Changing the warmth and competence dimensions: Experimental validation in the context of insurance consultants

When you fall for someone’s personality, everything about them becomes beautiful.
—Marilyn Monroe

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ABSTRACT

Purpose: The Stereotype Content Model (SCM) postulates that consumers perceive other individuals primarily in terms of their warmth and competence. This also applies to sales agents. Consumers admire brands that are ‘lovable stars’ (highly competent and very warm). Since previous studies were based on explicit measures of existing people and groups, we aimed at experimentally creating the appropriate characters.

Method: Four sets of stimulus material were created using attributes and descriptions from the SCM.

Results: The results of this study fully confirm our approach. The blind perceivers judged the targets on the two dimensions of warmth and competence as intended.

Conclusions: The results confirm that it is possible to apply our model to the domain of insurance agents by using competence and likability as dimensions. Furthermore, it is possible to assess the stereotype in advance. Previous studies relied on ex-post judgments. Finally, likability and competence have a positive effect on trust. Thus both dimensions should be taken into account by management when recruiting or training their company’s representatives.

1 INTRODUCTION

The preferences of consumers are often shaped associations as well as unconscious, implicit beliefs (Bond, Bettman, & Luce, 2011). These beliefs are further often predominantly shaped by automatic processes of the brain. Eye size and appearance can influence these beliefs (Goncalves et al., 2014). When one meets a person for the first time, for example a customer, first impressions are processed in a split second, 100–500 milliseconds (Willis & Todorov, 2014). With information about stereotypes, leading to preferences and beliefs about the counterpart (e.g., insurance consultant) based on age, gender, and social class, a judgement is formed (Fiske & Tablante, 2015, p. 482 ff.). Countless romantic movies and novels pick up on this effect and play with the love-at-first-sight motive. Rhetoric, appearance, and tone of voice can positively contribute to a client’s perception of sympathy as well as competence (Ambady, Krabbenhoft, & Hogan, 2006). Perceived competence and sympathy for their part can influence trust. Needless to say, in a client-consultant relationship, trust plays an important role, especially when the product is a service, such as in the case of insurance.

Therefore, practitioners are interested, first, in measuring these effects because without quantification, measurement is rendered obsolete, and deriving implications for strategy becomes rather difficult. Second, practitioners are interested in training their frontline employees. Companies strive to have “lovable stars” (in reality rare) for customer interac-
The challenge is to “transform” frontline employees into those stars. Based on the theory of social cognition (see e.g., Fiske, Cuddy, & Glick, [2007]), it is possible to “construct” lovable stars.

Developing a tool for measuring such emotions is a challenge for researchers and practitioners alike, and as a first step, stimulus material is needed. Hence, together with an industry partner, we meet this challenge with an experimental approach for validation. Before doing so, we take a closer look at the theoretical foundation of this study.

2 THEORETICAL FOUNDATION

The theoretical foundation gives an overview of the concepts of mental information processing as well as models regarding stereotypes with a focus on the warmth and competence dimensions.

As mentioned in the introduction, a consumer’s preferences are often subject to the influence of subconscious mental processes. For analysis purposes, these mental processes can be divided into two general categories, leading to the classification of system 1 and system 2 processes (Gawronski & Creighton, 2013; Kahnemann, 2012). System 1 consists of automatic, holistic, and associative processes that run automatically within the subconscious mind. System 2 is of a more rational nature, and here the process runs in a conscious-based as well as analytical, rule-based manner. In contrast to system 1, system 2 is limited by the working memory capacity (Bond et al., 2011; Gawronski & Creighton, 2013). Therefore, it is no surprise that consumers use system 1 when it comes to choosing and using brands (Kahnemann, 2012). Often, the rational system is not able to counteract and overrule impressions and preferences that emerge from system 1. An application where the appearance, character, and personality of an employee play a central role is consulting—in this study insurance consulting in particular.

In the course of human evolution, it has been important to judge the opposite immediately whether his intentions are good or bad (Fiske, Cuddy, Glick, & Xu, 2002), and people decide quickly who is friend or foe (Fiske & Dupree, 2014). Unsurprisingly, people judge warmth most reliably, followed by competence, in a split second. Based on the studies of Asch (1946), where the gestalt changed by variation of information about an individual’s warmth, Bales (1950) conducted further research with regard to the aspect of leadership. Wojciszke (1994) extended the research using morality as a warmth dimension. Without going into the details of the vast amount of labels used for the warmth and competence dimensions, we would like to cite Cuddy, Glick, and Beninger (2011), who stated, “In sum, decades of research across a variety of subfields . . . suggest that warmth and competence represent fundamental dimensions of person perception.” Casciaro and Sousa-Lobo (2005) used the dimension of competence as well as likability and built a 2 × 2 matrix (see Figure 1).
Competence is more resistant to little failures than warmth, but one incident may be enough to radically change warmth assessments (Kubicka-Daab, 1989). Cuddy et al. (2011) state that “the people expect competent individuals to behave competently most, but not all, of the time. . . . Thus, negative information about competence does not carry the same weight as negative information about warmth.” Judgement is not limited to groups (Cuddy, Fiske, & Glick, 2008; Cuddy et al., 2011), and therefore, it is no surprise that Kervyn, Fiske, and Malone (2012) have applied this concept to brands as well and got the attention of Aaker, Garbinsky, and Vohs (2012), who tested the BIAS framework explicitly by using eight brands. Further, the warmth and competence concept has an effect on purchase intentions as well (Bennett & Hill, 2012, p. 201).

Regarding the assessment of people as well as products, information economics can contribute to the literature part of this paper regarding product type. Insurance products are complex and can be seen as confidence goods. These products are characterized by the fact that the consumer cannot fully assess the quality of the product or service as this is the case, for example, in medical services or, in our case, insurance products (see Darby & Karni, 1973; Nelson, 1970). The consumer has to have confidence on and trust the product or service he buys. If this assessment is done with the use of an electronic channel, the technology acceptance model (Davis, 1989) can be mentioned as a model where perceived ease of use and perceived usefulness have an effect on the intention to use. Meta-analysis shows that perceived usefulness has a profound effect and captures much of the effect of perceived ease of use (King & He, 2006, p. 751), and because the measures are highly reliable, these models can be applied to a wide range of contexts. In a broader sense, perceived usefulness may be seen as competence or a hard factor, whereas perceived ease of use could be a soft factor and associated with sympathy. After going into detail about the underlying theory and literature, we continue by taking a closer look into the research methodology of this study.

3 RESEARCH METHOD

The questionnaire contained items to measure the competence and likability dimensions. Likability scales were drawn from Reinhard, Messner, and Sporer (2006) and McCroskey and Teven (1999), whereas competence was measured using the scale of Stock and Hoyer (2005). Based on theory and literature, we set up a conceptual model (Figure 2). Content, appearance, and tone of voice should have an effect on the perceived likability as well as competence of the insurance consultant. These in turn affect trust. Further, the likability construct is composed of the dimensions of goodwill and likability. Competence, on the
other hand, consists of the dimensions of expertise and competence. The judgement of visual appearance is usually unavoidable (Heflick, Goldenberg, Cooper, & Puvia, 2011), and we therefore used pictures of sales representatives. Content, appearance, and tone of voice are modelled as one construct as these factors are perceived together and assessed as a whole, especially in an insurance sales talk setting. This is in line with the first impression theory (Ambady & Skowronski, 2008).

The stimulus material for the study was constructed using descriptions, attributes, and expressions taken from previous studies and summaries on the topic (Cuddy et al., 2008; Fiske et al., 2007). Pictures of presumable sale agents were selected according to those descriptions, the text they spoke was written using attributes from these studies, and finally, a professional actor was briefed to read the text in the appropriate tone of voice. This resulted in four stimuli for each quadrant in Figure 1. The material was pretested. The combination of photo and spoken text (appearance, voice, and content) has a satisfactory field validity (Gray & Ambady, 2006).

Participants were randomly assigned to four groups. The steps of the experiment were explained to them by the investigators leading the experiment. After seeing the pictures as well as the corresponding narration in audio form, they were allowed to open a sealed envelope containing the questionnaire. This questionnaire was fitted with a code, enabling an ex post allocation to the corresponding groups. The questionnaire contained items to measure relevant variables as well as our conceptual model (Figure 2). The whole experiment took 10 minutes per group and went according to planned. Recruitment of participants was carried out in the course of a bachelor lecture with the topic of consumer behaviour and communication at the Zurich University of Applied Sciences. A total of 102 participants took part in the experiment. We can report an average age of 23.4 years for the participants. Furthermore, a manipulation check consisting of participants assigning the person in the experiment into the corresponding quadrant was tested using chi-square, which yielded a nonsignificant result. Therefore, we conclude that the manipulation can be rated as successful.

4 FINDINGS

A first analysis was conducted by looking at the average values of the variables (see Table 1). Sympathy 1, competence 2, and trust have average values exceeding 4 on a seven-point scale. Both sympathy 2 and competence 1 have average values below 4.

In order to conduct more detailed tests, we take a look at the distribution. A Kolmogorov-Smirnov test reveals that the normal distribution hypothesis has to be rejected on a 5% alpha level with two-tailed significances ranging from 0.002 (trust) to 0.026 (competence...
2). Sympathy 1 (p=0.005), competence 1 (p=0.011), and sympathy 2 (p=0.009) all indicate a distribution deviating from a normal distribution. Therefore, we proceed in our analysis with nonparametrical measures and tests. We proceed with reliability tests by testing Cronbach’s alpha values larger than 0.7 on all construct items.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Avg</th>
<th>S.D</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likability (likable, friendly, nice, polite [sympathy1])</td>
<td>4.66</td>
<td>1.25</td>
<td>0.887</td>
</tr>
<tr>
<td>Competence2 (intelligent, trained, informed, bright</td>
<td>4.56</td>
<td>2.20</td>
<td>0.869</td>
</tr>
<tr>
<td>Trust (honest, honourable, moral and genuine)</td>
<td>4.36</td>
<td>0.77</td>
<td>0.722</td>
</tr>
<tr>
<td>Goodwill (caring, interested, concerned, understanding [Sympathy2])</td>
<td>3.99</td>
<td>0.56</td>
<td>0.778</td>
</tr>
<tr>
<td>Salesperson’s expertise1 (knowledgeable, organized, informed, finds solutions)</td>
<td>3.77</td>
<td>1.43</td>
<td>0.958</td>
</tr>
</tbody>
</table>

**Table 1: Descriptive statistics**

All items except those of the construct sympathy 1 meet the criteria. Item number 2, “He cares about my interests,” is dropped, rendering a Cronbach’s alpha of 0.887 for sympathy 1.

In line with our conceptual model, the model translates into following equation:

\[
\text{trust} = \text{constant} + a \times \text{likability} + b \times \text{competence} + \text{S.E.}
\]

First, an analysis of high versus low sympathy is conducted by using the Mann-Whitney U test. No significant difference is found for sympathy 2 (p=0.128, Z: -1.523). A different, and thus significant, result can be reported for sympathy 1 (p=0.001, Z: 3.45). Second, we analyse high versus low competence. A significant difference can be reported for the variable “expertise” (p=0.000, Z: -7.510). Further, for the variable “competence,” we report a P value of 0.000 (Z: -6.297). Therefore, two people are significantly different in both sympathy and competence.

By including sympathy and competence, an adjusted R-square of 0.33 can be reported, and this represents acceptable value; and with a beta value of 0.317 (p=0.003), likability/warmth has a larger influence than expertise/competence, which has a beta value of 0.235 (p=0.028).

Table 2 shows that cold, incompetent people have the lowest trust values, whereas warm and competent people are reported to have the highest trust values.

<table>
<thead>
<tr>
<th>Likability</th>
<th>Competence</th>
<th>Avg.</th>
<th>S.D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlikable</td>
<td>Incompetent</td>
<td>4.01</td>
<td>0.529</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Competent</td>
<td>4.58</td>
<td>0.714</td>
<td>27</td>
</tr>
<tr>
<td>Likable</td>
<td>Incompetent</td>
<td>4.31</td>
<td>0.877</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Competent</td>
<td>4.64</td>
<td>0.809</td>
<td>21</td>
</tr>
</tbody>
</table>

**Table 2: DV trust (univariate analysis)**

An analysis of variance shows that competence has a clearly significant effect on trust. However, somewhat puzzling is that sympathy does not have a significant effect on trust,
nor does the interaction sympathy*competence. An adjusted R-square value of 0.08 can be reported. The former astounds us as both regression and group differences can be reported.

5 DISCUSSION, LIMITATIONS
This study demonstrates the attributes of communication, and sales success can be identified. The perceivers appeared to use the target’s affective displays to make assumptions about the underlying motives and character. It should be noted that the target is a combination of words, a visual, and the corresponding tone of voice. Accumulating evidence from social cognition suggests a generalization effect (Ames & Johar, 2009). Thus, it seems realistic to train “normal” performers to become lovable stars.

A management saying goes, “You can’t manage what you can’t measure.” Measuring emotions is not a trivial task, but we hope to have added to the toolbox of methods that can be used to do so by developing schemas from people with different levels of sympathy and competence. These can be used for measurement as the validity of these personas was rigorously tested in an experiment with success. We now have the stimulus material to further improve measurement tools as well as to improve the aspects of training. A further alley of research is the validation of the 7-85-55 rule (Mechinda & Patterson, 2011; Mehrabian, 1969, 1977). In the construct sympathy 1, item number 2 had to be dropped. Presumably, the question was too emotional and abstract for usage in the context of a sales talk. A verification of this possible explanation provides a further field for subsequent research as well as a replication of this study in a different domain (e.g., a B2B context).

Furthermore, the nonsignificant effect of sympathy on trust may be explained by the insurance product itself being a rather abstract and complex product. Another explanation can be drawn from the technology acceptance model, where perceived usefulness, which can be associated with competence, has a more profound effect than the softer dimension of perceived ease of use in a rather abstract and complex context of technology or computer systems.

Finally, trust, which arises in the context of complex insurance products and services, may be used as an explanation for sympathy not having a significant effect, which is in line with current research results stressing the importance of competences (Lambert, Plank, Reid, & Fleming, 2014) as well as older research results (Swan, Bowers, & Richardson, 1999) showing the higher importance of competence over likability.

Not really a limitation but a point we need to make is that all of the 102 participants are students, and therefore, this study is based on a student sample. We do not expect relevant biases resulting from this aspect (Calder, Phillips, & Tybout, 1981). In Switzerland, young adults have a compulsory insurance as well pension plans and are therefore familiar with insurances. Further, the students are business administration students and are therefore further familiar with the insurance context. The sample is rather small; therefore, in conjunction with the fact that this study does not contain normal distributed data, these two aspects are mentioned here as limitation. Further studies could pick up on these aspects in order to replicate the results reported in this study and conduct an analysis that goes beyond nonparametric testing.

This study is not an exact replication of previous studies because the voice in the MP3 files was the same for each of the four groups. Previous research has mainly been conducted with a hindsight approach using cross-sectional data, leading to a categorization of people (e.g., a homeless person in the lower left quadrant). Especially in these aspects, this study differs from previous research.
An important note about the results and their application is one of ethical nature. Ethics can play an important role, especially with the trust and emotional dimension the application of these results can have if used for deceiving customers. We therefore advise practitioners to keep this aspect in mind when applying the research results.

In this study, pictures, text, and audio were used, resulting in the use of the same voice for each group. Further research could use the same person for each group (e.g., a professional actor) and use a video instead of pictures to gain further insights.

6 CONCLUSION

In this paper, stimulus material has been developed to help measure emotions within a relationship—in this study, the one between insurance consultants and their customers. Further, the stimulus content model has been applied to the domain of insurance products and services.

We claim that it is possible to apply our model to the domain of insurance and thereby categorize consultants by using competence and likability as dimensions. Furthermore, it is possible to assess the stereotype in advance compared with previous studies that relied on ex post judgements.

It is important to keep in mind that the ethical dimension these results have and deception of customers using these results can result in ethically problematic consequences.

Furthermore, we would like to close on the comment that both likability and competence have a positive effect on trust, and thus, both dimensions should be taken into account by management when recruiting or training their company’s representatives and consultants.
7 REFERENCES


