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# **The Stability of Attitude and the Significance of Affective-emotional and Cognitive Components**

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marketing research, stability of hypothetical constructs, attitude, two-component theory, emotion, cognition, involvement, sportswear, T-test, anova, stepwise regression

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## Abstract

Research on attitude has a long tradition in marketing. It has commonly been assumed that attitudes are relatively stable over time. Contrary to this hypothesis, this paper shows that merely confronting consumers with some cognitive criteria concerning brand evaluation can in fact change their rating in the short term. A second finding is that evaluations of sportswear brands become consistently more negative when subjected to the cognitive evaluation process. A third result shows that purchasing behaviour can be explained to a greater extent by emotions than by cognitive components of attitude.

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## 1 Basics

According to the two-component theory, the attitude as the learned, relatively permanent tendency of an individual to react positively or negatively to an object (cf. e.g. Trommsdorf 1975, p. 8) has an affective-emotional component, in which primarily the individual's feelings are expressed, as well as a cognitive component, which reflects more strongly consciousness-controlled evaluation processes (cf. e.g. Böhler 2004, p. 115 f.). The "conative" attitude component, i.e. the behavioural tendency of an individual, remains unconsidered in this conception so that the attitude can be operationalized as a psychographic construct (cf. Hammann/Erichson 2000, p. 336) that (pre-)determines behaviour. Accordingly, behavioural inclination and behaviour are therefore explanandum and not considered part of the independent variable attitude.

While emotion can be completely or partially unreflected, cognition is usually associated with a striving for rationality. Multidimensional models for measuring attitude form index values from emotional and cognitive variables, which are either mapped multidimensionally or condensed to a one-dimensional attitude value. In the widespread attitude models, the cognitive component is often understood as "knowledge about the object" (Böhler 1977, p. 91). In the Fishbein model, for example, the cognitive component consists of the probability that a brand has a certain property, the "Strength of Belief" (Fishbein 1966). Multidimensional attitude models with ideal objects operationalize the cognitive component as the intensity of a characteristic in a brand (Trommsdorf 1975). The current models suggest that the consumer is able to make a (partial) judgement and at least partially suppress emotions. Departing from this, in the following, the relationship between emotion and cognition will be understood as motivational psychology. Accordingly, each attitude contains both affective-emotional and

reflected-cognitive components, the relationship of which is variable and influenceable. Three groups of determinants can be distinguished for the proportion of emotion and cognition: person, object and situation (similar with reference to buying behaviour: Weinberg 1981, p. 16 ff.).

By definition, the attitude is person-related and thus to be measured at the level of the individual. On the basis of such individual measurements, groups of people with similar attitudes can be summarized in the following. For example, there are more “cognitive types” who tend to subject objects to be judged to rationality-based evaluation processes, while “emotional types” more often make judgments based on "gut feeling". Highly involved individuals will make a judgement more dependent on cognitive-rational criteria and go through more extensive information processing procedures (Petty et al. 1983, Schiffmann/Kanuk 2007, p. 223), while individuals with a lower involvement are more likely to be guided by emotions in their judgement. Extensive studies on types of individual decision-making behaviour have been conducted, for example, on the basis of the Consumer Style Inventory (CSI) (cf. Sproles/Kendall 1986, Walsh et al. 2001). “Dedicated buyers” have “a larger quantity of alternatives than other consumers in mind” (Kroeber-Riel et al. 2009, p. 432 f.) etc. depending on the individual. Despite such variability in the personal disposition of target groups, it is customary to summarise the attitudes of groups of persons and thus interpret them as the overall image of an object of assessment (i.e. brand). Here, on the basis of identical data samples, a change of perspective takes place from the judgement of the individuals to the description of the object of assessment. Thus the image of a brand also consists of “cognitive and emotional elements” (Trommsdorf et al. 2000, p. 769, similar to Becker 2002, p. 184). Metrologically, therefore, no difference is made between the measurement of attitude and image, but only in the degree of aggregation and allocation: The sum of the attitudes of a group of individuals towards an object corresponds to the image of this object.

Secondly, the relationship between emotion and cognition depends on the evaluated object itself and the "goods specific characteristics" (Becker 2002, p. 183), so there is something like "special (product-dependent) adjustments" (Freter 1983, p. 64 ff.). High involvement products also exist for a more information-averse, spontaneous-emotional type of consumer that evoke more extensive assessment processes. And the more cognitive types with a high information affinity also know products with which they feel little involvement.

Thirdly, the situation influences the assessment of the object (Freter 1983, p. 75). For example, in a situation of great thirst, the negative attitude towards a beverage brand may recede into the background if no other beverage is available. In a social group, the individual adapts and possibly acts differently than when making a decision alone.

Such situational dependency corresponding to life experience, however, contradicts the common definition that postulates a relative "permanence" of the construct attitude. On the basis of this, it is discussed in the literature whether a contingency approach can be used to distinguish situation classes within which one can adhere to the fiction of the permanence of the attitude, so that general variability does not have to be assumed (cf. Schwarz 2007). Empirically, it has long since been established that the inclusion of situational factors can provide significantly increased contributions to the explanation of variance for the prognosis of consumer behaviour (Sheth 1975).

Picking up the above findings and extending them, the present study examines to what extent individual attitudes can be assumed to be relatively permanent. At the same time, the relationship between emotional and cognitive aspects is of interest, by way of analogy to the dual channel theory of communication (cf. e.g. Rossiter/Percy, 1980; Mitchell 1984), according to which communication measures can focus to varying degrees on cognitive and emotional processes.

## **2 Research Design, Scales, Measurement Techniques and Hypotheses**

As part of a positioning study in 2012, people aged between 14 and 30 in Germany were interviewed face-to-face (Riedl, 2012). In the process, attitudes towards 25 brands in the sportswear sector (shoes and clothing) were surveyed. A pre-classification of the surveyed brands on the basis of expert judgements provides four groups: Sports premium brands (adidas, Nike, Puma), textile premium brands (Hilfiger, Lacoste), a discount brand (Crane Sports/Aldi) and other sports brands (Asics, Bench, Billabong, Burton, Chiemsee, Converse, DC, ecko, element, és, Etnies, Fila, Head, Kappa, Kswiss, Mizuno, Quicksilver, Reebok, Vans). The latter are mostly smaller and medium-sized suppliers, known to be preferred by sub-target groups but less clearly positioned in the overall target group than the premium sports brands, the premium textile brands and the discount brand.

The most important choice criteria (cf. Kernan 1968) for the target group were determined on the basis of a literature search and an explorative preliminary study. After several revision steps, a list of 24 criteria (Tab. 1) was produced which met the essential requirement criteria such as completeness, measurability, relevance for the target group, similarity in the level of abstraction, etc. (Riedl/Eggers 2013, p. 554 f.).

In order to limit the scope of the questionnaire, no ideal ideas were asked. According to the assumption that the overall attitude is a function of the individual's motivations and cognitions towards the brand in a certain situation constellation (cf. Freter 1983, p. 76), overall assessments were asked. Thus it is explicitly not assumed that the multidimensionality of the attitude construct requires a separate measurement of cognitive and emotional components, nor is the

subsequent calculation of the attitude using mathematical linking rules necessary. Rather, as in reality, it is up to the consumer to decide to what extent emotional and cognitive elements flow into an overall attitude. As a result, the attitude is "represented by a scalar quantity, which neither gives information about the content nor about the contributions of the individual properties to the overall attitude" (Böhler 1977, p. 94). This does not exclude the possibility of determining *ex post*, e.g. by regression analysis, to what extent the choice criteria or factors derived from them are related to the overall setting.

For the same reason, a weighting of the choice criteria was omitted, especially since the introduction of significance weights usually does not provide increased explanation of variance for any dependent variable (Trommsdorf 1975, p. 63 f.).

In order to scale the answers, the widespread school grade scale was used, which does not require further explanation in the German-speaking regions. According to a "strictly statistical" understanding, this merely has an ordinal scale level (Hornsteiner 2012, p. 12). However, it is common practice in marketing research and other disciplines to assume an approximate interval scale level for school grades and similar scales in order to be able to apply multivariate analysis methods (Sedlmeier/Renkewitz 2008, p. 63ff.). To support this, with the exception of the extreme values "1= very good" and "6 = very bad" no verbalizations were given for the individual grade values in the present study, so that the fiction can be maintained that the respondents are able to interpret and use the intermediate numerical values as gradations of equal distance.

**Tab. 1: Choice criteria for sportswear**

01 Range of genuine sports functional goods, 02 Exclusivity and image of the brand, 03 Brand presence online and in social media, 04 Convenience and wearing comfort of the products, 05 Wide range of sizes, 06 Impression the brand makes on friends, 07 Colour and shape stability of the goods, 08 Good fit of the goods, 09 Fashionable product design, 10 Sustainability of production, 11 Benefits for use in sport, 12 Orientation towards customer wishes, 13 Affordability, 14 Product variety of the brand 15 Brand profiling for sport, 16 Social standards in manufacturing, 17 Availability of the brand in the shops, 18 Value of materials, 19 How healthy are the products, are there harmful substances?, 20 How individual are the products?, 21 How innovative is the brand?, 22 How strongly does the brand orient itself to current trends?, 23 How likeable is the advertising presence of the brand?, 24 Product recognition value
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## **2.1 Measurement of the emotional brand judgement**

At the beginning of the interview (time U1) a spontaneous overall assessment was made for each of the 25 brands included ("Please make a spontaneous assessment: I give this brand a grade...").

At this point, the respondents had not yet been confronted with the choice criteria. Due to the sudden questioning of an overall judgement without time for a cognitive reflection process and without reference to concrete benefits, it can be assumed that in this way a judgement is made that is predominantly affective-emotional. In the following, the term "emotional attitude" is used for simplification, although cannot be ruled out that cognitive elements are also present to a lesser extent in U1.

Sales figures show that the large, internationally known premium brands from the sports and textile sectors meet the tastes of broad target groups in the market. Since these companies also have the largest budgets for image advertising, it is to be expected that these brands have the best absolute image. In order to check the discrimination capability of consumer judgments and to validate the expert judgments on brand grouping, the following postulations are made:

- H 1.1: The affective-emotional brand assessments of the four brand groupings differ significantly, whereby**
- H 1.2: premium brands from the sports and textile sectors receive better ratings in the overall target group, and**
- H 1.3: the discounter brand is rated worse than the other brands.**

At the same time, the assumption of object dependency of attitudes is checked.

## **2.2 Measurement of involvement in sport and purchasing behaviour**

The involvement in sport was measured by the simple self-assessment: "How important is your own active participation in sport in your life? You can assign between 0 and 10 points". This measurement method follows the dictum "there is a consensus that high involvement means (approximately) personal relevance or importance" (Greenwald/Leavitt 1984). In a partial data set, more complex measurements of the involvement were carried out (cf. e.g. Zaichkowsky 1985; Laurent/Kapferer 1985). The involvement-values found in this way did not provide higher contributions to the explanation of variance than the simple self-classification, making the presentation of more elaborate and multidimensional involvement-parameters irrelevant here.

As an indicator of behaviour, the total expenditure on sporting goods was asked: "How much do you spend per year on shoes and clothing for sports goods brands?"

According to the assumption that the attitude is person-dependent, it can be expected that people with different involvements will rate branded goods differently:

**H2: Compared to people who are highly involved in sport, sportswear brand articles are rated better than people who are less involved in sport.**

The discrimination capability of the involvement construct is no more than a prerequisite for further analyses within the framework of H4. The trivial question of H2 in itself provides the prerequisite for using involvement as a possible moderator of the stability of the attitude construct.

### **2.3 Measurement of cognitive brand judgement**

In the course of the interview, various questions on buying behaviour, brand involvement etc. were asked and followed finally by the brand assessment in the 24 choice criteria as the core of the survey. To limit the duration of the interview, each interviewee had to answer the choice criteria battery with a final overall assessment for a maximum of three brands only. Another explicit requirement was that only brands with which the interviewee had real experience should be judged, so that the ability to provide information is guaranteed (Böhler, 1979, p. 262 ff.). For reasons of reliability, a quota plan was used to ensure that at least 100 individual judgments were collected for each of the brands evaluated.

The choice criteria contain both affective-emotional and rational-cognitive aspects. Their application to the assessment of several brands requires a cognitively controlled assessment process from the respondents throughout. For example, the "benefit for use in sport" (criterion 11) should not be evaluated any differently than picturing concrete brands in the "mind's eye" and consciously thinking about their suitability. The accompanying observation of the interviewees during the brand evaluation clearly showed a more intensive process of reflection and an increased time requirement compared to the first judgement U1. Even personality types who can be attributed to an emotionally spontaneous type are moved by this type of questioning to an increased cognitive control of the judgement process, which results in a hypothetically stronger measurement of attitude influenced by cognitive aspects.

Thus, it has to be examined whether the confrontation with "cognitive criteria" has an influence on the overall attitude of respondents towards brands. At the same time, the significance of the situation is also examined, as the "interview situation" (Freter 1983, p. 75) is deliberately changed from U1. For the assessment, the respondents were asked after confrontation with the 24 individual criteria "All in all, I give the brand a grade ...". Under changed framework

conditions, a second overall judgement was asked at time U2 (hereinafter simplified as "cognitive attitude"). It is not only assumed that the respondents can be influenced by the choice criteria when U2 is delivered. If one assumes that the previous brand judgement U1 is strongly shifted into the positive by the intensive image advertising of the manufacturers, then it can be assumed that the confrontation with a long and differentiated catalogue of predominantly demanding choice criteria (such as sustainability, real functional benefits of sport, etc.) will lead the respondents to lower their overall judgements. Preliminary studies indicated such an effect, so that the following conclusions are drawn:

**H3: The confrontation with differentiated, cognition demanding choice criteria reduces the overall evaluation of a brand.**

It should be stressed that between the two attitude measurements U1 and U2 there is no other information about the brands to be evaluated, because there is no question that "framing" can influence the attitude measured (cf. e.g. Edell/Burke 1987 and cited literature).

At the beginning it was assumed that highly involved persons are more strongly guided by cognition than less-involved individuals. Analogously, for those with a low level of involvement it is demanded that they "need the right emotional form of address" (Kroeber-Riel et al. 2009, p. 415). The hypothesis is derived from the assumption that highly involved individuals have a better level of information concerning choice criteria ex ante:

**H4: The confrontation with criteria that require cognition lowers the overall evaluation of a brand less for highly-involved people than for less-involved people.**

The financial risk perceived with a purchase decision has an influence on the scope of the evaluation process (cf. in this connection the various studies following Kapferer/Laurent 1985). While it can be assumed that cognitive evaluation processes play a greater role in the decision-making process for high-priced purchasing processes such as house or car, it can be assumed that cognitive evaluation processes play a lesser role than emotional influences in purchasing decisions with limited financial resources. This is the assumption:

**H5: Spontaneous emotional judgments have a greater influence on the decision to buy sportswear than cognitive judgments.**

The purchase decision was measured for all 25 survey brands with the question: "Please tell me how often you have bought or received the brand as a gift in the last three years". The second part of the question was included because the preliminary study had shown that the younger target groups often ask for the preferred brands as gifts. Hence, in such gifts an individual's attitude-dependent behaviour intention is also expressed.

## **3 Results**

### **3.1 Return flow and data preparation**

The data were checked for completeness, outliers and incorrect entries. Incomplete and unusable questionnaires were eliminated so that ultimately 1510 interviews could be included in the evaluation. Since each respondent assessed up to three brands with the total battery of the choice criteria, a total of 4530 complete brand assessments were available. For the corresponding evaluations, the data set was restructured in such a way that each brand assessment is treated as a single case.

On the basis of the answers on sport involvement, the respondents were classified into groups of high (scale values 7-10,  $n = 983$ ) and low involvement (scale values 0-4,  $n = 244$ ); the 283 respondents with mean self-rating 5-6 were excluded. The two groups differ highly significantly with regard to expenditure on sporting goods (Anova:  $F = 46.623$ ,  $p < .001$ ): Highly involved individuals spend on average 503 Euros per year, those with low involvement only about half of that, at 253 Euros. The validity of the involvement measurement is supported by the fact that it is correlatively highly significant with the total expenditure on sporting goods ( $r = 0.214$ ,  $p < .001$ ).

With regard to the purchase frequency of brands in the last three years, the average value across all brands is 2.7 purchase acts, with brand-specific differences ranging between 5.6 (adidas) and 1.1 (Mizuno). The intergroup differences are significant: (Anova:  $F = 15.50$ ,  $p < .001$ ). The purchasing frequency reaches an individual maximum value of 60.

Hypothesis 1: As Table 2 shows, the average brand ratings U1 differ significantly in the four brand groups. A grade difference of 1.5 grade points between the sports premium brands and the discount brand expresses that the respondents have clearly different emotional attitudes. A factor analysis using the choice criteria with subsequent provider positioning confirms that the expert classification of groups one, two and three corresponds to the judgments of the target group. There are further subgroups for the “other sports brands”, but this is irrelevant for the presentation at hand.

<b>Brand groups</b>	<b>Mean</b>	<b>n</b>	<b>STD</b>
Sports premium brands	1.79	4381	.8241
Premium textile brands	2.33	2537	1.1311
Discounter brand	3.48	675	1.2328
Other sports brands	2.81	18909	1.1685
Total	2.61	26502	1.1881

The analysis of variance confirms highly significant intergroup effects ( $F = 1161.865, p < .001$ ). All post-hoc tests performed also provide highly significant differences between the group averages. Since according to the Levene test, the null hypothesis of variance equality is to be rejected (Levene value 191.234,  $df_1 = 3, df_2 = 26498, p < .001$ ), a Tamhane T2 test was carried out. Here, too, all group mean values differ at the level of  $p < .001$ .

The scores determined correspond to the preceding postulates, so that all partial hypotheses are supported by H1. In addition, it can be reported that the evaluation of the sports premium brands is far more homogeneous than that of the other brand groups.

Hypothesis 2: The overall setting U1 was tested by means of an analysis of variance to determine whether individuals with high and low involvement rate the branded articles differently.

Average values brand judgement				Anova					
Involvement	U1	n	STD		Square-sum	df	Mean of the squares	F	Significance
<b>low</b> (0-4)	2.69	4061	1.2194	Inter-group variance	42.852	1	42.852	30.487	.000
<b>high</b> (7-10)	2.58	17641	1.1777	Internal group variance	30502.627	21701	1.406		
Total	2.60	21702	1.1864	Total	30545.479	21702			

Table 3 shows that in the emotional brand assessments, when calculating an overall average of 25 brands, there are only minor differences of 0.11 points in absolute terms when comparing low and highly involved respondents. This is partly due to the fact that the individual

evaluations average themselves out across the brands, some of which are judged quite heterogeneously. Nevertheless, the analysis of variance shows a significant overall difference depending on the involvement, so that the hypothesis as a whole cannot be rejected. It should also be noted that in the study with the 14-30 age group, a narrowly defined sub-target group was surveyed within which the variation in sports involvements is lower than in the total population.

A supplementary analysis for the four brand groups provides additional information: While there are no significant differences in the assessment of the discount brand and the textile premium brands between those with high and low involvement, such differences exist in the assessment of the sports premium brands (Anova:  $F = 15.112$ ,  $p < .001$ ) and the other sports brands ( $F = 36.528$ ,  $p < .001$ ).

Hypothesis 3: By comparing U1 and U2, it can be examined to what extent the intensive confrontation with the choice criteria between the two judgments has an influence on the attitude of the individuals. In order to obtain as detailed results as possible, the mean values U1 and U2 for all 25 individual brands were examined for significance of the differences using two-sided T-tests.

The before-and-after comparison assumes that a respondent has provided data for U1 and U2. Since each respondent only had to assess three brands for U2, the case numbers are somewhat lower than for the individual presentation of U1 in Table 2.

Table 4 shows that the overall evaluation for all 25 brands deteriorates due to the interim presentation of the choice criteria. The difference is significant for the overall average of all 25 brands as well as for 19 of 25 individual brands. With the exception of Asics, the few insignificant mean value changes only affect those brands that are assessed rather poorly overall. It is easy to explain that the judgement is less affected by a cognitive process if it was already negative before. On the other hand, leading manufacturers such as adidas and Nike, whose image is strongly driven by advertising, deteriorate significantly when the respondents undergo a more conscious judgement process. The fact that it is the choice criteria that appeal to cognition that lower the overall evaluation is not only evident from the chronological sequence in the questionnaire. The sum indices shown in Table 4 from the individual scores for all choice criteria are even worse than U2 in 20 of 25 cases and in the overall mean, and thus explain well how the overall attitude of the respondents deteriorates.

<b>Tab. 4: Average scores for sports brands before and after the presentation of criteria appealing to cognition</b>							
Overall rating (scale from 1=very good to 6=very bad)			Brand	Rating Delta U2-U1 (minus = deterioration)	t	df	p
U1 emotional	Sum index choice criteria	U2 cognitive					
1.77	2.45	2.18	<i>Converse</i>	-0.41	-6.766	215	.000
2.03	2.52	2.42	<i>Vans</i>	-0.39	-5.580	186	.000
1.80	2.18	2.14	<i>Puma</i>	-0.34	-6.218	251	.000
2.28	2.64	2.61	<i>DC</i>	-0.34	-3.876	130	.000
1.91	2.46	2.24	<i>Bench</i>	-0.33	-5.575	208	.000
1.92	2.44	2.24	<i>Lacoste</i>	-0.32	-4.468	195	.000
2.22	2.42	2.51	<i>Reebok</i>	-0.29	-4.255	189	.000
2.04	2.44	2.33	<i>Head</i>	-0.29	-3.798	141	.000
2.30	2.66	2.58	<i>Etnies</i>	-0.29	-3.298	131	.001
1.51	2.03	1.80	<i>Nike</i>	-0.29	-7.104	279	.000
2.12	2.53	2.40	<i>Quicksilver</i>	-0.28	-3.307	153	.001
2.33	2.65	2.59	<i>Kswiss</i>	-0.26	-2.904	143	.004
2.47	2.61	2.69	<i>Kappa</i>	-0.23	-2.880	158	.005
1.86	2.46	2.09	<i>Hilfiger</i>	-0.23	-3.390	211	.001
2.45	2.78	2.66	<i>És</i>	-0.22	-2.175	124	.032
1.61	1.99	1.82	<i>Adidas</i>	-0.21	-5.761	335	.000
1.91	2.24	2.11	<i>Burton</i>	-0.21	-2.818	159	.005
2.77	2.96	2.98	<i>Ecko</i>	-0.21	-1.971	125	.050
2.02	2.37	2.22	<i>Billabong</i>	-0.20	-2.430	176	.016
2.83	3.06	2.98	<i>Crane Sp.</i>	-0.16	-1.516	126	.132
2.63	2.70	2.79	<i>Chiemsee</i>	-0.16	-1.795	134	.075
2.39	2.67	2.52	<i>Element</i>	-0.13	-1.295	99	.198
2.07	2.30	2.13	<i>Asics</i>	-0.07	-0.884	167	.378
2.70	2.71	2.74	<i>Mizuno</i>	-0.04	-0.431	102	.667
2.79	2.67	2.80	<i>Fila</i>	-0.01	-0.700	169	.944
2.09	2.46	2.34	Total mean	-0.25	-15.713	4330	.000

The extent to which the overall attitudes of the respondents are influenced is not only shown by the absolute worsening of the judgments. If U1 and U2 are correlated with each other, the correlation coefficient ( $r = 0.568$ ,  $p < .001$ ,  $n = 4331$ ), which is significantly positive as

expected, is only "medium" in height and does not express the ex ante expected high agreement between the two setting measurements. This can only be explained by the fact that the respondents are put into a different assessment situation by the examination of the list of the choice criteria.

If one considers the extent to which the changes per brand vary (this explains why the correlation coefficient is not higher), one also refutes the obvious assumption that the differences between the two survey dates can be attributed to a pure halo effect (cf. in this sense, for example, Beckwith/Lehmith, 1975, p. 1): The initial evaluation of the 25 brands is already different and differentiated (values between 1.51 and 2.83 on the school grade scale), the change between the survey times is differentiated (changes between -0.01 and -0.41 points) and finally the evaluations of the individual brands in the choice criteria at time U2 are also differentiated (without illustration). For example, the scores for Converse vary between 1.38 (STD .626) for product recognition and 3.65 (STD .1.298) for brand profiling in sport, for Adidas between 1.44 (STD .626) for the brand's brand recognition. 71) for the range of genuine sports functional goods and 3.19 (STD 1.11) for the low price and for Crane Sports between 1.57 for the low price (STD .968) and 4.22 (STD 1.332) for the brand's online presence. The differentiation of the brand assessment in the context of the survey conducted is attributed to the implementation in the form of face-to-face interviews and the high training level of the interviewers used. A halo effect attributable to the interviewers, as reported by Nisbett and DeCamp Wilson (1977), must be excluded, because the study used a total of 59 different, extensively trained interviewers whose influences equalize each other.

Individual inquiries in the survey situation as to why a respondent changed his overall judgement lead to exemplary justifications such as "if one takes all this into consideration, then...", which together with the quantitatively resulting deterioration in attitudes can be seen as a strong indication of the dependence of attitude measurement on the methodology and the survey situation.

Hypothesis 4: This analysis is also limited to respondents, who made an overall judgement for both U1 and U2. As U2 was only surveyed for brands with experience, preference was given to judgments for "favourite brands", so that the overall judgments were on average better than those for all brands.

As Table 5 shows, the judgments in U2 are significantly worse than in U1. The judgments of those with low involvement are consistently somewhat worse than those of those with high involvement, which is also significant and meets expectations. Contrary to the hypothesis, the overall score for those with low involvement deteriorated by 0.23 grade points and thus slightly more than for the highly-involved (0.24), with the result that significant differences in dependency ratios cannot be found.

<b>Tab. 5: Mean values of emotional and cognitive overall judgement as a function of involvement</b>						
Sports Involvement		Overall Score U2	Overall Score U1	Delta U1-U2 (minus = deterioration)	Significance U2-U1 (T-Test)	
<b>Low</b> (n = 703)	Mean	<b>2.41</b>	<b>2.18</b>	<b>-0.23</b>	t = -5.643	p < .001
	STD	.8720	1.0843	.2123		
<b>High</b> (n = 2823)	Mean	<b>2.31</b>	<b>2.07</b>	<b>-0.24</b>	t = -12.826	p < .001
	STD	.8948	1.0157	.1209		
Difference Low - High	Mean	<b>0.10</b>	<b>0.11</b>	<b>-0.01</b>		
	Significance. Anova	F <sub>3524</sub> : 6.615 p = .010	F <sub>3524</sub> : 6.948 p = .008	F <sub>3524</sub> : .222 p = .638		
Total. n = 3526	Mean	2.33	2.09	-0.24		
	STD	.8911	1.0306	.1395		

Although H4 has to be rejected, it can be stated that the scatter of the judgements decreases more with the lower-involved than with the highly-involved. This indicates that the highly-involved already had a more stable attitude in the emotionally spontaneous judgement U1.

Viewed in columns, it can be seen that the dispersion of judgements in the emotional judgement U1 is significantly higher in all cases than in the cognitively inspired judgement U2. The judgement is thus not only worse, as postulated in Hypothesis 3, but also more unequivocal due to the presentation of the choice criteria.

Hypothesis 5: A stepwise regression analysis with an accompanying variance analysis shows that both the more emotional attitude U1 and the more cognitive attitude U2 make a significant contribution to the explanation of variance in purchasing frequency. The  $r$  of U1 and U2 together is .299 (coefficient of determination  $r^2 = .089$ ). Thus the relationship between overall attitude and buying behaviour is at a level that corresponds to findings from many other studies (cf. e.g. Wicker 1969, p. 65; Sheth 1975; Böhler 1977, p. 97; Schwarz 2007). This shows that the decision not to measure separate cognitive and emotional components and their weighting did not lead to a significant loss of knowledge for the present study.

The collinearity diagnosis between U1 and U2 results in an acceptable tolerance value of .677, so that there are no objections to the interpretation of the standardized coefficients of regression analysis. Step two of the regression analysis (Table 6) shows a beta value of -.203 for the emotional attitude and a value of -.132 for the cognitive attitude (the negative signs result from the fact that a better grade corresponds to a lower numerical value for the school grade scale used). This corresponds to the hypothesis that emotions play a greater role than cognitive choice criteria when buying sportswear.

<b>Tab. 6: Stepwise regression, purchase frequency depending on emotional and cognitive judgement</b>								
model		Non-standardized coefficients		Stand. coefficient	T	Sig.	Collinearity statistics	
		Regression Coefficient	Standard Error	Beta			Tolerance	VIF
1	Constant	5.108	.144		35.541	.000		
	U1 Overall judgement emotional	-1.172	.062	-.278	-19.057	.000	1.000	1.000
2	Constant	5.952	.182		32.703	.000		
	U1 Overall judgement emotional	-.857	.074	-.203	-11.531	.000	.677	1.476
	U2 Overall judgement cognitive	-.643	.086	-.132	-7.487	.000	.677	1.476

The values in Table 6 result only from data provided by respondents who simultaneously gave data for U1 and U2. If, alternatively, one considers the spontaneous initial judgments U1 given by all respondents and relates these to the buying frequency, then the effect of spontaneous image judgments is also taken into account to a much greater extent in those persons who were not (previously) or were to a lesser extent buyers of a brand. In this calculation, the  $r$  rises to .321 ( $n = 26501$ ,  $p < .001$ ,  $r^2 = .103$ ). In the same way, the special significance of the emotional attitude is confirmed if one does not consider the levelling relationship across all brands, but analyzes the brands in detail (without illustration): For all 25 brands, there are highly significant correlations ( $p < .001$ ) between the U1 and the purchase frequency, the correlations lie between  $r = -.238$  (Chiemsee) and  $-.387$  (Asics).

#### 4 Conclusion

It is not surprising that consumers can arrive at a more differentiated brand judgement after confrontation with a larger list of relevant choice criteria. Comprehensive item batteries that include many relevant aspects ensure that all respondents use the same criteria when making an overall judgement, while each respondent can include different reference values when spontaneously asking for a brand judgement. In a query appealing to affect and emotion, these

are primarily (positive) contents that are brought to the fore by the advertising of financially strong manufacturers.

In this study, the cognitive stimulating assessment process affects all brand judgements. It would be conceivable that judgement could be further improved by referring to such benefits in relation to preferred brands that provide a particular customer advantage. However, this is not the case with any of the 25 brands surveyed here, although the study also included smaller brands with sworn fan communities in addition to the most popular brands.

The only variation in the survey situation was that the respondents were asked to assess the brands in 25 decision-relevant criteria. Even with premium brands from the sports and textile sector, the predominantly cognitively controlled assessment process induced by this leads to a significantly lower overall assessment.

For the practice of brand communication, two conclusions result from the study: Firstly, it was shown how important communication based on emotional components is for the overall judgement of consumers. Emotion plays a considerably greater role in buying behaviour regarding brands than cognition. At the point of sale, the spontaneous feeling towards brands is obviously more decisive, because consumers are not aware of many fundamentally relevant choice criteria. It should be noted that the finding of the present study is limited to sportswear, i.e. consumer goods with a financially limited risk potential. The extent to which similar or deviating effects occur in other categories of goods and other decision-making situations must be investigated, because the specific conditions of the sportswear industry cannot be transferred to other industries. Here, too, a young target group was surveyed that is characterised by a particularly high level of involvement in sportswear.

Secondly, if directing the cognition of the target groups towards certain benefits in advertising is desired, then it is necessary to know which choice criteria pay the most for the respective brand. As a general rule, it is not advisable to draw the attention of consumers to criteria which have not pronounced strengths. Thus, comparison portals and product tests, in which many choice criteria are included according to the pattern of scoring models, tend to be disadvantageous for brand providers who profit from the image rather than from "objective" product characteristics.

It is relevant for theory-building and research that attitude, as one of the most important hypothetical constructs of marketing, is obviously not as stable as assumed in common definitions. Contrary to the assumption that individuals try to show a consistent response behaviour within a survey (for the consistency effect see Böhler 2004, p. 101), they are willing to spontaneously vary the overall judgement about a brand, depending on which choice criteria they are confronted with beforehand. The respondents are even prepared to openly admit the change in the overall judgement and give verbal reasons for it with reference to the choice

criteria. In contrast to earlier research results (Nisbett/DeCamp Wilson 1977), the change of attitude neither has to take place unconsciously nor does such a change lead to feelings of embarrassment among consumers (ibid., p. 256). For marketing research, it is not only the well-known influence of survey designs on the results that is evident here. Overall, the temporal and situational stability of all constructs of consumer behaviour is a field that deserves increased attention. In the past, when unexpectedly low contributions to the explanation of variance were made in relation to any dependent variables of consumer behaviour, it was assumed that the operationalization of the constructs considered had to be improved or the statistical evaluation procedures refined, while the temporal stability of the constructs has in principle hardly been questioned.

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