indeed may benefit from this self-presentation strategy. The results of the two studies permit the conclusion that, if the others have access to relevant information, actors try and succeed in influencing the perceptions of others in a favourable direction by properly using the consistency principle.

If one is only partially informed about an actor's previous performances, ratings on liking are related to the degree of internality of the ability attributions, which is in agreement with our hypothesis. An actor was liked more when making more internal ability attributions, independent of the actual performance. Thus, if there is no relevant information for scrutinizing the attribution statement on the basis of the consistency principle, an actor can make a positive self-presentation by publicly giving internal attributions.

When one is only partially informed about an actor's performance, self-enhancing ability attributions are predicted to lead to higher perceived competence than non self-enhancing attributions. Although the results are in the predicted direction, that is: actors in the high task performance condition are rated as more competent, the more they make internal attributions, and actors in the low task performance

conditions are rated as more competent, given less internal attributions, the effect is only marginal ($p < 0.08$). The marginal effect is probably due to the research method. Subjects had to think of an hypothetical actor in a hypothetical performance situation. Probably the effect is more striking in a situation in which a real life actor is observed in a real life-performance situation. Further research should highlight this issue.

III.4 GENERAL DISCUSSION

The results of the studies on attributional self-presentation allow the conclusion that individuals are willing to use attribution statements for self-presentational goals. When others do not have access to relevant information, that is, when the actor perceives that the other cannot easily repudiate a boosted self-presentation, the actor tries (study 1) and succeeds (study 2) to impress others by self-enhancing attributions. When others do have access to possible repudiating information, the actor's attribution statements are rational and accurate. These results show us that people can behave as logical information-processors, but that they are sensitive to influences from their social environment as well. Kelley (1973) depicted people as "naive scientists". However, viewed from the results of self-presentation

studies, it may be more accurate to depict people as "naive politicians" (see also Tetlock, 1981; Weary & Arkin, 1981). That is, individuals process the available information logically and according to the established rules in situations where others are able to invalidate them, and self-enhancing when they perceive that others cannot scrutinize their statements. The evaluations by others (audience) are congruent with this finding. That is, others like an actor most if he processes the information in a logical manner, but give him the benefit of the doubt if they feel information is lacking. Apparently, observers expect that an actor processes available information logically. In fact, both actor and others make use of the same causal schemata. Observers base their expectations about the actor's behaviour on these schemata and evaluate the actor more favourably if he acts according to these expectations. Others experience a disruption of their interaction with actors when additional information (either from the past or in future) shows that the actor misused the trust in him by making self-enhancing claims. When an actor's behaviour does not coincide with others' expectations he makes an unfavourable impression and, therefore, will receive negative evaluations. The same reactions are found in studies regarding the operation of stereotyped expectancies. Deviations from stereotype-based expectations result in unfavourable evaluations

(e.g. Costrich et.al., 1975; Storms, 1978, Touhey, 1974).

The studies reported upon in this chapter show that self- presentation considerations might override logical cognitive concerns when that suits the need for gaining social approval.

IV. SELF-PRESENTATION THEORY AND HEALTH-RELATED BEHAVIOUR

IV.1 INTRODUCTION

The previous chapter dealt with two experimental studies regarding self-presentation motives as a cause of public behaviour. In the chapter at hand we will attempt to apply the results of these studies in conjunction with other notions from self-presentation theory to health-related behaviour. The utility of self-presentation theory will be explored in two field studies regarding adolescents smoking behaviour.

IV.2 CONSIDERATIONS FOR APPLICATION

Based on the results of studies 1 and 2, we can conclude that individuals process the available information in the manner of a 'politician': logical and according to the established rules in situations where others are able to scrutinize the derivations, and self-enhancing in the absence of such possibilities. The evaluations by others are consistent with these findings. As stated before, the results of the two studies show that self-presentational considerations

can override logical concerns when this will suit the need for gaining social approval.

For health education these results are of importance. They might explain the powerlessness of logical arguments when health-related behaviour may be conducive to receive social rewards. When it comes to identifying the determinants of health-related behaviour for purposes of planning health education campaigns, the accuracy of identifying the considerations underlying behaviour may well be of overriding importance for the effectiveness of campaigns.

Knowledge of positive or negative effects of health-related behaviour is important for an individual in order to be able to decide whether or not to re-evaluate or change his/her present behaviour. For example, knowledge about the relation between our physical condition and our life style (e.g smoking, food-pattern, exercising) informs us that we can, at least partially, exercise control over our own physical condition. It enables rational decision making about either changing unhealthy behaviour and/or maintaining healthy behaviour. Thus, knowledge of factors that influence health is necessary in order to enable individuals to take decisions with respect to changing present behaviour.

However, knowledge of such cause-effect relationships is not always sufficient to induce changes in health-related behaviour. For exam-

ple, the negative consequences of smoking on health are well known, but still a considerable number of people begin or continue to smoke. And, taking part in traffic after alcohol consumption is not uncommon, despite our knowledge of the risks for our own and other peoples' life. The question to be raised here is 'why do individuals engage in such behaviour if they know about the negative consequences?'. Individuals quite often deal with other individuals; they are a part of social networks. Much health-related behaviour occurs or is learnt in those social contexts, that is, in the presence of other people. For example, not many people have their meals on their own, but in company of others. Also alcohol is mostly consumed in the presence of others, for example at parties or during an evening out with friends. This behaviour does not only have a survival function (e.g. a biological need for nutrition), but it has a social function as well. The social environment therefore has a strong influence on such behaviour.

IV.2.1 Social norms and consistency

In social groups there are obviously social norms that govern all forms of self-presentational behaviour. In situations in which cause-effect relations are clear, social norms will be based on general 'objective' rules and criteria (compare the results of studies 1 and 2). How-

ever, when causal analysis cannot be made due to for example, a lack of information or to the ambiguity of information, social groups will be inclined to formulate their own 'rights' and 'wrongs'. That is, they establish their own group norms.

With regard to health-related behaviour, the cause - effect relation between behaviour and health often is ambiguous due to for example, a perceived indirect relation between behaviour and health. Furthermore, individuals often are exposed to inconsistent information provided by different channels and media. For example, health organizations may differ in their recommendations regarding the consumption of eggs, alcohol, dairy products, meat and other edibles, where the industry in its turn will give different inform. Apart from raising the question as to the validity of the information, the various sources of information are often inconsistent and therefore do not give clear guidelines for behaviour (cf. Koelen, 1986). In ambiguous situations, individuals are inclined to infer information from relevant others. As stated in chapter II, cognitive theories postulate that individuals have an internal need to correctly define social reality. They are inclined to infer information from others in order to obtain information about the validity of their position. For example, in his theory of social comparison, Festinger (1954) emphasized that individuals, in the absence of objective non-social means,

evaluate their opinions and abilities through social comparisons with others, in order to fulfil a cognitive need for valid opinions and judgments of abilities. In contrast, in self-presentation theory it is assumed that individuals try to evoke favourable reactions from the social environment. They engage in social comparisons so that they can determine which opinion, ability or behaviour will be approved of and which will be disapproved of by others.

Thus, in both theories the social environment is important in obtaining information regarding opinions, abilities and behaviour. In terms of social comparison theory this information serves the goal of obtaining a veridical view on reality. In terms of self-presentation theory the information serves the goal of gaining optimal social rewards. Since the individual is attempting to gain approval from the group in the immediate situation, he will adopt the position or perform overt behaviour which he expects will be approved of his social environment (cf. Jellison & Arkin, 1977). Thus, from self-presentational point of view, the observed behaviour-reward contingencies are important in determining the health-related behaviour.

In everyday life individuals show consistency in their behaviour and in their expression of, for example, attitudes, opinions and attributions of ability. As Kelley (1973) stated, consistency is highly valued in western society. Inconsistency in behaviour would make organized social

interaction difficult. Acting consistently, according to established norms, will result in predictability and regularity in behaviour and will create stability in social relationships. From a self-presentational point of view, consistency in overt behaviour is a necessity for individuals because of the reactions from social environment. Inconsistency is negatively evaluated by others. The results of studies 1 and 2 support the conclusion that there is a general norm for consistency. Individuals who comply with this norm receive social approval and acceptance (see study 2). An individual, acting in an inconsistent manner (e.g. by violating existing group norms) elicits negative feelings in others. In some situations this may lead to evaluations such as being a dishonest or untrustworthy person, a liar or bragger (see also Jellison, 1981; Tedeschi, Schlenker & Bonoma, 1971).

IV.2.2 Conclusions

Generally, self-presentation theory emphasizes the importance of the environment, and particularly the social environment, as the cause of individual behaviour. Individuals seek to optimize social rewards. Many important health-related behaviours, such as smoking, alcohol and food consumption, have a social function and can, therefore, be perceived as important mediators of social rewards. Whether individ-

uals will change a specific behaviour depends largely upon the opinions regarding that behaviour held by others who have control over valuable rewards. When people know, for example, that their food pattern is not very healthy, they might be willing to change it. However, when the family condemns a change in food pattern, the individual has to decide whether to change the food pattern, which will lead to the withholding of approval from the family, or maintain it, which may affect his health negatively.

Many health-related behaviours are embedded in social relationships and in habits of a group someone belongs to or should like to belong to, and can, therefore, be important in determining the social rewards individuals receive. A change in such overt behaviour can affect the quality of interaction of an individual with others. In the remainder of this chapter, we will continue on this topic by studying the utility of self-presentation theory in explaining the smoking behaviour of adolescents. Two field studies will be presented which explore the utility of self-presentation theory to a better understanding of processes underlying the initiation and maintenance of smoking behaviour.

IV.3 STUDY 3: PEER-PRESSURE AND ADOLESCENT SMOKING BEHAVIOUR*

Research into smoking behaviour, motivated by the wish to prevent adolescents to take up smoking, aims to analyse the processes that motivate people to take up and to continue smoking. Variables used in this research include knowledge about the consequences of smoking for health, attitudes towards smoking, and the influence of social environment, i.c. parents, siblings and peers. For the study reported here, two findings from past research are of importance.

Several studies show that changes in knowledge about health risks and attitudes towards smoking scarcely lead to significant enduring changes in behaviour (eg. Radius et.al, 1980; Dielman et.al, 1984). As a result, prevention programmes to increase adolescents' knowledge of health consequences are effective in teaching about hazards of smoking, but often only have a small influence on attitudes towards smoking. Furthermore, behavioural effects usually do not occur (see Botvin & Eng, 1980; Leventhal & Claery, 1980). These results correspond with what we have stated before that knowledge often constitutes an insufficient condition for behavioural effects.

* The author wishes to thank Edith Wortel for conducting study 3.

A second finding relates to the influence of social environment. Adolescents whose parents, siblings or peers smoke are more prone to start smoking than adolescents in whose social environment hardly anyone smokes (e.g. Aarø et.al., 1981; Alexander et.al., 1983). The influence of peers (peer pressure) seems to be a strong explanatory variable (e.g. O'Connell et.al., 1981). It is assumed that adolescents who have started to smoke and those who intend to do so are less capable to resist peer pressure than non-smoking adolescents. Although some positive results have been reached (de Vries, 1988), many prevention programmes to improve resistance to peer pressure have shown to be relatively ineffective in reducing the proportion of adolescents who take up smoking (Thompson, 1978; Leventhal & Cleary, 1980).

In our opinion, this result can be explained by taking the method according to which peer pressure has been studied into account. Peer pressure is mostly defined in terms of overt and direct attempts to coerce an individual to comply with others. However, in the majority of studies the extent of peer pressure is operationalised as the number of friends who are smoking. This implies that peer pressure is considered to be relevant only for taking up smoking. The effects of peer pressure on other spheres of the adolescent's life are neglected. The relative ineffectiveness of 'resisting to peer-pressure programmes' might be due to this

conceptualization. In the present study we attempt to reformulate the concept of peer pressure and to place it in the perspective of self-presentation theory.

According to self-presentation theory, individuals try to make a favourable impression on others by manipulating the information they give about themselves. They seek approval from others because of the consequences of being liked or disliked. Gaining the liking of others can result in the formation of a bond with them, for example friendship and acceptance as a member of a peer-group, which in turn increases the probability that the others will do favours for the individual (cf. Jellison & Gentry, 1978). With a formation of a bond, however, individuals develop expectancies about how peers should behave and react. Presenting oneself consistently with the expectations of others will lead to the desired approval. Self-presentation activities which are not consistent with the expectations others hold might produce disruption of the interaction and the actor may, as a consequence, be negatively sanctioned (Schlenker, 1975; Baumeister, Cooper & Skib, 1979; also see chapter III). Therefore, it is rewarding for both the actor and other to meet mutual expectations.

In sum: adolescents try to create and to live up to public images that meet the perceived expectations of their peers in order to gain recognition and approval. Favourable public ima-

ges can be created by means of, for example, overt behaviour, physical appearance and verbal statements about own attributes and characteristics. Smoking can, amongst others, be considered as one of the means. A public image therefore can be conceived as a composite resultant of different factors, such as opinions, behaviours and activities.

In order to gain a fuller understanding of the operation of peer-pressure as an end to prevent adolescents from smoking, it is necessary to look at smoking behaviour as a fraction of the public images adolescents try to create. Peer pressure incorporates enduring social influences on individuals. An adolescent who, for example, changes his attitudes from 'positive toward smoking' to 'positive toward non-smoking', but who wishes to remain a member of the same peer group in which others are smoking because he values the rewards distributed by that peer-group, might easily recide into his previous attitude because of the enduring social influence. Furthermore, in line with self-presentation theory, peer-pressure should not be conceived of as a one-way influence to impose the will of peers on an individual, but rather as a two-way influence process, in which meeting expectations is rewarding for both the individual and his peers. It should be noted that these processes can be expected to operate both to stimulate adolescents to start smoking and to prevent them from smoking,

depending on the group to which they (like to) belong.

The study at hand explores whether smoking and non-smoking adolescents differ in the images they try to create, and whether they are inclined to meet the perceived expectations of their peers. Adolescents therefore will be asked about behaviours and activities they engage in, the way they interact with their friends, the expectations they perceive their friends hold regarding those behaviours and activities and the nature of interaction. Furthermore, it will be explored whether boys and girls differ with regard to the previous mentioned aspects.

IV.3.1. Method

Overview of the design

Subjects will be divided into three categories, based on two questions regarding their smoking behaviour. These categories are: smoker, intender and non-smoker. In the analysis, smoking behaviour will be considered as a between-subjects factor. The design, therefore, consists of 3 (smoking behaviour: smoker, intender, non-smoker) x 2 (sex of subject) between subjects factors. The independent variables consist of three groups of variables, either measuring the nature of interaction with friends, the activities and behaviours subjects engage in, and subjects' perceived expectations of their

friends. These variables are derived from articles regarding adolescents' smoking behaviour.

Subjects

In a medium sized city, primary and secondary schools were selected at random. In the selected primary schools, all sixth-grades, and in the selected secondary schools, all first to third forms, were included. In each of these groups, all pupils completed the questionnaire. The data regarded 239 male and 275 female pupils, varying in age from 11 to 16 years.

Questionnaire

Peers: In order to increase the salience of peers, the first question in the questionnaire asked respondents to give the first names of their best friends, with a maximum of 5. They were asked to write down the names of the "friends with whom you interact the most", in order to be sure that they used the same criterion when selecting friends. Wherever in the questionnaire peers were important, the accompanying text referred to "the friends you mentioned in the first question".

The nature of interaction with friends was measured by means of 12 statements with four response categories each, ranging from strongly disagree to strongly agree. A sample statement is: "when I am with my friends I am serious". In

other statements serious is replaced by funny, active, honest, independent, helpful, sturdy, self-assured, kind, having good ideas, modest, or sensible. In the introduction of these questions in the questionnaire, respondents were asked to think of the friends they mentioned in the first question.

Ten items asked subjects about behaviours/activities they engage in. The items were also presented as statements with the response categories as described. The ten behaviours/activities were: going to a bar, going go to a disco, drinking alcohol, practising sports, listening to popmusic, wearing sportswear, stylish or trendy clothes, like going to school, and doing well at school.

Perceived peer expectations were assessed by means of the same items but now reformulated as: "my friends expect that I am serious when I interact with them" or, for behaviours/activities: "my friends expect that I often go to a bar." Respondents again were asked to think of the friends they mentioned in the first question. The questionnaire further contained questions about actual smoking behaviour and the number of friends smoking.

Procedure

Subjects were seated in a class-room at separate tables, in order to ensure that they would

work independently from each other. They were told that the study concerns "opinions and activities of today's adolescents". They then received a written instruction explaining how to complete the questionnaire. This instruction was also explained by the assistant researcher. In order to decrease the possibility that respondents tended to present themselves in a favourable manner to the researcher, respondents could enclose the completed questionnaire in a sealed envelope. To ensure further anonymity, no name of respondents was asked.

IV.3.2 Results

Checks on variables

Peers: In the first question of the questionnaire, subjects were asked to mention their best friends, with a maximum of five. In order to secure the validity of the statements about peer groups, first an analysis regarding the number of friends mentioned has been executed. It appeared that 95% of the respondents mentioned three or more friends (mean 4.53).

Age: An analysis regarding the influence of age on the responses showed that age does not significantly influence the response patterns. Therefore, age is not further included as variable in analysis.

With respect to smoking behaviour, subjects were classified as smoker when they sometimes or regularly smoked, as intender when

they were sure or quite sure that they would start smoking, and as non-intenders when they were sure or quite sure not to start smoking. In the remainder, non-intenders will be referred to as non-smokers. The results are presented in Table 5 .

Table 5 shows that most of the subjects do not (intend to) smoke. Furthermore, more girls smoke than boys. The same pattern of results has been found in other studies (e.g. Aarø et.al., 1981; Schuurman, 1983).

With respect to smoking behaviour of peers first the proportion of smoking peers has been calculated, by dividing the number smoking by the number mentioned. Analysis showed that of the friends of smokers, 62% smoked. In the case of intenders and non-smokers, these numbers were respectively 24 and 7%. The analysis of variance revealed a main effect of smoking behaviour ($F(1,491) = 272.96, p < 0.001$). Between

Table 5: Percentage of smokers, intenders and non-smokers by sex

Smoking behaviour	Boys	Girls	Total
smokers	9 %	14 %	12 %
intenders	5 %	9 %	8 %
non-smokers	86 %	77 %	81 %

the categories the differences are significant (p 's < 0.001). Sex did not have an effect.

The analysis regarding the nature of interaction showed a significant main effect of sex of subject: $F(1,398) = 4.12$, $p < 0.001$. The means are presented in Table 6 .

Inspection of the means show that boys more often believe themselves to be active, sturdy and self-assured when they interact with their friends than girls, while girls more often consider themselves kind than boys.

The analysis did not reveal an effect of smoking behaviour. That is: smokers, intenders and non-smokers do not differ with respect to the nature of interaction with their friends.

With regard to behaviours and activities, the analysis shows that both smoking behaviour and

Table 6: Means and univariate results of sex on the nature of interaction

Variables	Boys *	Girls	F(1,398)	p <
active	3.02	2.36	11.65	.001
sturdy	1.80	1.33	16.30	.001
self-assured	3.31	2.88	10.26	.002
kind	3.62	3.81	4.50	.04

* The scores range from 1 (strongly disagree) to 4 (strongly agree)

sex are strongly related with the type of behaviour adolescents engage in. The analysis of variance revealed a main effect of smoking behaviour ($F(2,472) = 11.73, p < 0.001$), sex ($F(1,472) = 3.03, p < 0.002$) and an interaction

Table 7: Means and univariate results of smoking on behaviours/activities

Variables	Smokers *	Intenders	Non-smokers	F(2,472)	p <
going to a bar	2.20a **	1.22b	1.28b	41.03	.001
going to a disco	2.83a	1.64b	1.71b	30.24	.001
drinking alcohol	2.59a	1.61b	1.33c	65.35	.001
practising sports	2.77a	2.70a	3.36b	13.79	.001
listening to popmusic	3.85a	3.81	3.58b	4.47	.018
wearing sportswear	2.85a	3.29b	3.30b	7.27	.001
wearing stylish clothes	2.33	1.88a	2.58b	7.35	.001
wearing trendy clothes	2.69a	2.79a	2.19b	10.30	.001
like going to school	2.42a	2.43a	2.80b	5.49	.005
doing well at school	2.44a	2.91b	2.91b	17.80	.001

* The scores range from 1 (strongly disagree) to 4 (strongly agree).

** Differences in subscripts refer to significant differences between groups. No subscripts means: no difference with either other group.

effect of smoking behaviour and sex ($F(2,472) = 2.36, p < 0.001$).

The results with respect to smoking behaviour are presented in Table 7. Smoking behaviour is related to all the dependent measures. Inspection of Table 7 shows that smokers go to a bar or disco, drink alcohol, listen to popmusic and wear trendy clothes more often than non-smokers (p 's at least < 0.01). Non-smokers practise sports, wear sportwear, like going to school and do better at school more often than smokers (p 's at least < 0.01).

Intenders drink alcohol and wear trendy clothes more often than non-smokers. On the other hand they practise sports less and wear stylish clothes less than non-smokers (p 's at least < 0.05). In these activities/behaviours they do not differ from smokers, except for alcohol consumption: they drink less than smokers ($p < 0.05$) but more than non-smokers ($p < 0.05$). Intenders differ from smokers by going less frequently to a disco or bar, wearing sportswear

Table 8: Means and univariate results of sex on behaviours/activities

Variables	Boys	Girls	F (4,472)	$p <$
going to a bar	1.75	1.38	11.73	.001
like going to school	2.37	2.73	5.75	.01
doing well at school	2.70	2.93	3.88	.05

more often, liking going to school more, and doing better at school (p 's at least < 0.05). On these items, however, they do not differ from non-smokers.

The results with respect to sex of subjects are presented in Table 8. Inspection of Table 8 informs us that boys go to a bar and drink alcohol more often than girls. Girls on the other hand like going to school, and do better at school more often than boys.

The interaction of smoking and sex is related to the items 'going to a bar' ($F(2,472) = 7.43, p < 0.001$) and 'doing well at school' ($F(2,472) = 4.92, p < 0.008$). The means are presented in Table 9.

Table 9 shows that smoking boys go to a bar more often than smoking girls (Simple Main effect $p < 0.001$). Smoking boys and smoking girls attend a bar more often than intenders and

Table 9: Smoking x sex interaction effect on behaviours/activities

Smoking behaviour	Going to a bar		Doing well at school	
	Boys	Girls	Boys	Girls
smokers	2.65	1.75	2.10	2.78
intenders	1.27	1.17	2.91	2.92
non-smokers	1.33	1.22	3.09	3.03

non-smoking boys and girls (Simple Main effect: $p < 0.001$). Furthermore, smoking boys do less well at school than intending and non-smoking boys, and smoking boys do less well at school than smoking girls.

With respect to perceived peer expectations regarding the nature of interaction with friends and the behaviours/activities they engage in, it was expected that adolescents try to meet peer expectations, both during interaction and in the activities and behaviours they engage in. To further explore this expectation, correlation coefficients of subjects' scores have been computed on the nature of interaction and behaviours/activities on the one hand and perceptions of what their friends expect on the other hand.

Table 10: Correlation coefficients for nature of interacting and perceived expectations

Variables	r. *	n
funny	.44	511
active	.55	480
honest	.37	513
independent	.64	496
helpful	.47	498
serious	.55	511
sturdy	.59	511
self-assured	.54	425
kind	.43	507
having good ideas	.54	510
modest	.69	477
sensible	.58	504

* all p's < .001

In Table 10 the correlation coefficients are presented on the items regarding the nature of interaction. Table 10 shows a high degree of correspondence between all 'interaction items' and the perceived peer expectations.

In Table 11 the correlation coefficients are presented on the items regarding behaviours/activities. Again, we find a high degree of correspondence between the 'activity items' and perceived expectations. The only exception occurs on the item 'doing well at school'.

The results, presented in Table 10 and Table 11, suggest that subjects indeed try to meet their peers' expectations. Whether subjects smoke or

Table 11: Correlation coefficients for behaviours/activities and perceived expectations

Variables	r *	n
smoking	.51	491
going to a bar	.63	504
going to a disco	.68	499
drinking alcohol	.69	506
practising sports	.54	502
listening to popmusic	.42	503
wearing sportswear	.62	508
wearing stylish clothes	.71	507
wearing trendy clothes	.65	507
like going to school	.62	492
doing well at school	.08 **	499

* all p's < .001

** p < .01

not does not make a difference, since the correlation coefficients for smokers, intenders and non-smokers reveal the same pattern of results. This means that all subjects are equally eager to meet peer expectations. This is particularly interesting since the three smoking categories differ in their preference for activities.

IV.3.3 Discussion

The results of the study at hand support the notion that peer-pressure can be understood in terms of self-presentation. As expected, smokers, intenders and non-smokers show significant differences in the number of friends who are smoking: smoking adolescents have more smoking peers than non-smoking peers (even if the choice of smokers is limited to about 15%) while non-smoking adolescents have more non-smoking than smoking peers. Furthermore, smokers, intenders and non-smokers show significant differences in behaviour and activities. Smokers differ from non-smokers in that they go to a bar or disco and drink alcohol more often. Furthermore they wear trendy clothes more frequently than non-smokers. Non-smokers on the other hand more frequently practise sports, wear stylish clothes or sportswear and like going to school more than smokers. Intenders can be seen as an in-between group: with respect to preference for trendy clothes, their dislike of sports and stylish clothes they re-

semble the smoking adolescents. With respect to going to a bar or disco, wearing sportswear and like going to school they resemble non-smokers. Furthermore, intenders have fewer smoking peers than smokers, but more than non-smokers. These results altogether allow the conclusion that smokers and non-smokers adhere to different life styles, which are characterized by differences in behaviour and activities. The life style of intenders resembles in some aspects that of smokers and in other aspects that of non-smokers. Smokers, intenders and non-smokers on the other hand, do not differ in the way they interact with their friends.

The results show some interesting sex differences. With respect to the nature of interaction it has been found that boys more often believe themselves to be active, sturdy and self-assured than girls when they interact with their friends, while girls more often than boys consider themselves to be kind. This effect is in accordance with results of other studies (e.g. Dielman & Radius, 1980; Aarø et al., 1981). With regard to behaviour/activities it has been found that boys more often attend a bar than girls, while girls like going to school and doing well at school more often than boys. The interaction effect of smoking behaviour and sex shows that the differences with regard to going to a bar and doing well at school can be mainly ascribed to smoking boys and girls. These results suggest

that sex stereotyping affects some behavioral domains of adolescents.

The results show a surprisingly strong degree of correspondence between the way in which adolescents act and their peers' expectations. The relation is equally strong for each of the three categories. This means that smokers, intenders and non-smokers are equally eager to meet the expectations of their friends, on a wide range of behaviour (including the way of interaction with one another) and not only on smoking behaviour. This is particularly interesting since the three categories value different behaviour and activities. Within each group presumably the same process is operating regarding the distribution of social rewards, such as acceptance, recognition and support.

The results of this study support the notion that peer-pressure can be understood in terms of self-presentation. Adolescents try to create and to live up to public images that meet the expectations they perceive their peers to hold. Peer pressure can be considered as a two-way influence process, in which it is rewarding for both the individual and others if the individual lives up to the expectations. Furthermore, it is equally strong for smokers, intenders and non-smokers. Peer pressure seems to be related to lifestyles rather than to single behaviour, and is therefore relevant for many spheres of the adolescent's life; smoking is one of these. As a

consequence, peer pressure can be operative both to stimulate and to prevent adolescents from taking up smoking.

Looking at the majority of studies regarding adolescents smoking behaviour, smoking behaviour often is studied on its own. For example when using the theory of reasoned action (Fishbein & Ajzen, 1982), measures are directed at attitudes and subjective norms regarding smoking behaviour. Subsequent campaigns aimed at preventing youth from smoking, are, almost obligatory, also directed toward this one type of behaviour. The results of the present study suggest that an approach toward a single behaviour does not lead to a powerful intervention, and it explains the relative ineffectiveness of such campaigns. An important contribution of self-presentation theory lies in its focus on public images. The public image of a member of a group is a composition of several interests, activities and behaviour. Smoking behaviour is just one of a larger whole.

IV.4 STUDY 4: THE SELF-PRESENTATION FUNCTION OF SMOKING BEHAVIOUR*

The results from study 3 showed that smoking and non-smoking adolescents differ in their life styles. Engaging in behaviour and activities which are related to life styles increases the chance on social rewards. Therefore, those behaviours can serve self-presentational goals.

In order to examine the importance of behaviours and activities in the adolescents' public images, it is necessary to demonstrate that adolescents utilize statements about activities and behaviour in impressing friends. When adolescents on the one hand are asked to make a good impression on their friends and on the other hand to make a bad impression, this should reveal the behaviour and activities which are important for their image. Statements about behaviour and activities that change as a positive or negative impression is made, offer an important contribution to the image, while behaviours and activities without such fluctuation are less important.

The same research method has been used by Jellison & Green (1981) in their study regarding the question whether individuals can utilize the norm of internality (see study 2) when they engage in overt behaviour. For the study at hand, such data would document that adolescents can

* The author wishes to thank Ellen Hoegen Dijkhof and Roelof Bentem for conducting study 4

guide their behaviour according to the value attached to it by their peers.

It is to be expected that the distinct groups evaluate differently the behaviour and activities belonging to the various life styles, i.e. behaviour which is positively valued in one group can be negatively valued in the other group. In the study at hand, we examine whether smoking behaviour is one of the important contributors to adolescents' images. We expect that adolescents, if they are in search of approval of friends, are inclined to attune their statements regarding smoking to the evaluation adhered to it by their group. If the goal is changed to obtaining disapproval, they are inclined to make statements related to less favourable evaluations.

In the present study, subjects are asked to make both a favourable and unfavourable impression on their friends, by means of the statement "I smoke regularly". It is expected that smoking is positively valued in the smokers' group, but negatively valued in the nonsmokers' group. Therefore, when subjects are asked to make a favourable impression on their friends, non-smokers state less often that they smoke regularly than smokers (hypothesis 1a). On the other hand, when they are asked to make an unfavourable impression, non-smokers state more often that they smoke regularly than smokers (hypothesis 1b).

With regard to the differences within each of the smoking categories, it is expected that non-smokers state less often that they smoke regularly when asked to make a favourable impression than when asked to make an unfavourable impression (hypothesis 2a). Smokers, on the other hand, will state more often that they smoke regularly when asked to make a favourable impression on their friends than when asked to make an unfavourable impression (hypothesis 2b). That is, both smokers and non-smokers are inclined to use statements about smoking behaviour if they want to make a favourable impression on their friends: non-smokers tend to state that they don't smoke and smokers tend to state that they do smoke regularly.

IV.4.1. Method

In this study, pupils from two primary and one secondary school in a medium sized city participated. In the primary school, sixth grade students and in the secondary school, all first to third forms were included. The data regarded 70 male and 173 female pupils, varying in age from 11 to 16 years.

Design

The design consists of two between-subjects factors and one within-subjects factor. The between-subjects factors are smoking behaviour,

containing three levels: smoker, intender and non-smoker and sex of subject. The within-subjects factor is the impression made on best friends, containing two levels: favourable and unfavourable impression. The dependent variable is the response on the statement "I smoke regularly".

Questionnaire

In this study, the questionnaire resembled the one in study 3 with respect to self-descriptions on behaviours/activities. There were two reasons for this. It enabled us, firstly, to compare subjects of both studies on their self-descriptions, and secondly, to reduce the difference in research method. Questions about the nature of interaction with friends were omitted, firstly because the results of study 3 did not reveal a difference between the three smoking categories, secondly because we attempted to keep the length of the questionnaire approximately the same as the previous study. The questionnaire contained the following questions:

Peers: the first question asked respondents to give the names of their best friends, with a maximum of five. Further questions in the questionnaire referred to "the friends you mentioned in the first question".

Subsequently, subjects were asked to describe themselves on behaviours/activities and to describe the expectations they perceive their friends hold regarding their behaviours/activities. The items were the same as the ten described in study 3. They were presented as statements with four response categories ranging from strongly disagree to strongly agree. Furthermore items were included about actual smoking behaviour and the number of smoking friends.

The items regarding favourable and unfavourable impression again referred to the ten activities and behaviours, extended with the item "I smoke regularly". It was stated that "In this part of the questionnaire you find the same statements as you answered before. We ask you to answer them again, but now you have to make a favourable (unfavourable) impression on the friends you mentioned in the first question. That is: you have to answer the statements in a way you think your friends will approve (disapprove) very much.

Procedure

Subjects were seated in the class-room at separate tables in order to ensure that they worked independently from each other. As in study 3, they were told that the study concerned opinions and activities of today's adolescents. They received a written instruction

how to complete the questionnaire. This instruction was also explained by the assistant researcher. Anonymity was ensured. In fact, the same procedure has been followed as in study 3.

IV.4.2 Results

First, the data regarding smoking behaviour and number of smoking friends have been analysed. The results are reported below. Subsequently, the data regarding self-descriptions and perceived peer expectations have been analysed. The results of this analysis largely resemble that of study 3. That is, smokers and non-smokers differ in their behaviours and activities in the same way as subjects in study 3. These results, therefore, are not reported here.

With regard to smoking behaviour, subjects were classified as smoker when they sometimes or regularly smoked, as intender when they were sure or quite sure that they would start smoking, and as non-smoker when they were sure or quite sure not to start smoking. The results show that 18% of the subjects smoke sometimes or regularly, 4.5% intend to start smoking and 77.5% does not (intend to) smoke. Furthermore, more girls smoke than boys (22% of the girls versus 8.6% of the boys). The same pattern of results have been found in study 3.

Also the results regarding smoking behaviour of peers resemble the results in study 3. The analysis of variance revealed a main effect of smoking behaviour ($F(2,237)= 27.61, p < 0.001$). Of the friends of smokers, 61% smoked. Of the friends of intenders and non-smokers these numbers were respectively 24.5% and 14.5%. These differences are significant (p 's at least < 0.01). Sex of subjects did not have an effect on these relationships.

With regard to the results on favourable/unfavourable impression, only the data regarding the item "I smoke regularly" are presented. In the analysis no effects were found of sex of subjects. Therefore this variable is not included in further analysis. The data were first analysed for favourable and unfavourable impression separately. Smoking behaviour was the between-subjects factor. The analysis of variance revealed an effect of smoking behaviour on both the favourable and unfavourable impression, with $F(2,230)= 7.75, p < 0.001$ for favourable impression, and $F(2,226)= 24.84, p < 0.001$ for unfavourable impression.

Favourable impression: If subjects are asked to make a favourable impression on their friends, smokers state more often that they smoke regularly than non-smokers (means 2.79 and 1.36 respectively; $p < 0.001$). The intenders take an in-between position, with a mean score of 1.81. That is, they state less often than smokers that

they smoke regularly, but more often than non-smokers. The difference with smokers is significant at $p < 0.02$. The difference with non-smokers is not significant. However, there is a marginal effect in the expected direction ($p < 0.09$).

Unfavourable impression: If subjects are asked to make an unfavourable impression, non-smokers state significantly more often that they smoke regularly than smokers, with means 3.35 and 2.62 respectively ($p < 0.001$). Again, intenders take an in-between position (mean= 3.00), although they do not differ significantly from both smokers and non-intenders.

These data support the hypothesis, that if they want to make a favourable impression, smokers state more often that they smoke regularly than non-smokers (hypothesis 1a), and that, if they want to make an unfavourable impression, non-smokers state more often that they smoke regularly than smokers (hypothesis 1b).

The analysis of variance, with smoking behaviour as between- subjects factor and impression as within-subjects factor, revealed a main effect of smoking behaviour ($F(2,237)= 4.83, p < 0.009$) a main effect of impression ($F(1,237)= 26.75, p < 0.001$) and an interaction-effect of smoking behaviour x impression ($F(2,237)=$

28.83, $p < 0.001$). The means are presented in Table 12 .

The main effect of smoking behaviour can be interpreted by inspecting the right-hand margin of Table 12. The results show that, overall, smoking subjects more often state that they smoke regularly than non-smokers. Intenders position in-between, but do not differ significantly from both smokers and non-smokers.

The column means in Table 12 show that the main effect of impression is due to the fact that, when asked to make a favourable impression, subjects state less often that they smoke regularly than when asked to make an unfavourable impression.

The main effects can be reconsidered in the light of the interaction effect. The means in

Table 12: Smoking behaviour x impression interaction effect on the item "I smoke regularly"

Smoking behaviour	Favourable	Unfavourable	Row mean
smokers	2.79	2.62	2.71
intenders	1.82	3.00	2.41
non-intenders	1.36	3.35	2.35
column mean	1.64	3.20	

a high score stands for "strongly agree"

Table 12 show that smokers most often state that they smoke regularly if they want to make a favourable impression on their friends, while non-smokers state most often that they smoke regularly if they want to make an unfavourable impression on their friends. The differences between favourable and unfavourable impression are significant within both non-smokers ($p < .001$) and intenders ($p < .02$). That is, intenders and non-smokers state less often that they smoke regularly if they want to make a favourable impression than if they want to make an unfavourable impression. However, for smokers the difference between favourable and unfavourable impression is not significant. Although the means show a marginal difference in the expected direction, it would have been more comprehensive if smokers also discriminated significantly on the item.

This result, however, might be due to the way in which subjects were classified in the analysis. In constructing the categories, subjects were classified as smoker when they sometimes or regularly smoked. Since subjects were asked to make a favourable/ unfavourable impression on their best friends, it is possible that subjects who smoke now and then want to avoid appearing as bragging when stating that they smoke regularly. In order to gain a better understanding of the results, an additional analysis has been executed on smokers, where they were classified as either 'regular' (27

subjects) or 'now and then' (17 subjects) smokers. The additional analysis of variance showed a significant difference between these groups, on both a favourable and unfavourable impression. When asked to make a favourable impression, regular smokers state more often that they smoke regularly than now and then smokers (means respectively 3.27 and 2.06, $F(1,41)=15.05$, $p < .001$). When asked to make an unfavourable impression, the results are reversed. That is, regular smokers state less often that they smoke regularly than now and then smokers (means 2.23 and 3.24, $F(1,41)=10.37$, $p < .01$). The differences within each category on favourable and unfavourable impression are both significant (p 's $< .01$). To interpret these result in the light of the ones previously presented, the means are compared with the ones in Table 12. Table 13 shows the differences.

These results support the hypothesis that non-smokers state less often that they smoke regu-

Table 13: Smoking behaviour x impression on the item "I smoke regularly" when smokers are sub-divided

Smoking behaviour	Favourable	Unfavourable
regular smokers	3.27	2.23
now and then smokers	2.06	3.24
intenders	1.82	3.00
non-smokers	1.36	3.35

larly when asked to make a favourable impression on their friends than when asked to make an unfavourable impression (hypothesis 2a). Smokers on the other hand, state more often that they smoke regularly when asked to make a favourable impression on their friends than when asked to make an unfavourable impression (hypothesis 2b). Statements about smoking behaviour give a contribution to the different public images of smokers, intenders and non-smokers.

IV.4.3 Discussion

The results of study 4 show that smoking behaviour has a self-presentation function for adolescents. They can utilize statements about smoking behaviour in impressing their friends. The contents of the statements depends either on the smoking-status and on the positivity or negativity of the impression they are asked to make. That is, smokers, intenders and non-smokers differ in the extent to which they state that they smoke regularly if they want to present themselves either in a favourable or unfavourable manner to their friends. Smokers state most often that they smoke regularly if they want to make a favourable impression on their friends, while non-smokers state more often that they smoke regularly if they want to make an unfavourable impression. Intenders take a position in between, with respect to both

a favourable and an unfavourable impression. However, they show more similarity to non-smokers than smokers. These results allow the conclusion that (statements about) smoking behaviour can serve self-presentational goals. That is, smoking provides a positive contribution to the image of smokers and a negative contribution to the image of non-smokers.

In short, the results of study 3 and study 4 show that smoking and non-smoking adolescents differ in their life styles, and that smoking behaviour is one of the characteristics of such life style. The fact that adolescents vary the positivity of statements about behaviour and activities belonging to a life style when asked to make either a favourable or unfavourable impression on their peers, implies that those behaviours and activities indeed can be seen as mediators of social rewards.

IV.5 GENERAL DISCUSSION

In study 3 and study 4 attention has been paid to peer pressure. The concept of peer pressure has been placed within a self-presentation framework. The results of both studies show the plausibility of self-presentation concerns in the process of peer pressure. Some aspects should briefly be mentioned here. Firstly in self-presentation theory it is emphasized that

duals try to create and live up to public images that increase the chance of social approval. A public image is based on a composition of behaviour and activities. Smoking behaviour is a significant type of behaviour in the public images of adolescents. Furthermore, peer pressure should be conceived of as a two-way influence process, rather than a uni-directional pressure from a group toward an individual to comply with others, since it is rewarding for both the individual and others if the individual lives up to expectations. Related to the observed differences in images or lifestyles as reported in studies 3 and 4, peer pressure can be operative both to stimulate adolescents to start smoking and to prevent them from smoking, depending on the group to which they (like to) belong. In chapter 5 we will elaborate on these results and formulate some recommendations for health education programmes.

As stated before, adolescents adhere to a group from which they receive valuable rewards; they engage in behaviour and express statements that will lead to approval and acceptance. It is conceivable that the clearly observable differences in behaviour and activities that belong to the different life styles have a categorizational effect (cf. Van Knippenberg, 1978). For example, someone who does not smoke can be classified as belonging to the category of sporting adolescents, who like to wear sportswear and doing well at school. Established life styles

thus may lead to social stereotyping, that is, to general ideas one holds about the characteristics of one or another group. With regard to the very onset or initiation of joining a specific group, adolescents might base their choices on social stereotypes. That is, if an adolescent assumes that he can derive satisfaction from aspects of a certain group, i.e. life style, he will be inclined to behave according to that life style and will seek membership to a group which is perceived to possess such valuable characteristics. It would be of interest to do further research on this issue.

V. CONCLUSIONS AND DISCUSSION

The four studies on self-presentation reported here give us some insight into the consequences of interaction between individuals and their social environment on behaviour. It is argued that individuals, in interaction with each other, exchange social rewards and punishments. Individuals are motivated to increase their chance of social rewards, and are inclined to manage their images in order to influence the distribution of social rewards.

Chapter I pays attention to health problems which are caused or influenced by individual behaviour: behaviour-related diseases. After describing some current definitions of health and health education, we defined health as the extent to which an individual or group is able to realize aspirations and to satisfy needs, and to change the environment or cope with it. Prevention of behaviour-related diseases can contribute to better health. In the studies we tried to gain a fuller understanding of the determinants of health-related behaviour, which can enable us to make effective attempts to influence such determinants in the direction of reinforcement of healthy behaviour, or alteration of unhealthy behaviour. The work presented in this thesis, therefore, belongs to the approach to health education which explicitly seeks to persuade people to adopt healthier life styles.

In health education individuals often have been considered as logical information processors; changes in opinions, attitudes, and behaviour are expected to result from information. However, health education programmes which are based on such informational approaches seldom have the expected behavioural effects. We argue that these results can be explained by the character of health related-behaviour. Much health-related behaviour occurs or is learnt in a social context and is embedded in social relationships. Health-related behaviour might to a great extent be affected by the wish to receive social rewards.

Extending this line of reasoning, chapter II describes two theories: attribution theory and self-presentation theory.

Attribution theory (cf. Kelley, 1973) assumes that individuals are logical information processors. By means of 'naive scientific analysis' of available information, the individual tries to obtain a veridical view of reality, in order to understand and control the world surrounding him. In several studies, however, it appeared that attributions, resulting from the process of causal inference, can be biased: individuals seem to be prone to take responsibility for positive outcomes of their behaviour and to deny responsibility for negative outcomes.

Self-presentation theory (cf. Schlenker, 1975), is based on the hedonic assumption that individuals attempt to optimize the chance of so-

cial rewards and minimize the chance of social punishments. They are therefore inclined to manage a favourable impression upon others. It is suggested that attribution statements can be influenced by self-presentational concerns (attributional self- presentation).

Several studies based on attribution theory provide evidence that consistency is the most important rule in inferring causes from consequences. Also in everyday life there appears to be a socially based norm of consistency. Consistency in behaviour and expression makes interaction predictable. An individual who violates the consistency norm will be perceived as a liar and as unpredictable, and will therefore receive negative evaluations. Consistency in behaviour is necessary as long as the behaviour is observable. If there is congruence between what others know and what the individual states about himself the evaluation will be positive. Discrepancies will lead to negative evaluations. In the absence of potentially invalidating information the individual is free to enhance himself. Or, as Schlenker (1975) states, "Their self- enhancement is limited only by their perceived ability to 'act' the part they are presenting, not by their actually 'being' the part" (p.1031). In sum, individuals are inclined to present themselves in a favourable manner, where self-presentational manoeuvres are influenced by the (expected) information

that others hold or have access to regarding the individual's past, present or future.

In chapter III, two experiments are presented in which attributional self-presentation is studied.

In study 1, the dependent variable is an ability claim on alertness, a highly valued predisposition, made by means of an attribution of ability after two (either consistent or inconsistent) performances, and addressed to others (audience), who are (perceived to be) informed about either one or both performances. It was found that subjects make ability attributions according to attribution rules if the others are informed about both performances, but they are self-enhancing when the others are perceived to know only one performance.

Study 2 takes the position of the others. That is, subjects were asked to evaluate an actor on competence and liking, based on information regarding either one (uninformed others) or two performances of the actor (informed others) and the actor's publicly stated ability attribution. It was found that informed others evaluate an actor more positively if his attribution statement is in congruence with the information they hold. Uninformed others give the self-enhancing actor the benefit of the doubt. Thus, in situations where others (are perceived to) have access to relevant information, the actor's attribution statements are consistent with the information others are perceived to hold. The

actor behaves strictly logical and in conformity with attribution rules, which in turn is positively evaluated by the others. Inconsistencies between the causal analysis made by the others and the actor's attribution statements result in negative evaluation. In situations where the others lack access to information and are therefore unable to use attribution rules, the individual resorts to self-enhancing statements, while the others are inclined to give the actor the benefit of the doubt. Study 1 and study 2 show a finetuning of ability claims by the actor and of the evaluations by the others. That is, in situations where the available information is too scarce for logical derivations, the others are inclined to believe the actor, while the actor is very alert to the possibilities of invalidation of his claims to future events.

In chapter IV, two field studies of adolescents' smoking behaviour are presented, which take a self-presentational point of view. Adolescents often interact in groups of friends, so called peer groups. In those groups, the members possess information about each other regarding interests, activities and abilities. In study 3 adolescents were asked about the behaviour and activities they engage in (including smoking behaviour), the way they interact with one another, and about their perceptions regarding peer expectations. Subjects are differentiated on their smoking behaviour. We explored the

differences between them, expressed in other characteristics. Furthermore, the possible congruence between adolescents' behaviour and adolescents' perceptions of their friends' expectation regarding such behaviour has been studied. The results show that non-smokers mostly have non-smoking peers. Smokers, on the other hand, mostly have smoking peers. This is particularly interesting, since smoking adolescents constitute a minority (12 to 18%) of the adolescent population. Furthermore, the categories do not differ with respect to the way in which they interact with each other, but they do differ with respect to behaviour and activities they engage in. Intenders form an in-between category. They have fewer smoking friends than smokers, but more than non-smokers. Furthermore, in some behaviours and activities they resemble smokers, while they are similar to non-smokers in other behaviour and activities.

In order to explore the importance of the behaviour and activities in presenting a positive public image, adolescents in study 4 were asked to present themselves either in a favourable and unfavourable manner to their friends. We found that smoking offers a positive contribution to the image of smokers, but a negative contribution to the image of non-smokers. The findings suggest that smokers and non-smokers show significant differences in the image they try to create. These differences seem to be related to differences in life style.

The results show a high degree of correspondence between the images that adolescents try to create and their perceptions of what their friends expect them to be. This correspondence is equally strong for smokers, intenders and non-smokers. This brings us to a central theme in studies 3 and 4: peer pressure. Peer pressure often is defined in terms of overt and direct attempts of a group to coerce an individual to conform. In studies of smoking behaviour, this definition is used. It is assumed that smokers are less capable to resist peer pressure than non-smokers. The results of our studies show, however, that peer pressure is not just this uni-directional influence of a group on the individual. The individual is also eager to belong to the group. He is willing to act according to the group norms and to meet peer expectations in order to gain approval. Peer pressure, therefore, should be conceived of as a two-way-influence process, in which it is rewarding for both the individual and the group to act in accordance with the existing group norms. Through acting according to the life style of the group one belongs to, adolescents can optimize the chance of gaining social approval. The results show that peer pressure is equally strong for smokers, intenders and non-smokers. We therefore can conclude that, within the distinct categories, the same processes are operative, but that they differ in their behaviour-reward contingencies.

The results of the four studies show that behaviour often is guided more by self-presentational concerns than by cognitive consistency concerns. Although they process the available information in a logical and consistent manner (as the results in the audience-informed conditions of the first and second study show), individuals do not seem to search for cognitive consistency but rather for social rewards. Individuals will present themselves in a tactical manner to others. This implies that an individual's private opinions and his or her public behaviour might be inconsistent. Consistency can best be conceptualized as being constrained by social pressures rather than as being generated by cognitive needs for consistency (cf. Schlenker, 1975, p.1036). That is, if this better suits the need for gaining social approval, the individual is willing to ignore privately held information. Generally speaking, we can understand public behaviour by defining individuals as 'intuitive politicians'. In the light of this thesis, a politician's career depends mainly on the evaluations that others make of him. Behaviour or statements will be manipulated in an effort to convey to others that he is a competent, trustworthy and honest person. To some extent, he may even exaggerate, but he is careful to avoid being evaluated as a bragger. To portray himself as trustworthy, he will need to be consistent in his overt statements so that others evaluate his behaviour as predictable

and guided by an "own opinion". In the case of honesty he has to consider not to express overt statements or behaviour that can be invalidated by additional information. Invalidation would portray him as a liar.

The results of the four studies stimulates us to formulate some recommendations for health education.

In recent years, several anti-smoking campaigns have been conducted. However, in the course of the years, the total number of adolescent smokers did not decrease at the rate we expected. Self-presentation theory allows us to comment on some of these campaigns. Most of them are based on a cognitive approach and directed at the individual. The individual receives information about the negative consequences of smoking, which is expected to result in non-smoking attitudes, and subsequently, in behavioural change. The effects of social networks to which the individual often belongs, have been ignored. Also the function of smoking in the larger context of public images has often been ignored. For example, a few years ago the Dutch Foundation of Public Health and Smoking (Stichting Volksgezondheid en Roken) initiated a campaign addressed to adolescents, with the slogan 'I don't smoke, I practise sports' (Ik rook niet, ik sport). This campaign presents an activity which fits the life style of non-smokers, but not that of smokers. Smokers, therefore, do

not recognise themselves in such a campaign. Although this approach may be successful in strengthening the non-smokers in their decision not to take up smoking, and in confirming that behaviour, and as such it is a good campaign, it does not motivate smoking adolescents to reconsider their smoking behaviour. Health education should address adolescents in their own life style, referring to images closely related to the ones they are inclined to present. This encourages them to identify with it. As stated before, in social networks, the exchange of rewards is important. A campaign should include an 'evaluator' who is perceived to distribute valuable rewards. This has the advantage that the individual, as well as the others, are provided with guidelines for adequate reactions toward the undesirable behaviour.

Now let us, as an example, attempt to suggest a script for a mass-media campaign, designed to stimulate smokers to reconsider their smoking behaviour. We take into account the characteristics we found to be appreciated by smokers, and we position an 'evaluator' which we assume to be perceived as a distributor of valuable rewards. In adolescence, boys and girls are important evaluators of each other. For example, boys are sensitive to approval or disapproval of girls, and v.v. These considerations result in a television spot in which a group of adolescents is pictured, who visit a disco. In the background we hear some current popmusic. The adoles-

cents wear trendy clothes and are engaged in animated social interaction. In the foreground, a boy and a girl are talking together, obviously enjoying themselves. Then the boy produces a packet of cigarettes and offers one to the girl. The girl, however, refuses and states: "No, thank you. It would be better for you not to smoke either. It is unhealthy and it makes you stink." The girl then walks away, leaving behind an embarrassed young man.

We need to be aware that voluntary behavioural change will not easily be kept up if the social environment is disregarded, since many health-related behaviours are embedded in social relationships. In health education, the importance of the social environment is increasingly emphasized. For example, as stated in chapter IV with regard to the onset of adolescent smoking behaviour, the social environment, and especially peers, are seen to be important. Yet the starting point often assumes that individuals process information regarding health-related behaviour in a logical way, that individuals are in search of cognitive consistency and use naive scientific analysis to give meaning to the information. The results of our studies show some of the weaker points of that approach. That is, although individuals make use of the attribution rules, they are inclined to ignore the logical derivations if this hampers the objective of gaining social rewards. Public behaviour is often guided by self-presentational

concerns, rather than by a need for cognitive consistency.

The results of our studies can facilitate a more effective use of the influence of social environment on health-related behaviour. Health education should assess (1) the importance of the public behaviour in gaining social rewards, and (2) the function of the health-related behaviour in the larger context of life styles. This requires analysis of the function of health-related behaviour in life styles and of the salient behaviour-reward contingencies. Such analysis enables us to direct health education activities at the target population in such a way that its members can identify with it, which, in turn, increases the chance of behavioural change, and of confirmation of the 'new' behaviour. This implies that running small campaigns for different segments of the population can be more effective than running one general campaign.

Solving theoretical or practical problems often leaves one with new questions and problems. Also with respect to the studies presented in this thesis, a number of questions remain. From the point of view of smoking prevention, intenders are a particularly interesting group. Our results show that intenders resemble smokers in some aspects, while they resemble non-smokers in others. Furthermore they have

fewer smoking friends than smokers, but more than non-smokers. Although one might suggest that intenders still doubt, it is also reasonable to assume that they are just very clever. That is, they do drink alcohol (more than non-smokers), but not too much (less than smokers); they may sometimes smoke, but do not really enjoy the taste; they like to wear sportswear (non-smokers), but also trendy clothes (smokers) etcetera: they possess pieces of different lifestyles. Further research could answer the question whether intenders are doubters or that they have found a brilliant solution, which enables them to receive rewards from both smokers and non-smokers.

It should be noted that this solution also is a risky solution. Research has shown that 85% - 90% of those who smoke only four cigarettes become regular smokers (cf. Leventhal & Cleary, 1980).

In this thesis, an analysis has been made regarding adolescents' smoking behaviour. It would be of interest to conduct research from a self-presentational point of view with respect to other health-related behaviours, for example, sexual behaviour and traffic behaviour. Furthermore, other fields of extension could perhaps use the insights provided by this thesis as well, for example environmental education.

The studies on smoking behaviour revealed differences in lifestyles, but did not answer

the question how adolescents become involved in such a life style. It is suggested that this might initially be based on social stereotypes. Youngsters may observe behaviour-reward contingencies as related to certain life styles. If they perceive these rewards as valuable, they might search for identification with that life style. It is also interesting to explore to what extent these involvements are related to economic status and social class. Further research should gain a fuller understanding of this 'allocation process'.

In addition, it would be of interest to direct attention to other age categories as well, since we expect a relationship between the development of a child toward adulthood and the salient sources of social rewards. Rather speculatively we could state that, for a child, rewards from the parents are dominant, in adolescence rewards obtained from peers, while in adulthood rewards are perhaps related to more abstract sources (society, just world). This implies that the salience of certain behaviour-reward contingencies can shift over the years. Such a line of research does not exclusively belong to the field of social psychology. Developmental psychology could offer an important contribution as well.

In health education, but also in other fields of extension, there is the question of how to reach the "hard-to-reach". We suggest that the hard-

to-reach also can be analysed on life styles, the social function of health-related behaviour in these life styles, and on the salient behaviour-reward contingencies. An approach as presented in studies 3 and 4, therefore, could be worthwhile.

An other interesting research topic concerns the conditions under which new viable life styles can be stimulated. Health education could benefit from such research, for example in designing community based programmes.

SAMENVATTING

Deze dissertatie stelt de informationele benadering in de gezondheidsvoorlichting ter discussie. Veel gezondheidsvoorlichtingsprogramma's gaan impliciet uit van de vooronderstelling dat het verstrekken van relevante informatie over de consequenties van riskant gedrag zal leiden tot verandering in de richting van een gezondere leefwijze.

In hoofdstuk I worden de meest gangbare definities van gezondheid en gezondheidsvoorlichting besproken. Vervolgens wordt aandacht besteed aan de resultaten van voorlichtingsprogramma's die gebaseerd zijn op een rationele cognitieve benadering van de mens. Hierbij wordt ervan uitgegaan dat informatie over de consequenties van riskant gedrag via attitudeverandering leidt tot gedragsverandering. Evaluatie van deze voorlichtingsprogramma's leert dat veel mensen weliswaar trachten hun ongezonde gedrag te veranderen op basis van deze programma's, maar er niet in slagen dit over een langere periode vol te houden. Rationele en cognitieve benaderingen leveren vaak een onvoldoende basis om het nieuwe gedrag vast te houden. Gezondheidsgedrag past in het geheel van sociale gedragingen. De indruk bestaat dat dit gedrag daarom voor een belangrijk deel beïnvloed wordt door sociale beloningen zoals acceptatie door anderen.

In hoofdstuk II wordt dit idee verder uitgewerkt. Er worden twee sociaal psychologische theorieën besproken: de attributie theorie en de

zelf-presentatie theorie. De eerste theorie gaat er van uit dat mensen logische informatieverwerkers zijn. Ze hanteren causale schemata om de beschikbare informatie logisch verwerken, teneinde oorzaak en gevolg te koppelen. Men maakt gebruik van 'naief wetenschappelijke' methodes, teneinde tot goed overwogen conclusies te komen. Uit verschillende onderzoeken blijkt echter dat deze causale analyses soms vertekend worden. Individuen lijken geneigd te zijn positieve resultaten van hun gedrag aan zichzelf toe te schrijven (interne attributie) en negatieve resultaten aan omgevingsfactoren (externe attributie; i.e. 'self-serving biases'). De tweede theorie die besproken wordt, de zelf-presentatie theorie, gaat er van uit dat mensen geneigd zijn om naar andere personen toe een gunstig beeld van zichzelf te creëren, teneinde de kans op sociale beloningen te optimaliseren en de kans op sociale straffen te minimaliseren. Dit komt bijvoorbeeld tot uiting in het publieke gedrag, bij het geven van meningen, het doen van uitspraken en kleding. Verondersteld wordt dat ook attributie uitspraken kunnen worden gebruikt voor zelf-presentatie doeleinden. Dit zou de 'self-serving biases' in attributies kunnen verklaren.

In hoofdstuk III worden twee experimenten besproken waarin de zelf-presentatie verklaring voor de attributie 'biases' wordt bestudeerd. In studie 1 worden publieke bekwaamheids attributies onderzocht, als een functie van testprestatie (hoog of laag), taakprestatie (hoog of laag) en de bekendheid van de testprestatie bij

het publiek (wel of niet geïnformeerd publiek). De resultaten van de studie komen grotendeels overeen met de verwachtingen. Voor een niet geïnformeerd publiek blijken de bekwaamheids attributies sterk 'self-serving' te zijn. Voor een geïnformeerd publiek zijn 'self-serving biases' totaal afwezig en zijn de attributies in overeenstemming met de consistentie of inconsistentie van de test- en taakprestaties. De andere kant van de medaille komt aan de orde in studie 2. De proefpersonen (publiek; anderen) werden voorzien van informatie over een hypothetische actor, betreffende test en taakprestatie (geïnformeerde anderen), of alleen de taakprestatie (gedeeltelijk geïnformeerde anderen). Alle proefpersonen werden verder geïnformeerd over de mate waarin de actor te kennen gaf dat zijn/haar taakprestatie was beïnvloed door bekwaamheid (vijf niveaus, variërend van 'geen invloed' tot 'zeer veel invloed'). Overeenkomstig de verwachting, blijkt dat geïnformeerde anderen een actor als aardiger en competentier beoordeelen als de bekwaamheidsattributie in overeenstemming is met de geleverde prestaties. In de condities met gedeeltelijk geïnformeerde anderen wordt de hypothese ondersteund dat actoren gunstiger beoordeeld worden op het item aardig als er sprake is van interne attributies, ongeacht de prestaties. De voorspelde positieve relatie tussen 'self-enhancing' attributies en beoordeling op het item competentie bleek niet significant. De resultaten van deze twee experimenten leiden tot de conclusie dat individuen attributie-uitspraken gebruiken voor

zelf-presentatie doeleinden. Als een persoon bespeurt dat anderen weinig informatie hebben en daardoor de attributie uitspraken niet kunnen controleren op het gebruik van attributieregels, dan zal hij proberen de anderen te imponeren door het maken van 'self-enhancing' attributies. Als anderen evenwel toegang hebben tot mogelijk falsificeerbare informatie, dan zijn de uitspraken van de actor in overeenstemming met de attributie principes.

Hoofdstuk IV gaat in op de zelf-presentatie functie van aan gezondheid gerelateerd gedrag. Hiertoe zijn twee veld-studies uitgevoerd betreffende het rookgedrag van jongeren. In deze studies wordt getracht een beter inzicht te krijgen in de werking van peer pressure door het concept te plaatsen in het kader van de zelf-presentatie theorie. In studie 3 wordt onderzocht in hoeverre rokers, intenders (jongeren die overwegen om te gaan roken) en niet-rokers verschillen in de manier waarop ze met elkaar omgaan, en in overig gedrag en activiteiten. Voorts wordt nagegaan in hoeverre er een samenhang is tussen het gedrag van jongeren en de verwachtingen die hun vrienden hebben ten aanzien van hun gedrag. De resultaten laten zien dat jongeren die roken meer rokende vrienden hebben dan intenders en niet-rokers. De drie categorieën verschillen niet in de manier waarop zij met hun vrienden omgaan. Ze verschillen echter wel met betrekking tot de gedragingen en activiteiten die zij ondernemen. Deze verschillen lijken gerelateerd aan verschillen in leefstijl. Verder blijkt dat er een

sterke samenhang is tussen wat jongeren doen en de verwachtingen hieromtrent van hun vrienden. In studie 4 wordt de mogelijke zelf-presentatie functie van roken onderzocht voor de drie bovengenoemde categorieën. Uit de resultaten blijkt dat (uitspraken over) roken invloed heeft op het image van rokers, intenders en niet-rokers. Roken levert een positieve bijdrage aan het image van rokers en een negatieve bijdrage aan het image van niet-rokers. De resultaten van de studies laten zien dat peer pressure niet een uitsluitend eenzijdige invloed is van een groep op een individu (zoals in de meeste 'rookstudies' wordt aangenomen), maar dat er sprake is van een tweezijdig invloed-sproces. Dit betekent dat het belonend is voor zowel het individu als de groep wanneer men tegemoet komt aan de verwachtingen.

In hoofdstuk V worden de resultaten van de vier studies samengevat en worden aanbevelingen geformuleerd voor gezondheidsvoorlichting. Gesteld wordt dat in de gezondheidsvoorlichting effectiever gebruik gemaakt kan worden van de invloed van de sociale omgeving. Gezondheidsvoorlichting zou aandacht dienen te besteden aan de sociale functie van het aan gezondheid gerelateerde gedrag, in de context van leefstijlen, en aan de saillante gedrag-beloning contingenties. Tenslotte worden aanbevelingen gedaan voor verder onderzoek.

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CURRICULUM VITAE

Maria Koelen was born in Zenderen at August the 26th, 1953. After completing her training as a nurse in 1972 she worked for four years at an institute for senior citizen. In 1978 she completed her study on social work. In the same year she started reading Psychology at the University of Groningen from which she graduated in 1983. Her main subjects were social psychology, methodology, and secondary subjects were sociology and polemology. Since 1983, she has been lecturer in the Department of Extension Science at the University of Agriculture Wageningen. Her main interests are health education and extension science research.