
Stereotypes and typicality: their effects on relational chain

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Abstract:

In every interaction, individuals unconsciously activate stereotypes about people that belong to a different social group. This also applies to B2C relationships between frontline employees and consumers. An experimental design has been used in this study and it reveals stereotypes and typicality effects on relational chain. This experimentation is a scenario-based study and its design is based on two qualitative exploratory studies.

Keywords: stereotypes, services, B2C relationships

1. Introduction

Stereotypes are shared beliefs about the characteristics and behaviours of a group of people (Bédard, Déziel and Lamarche, 2006). Literature shows that stereotypes may impact interpersonal relationships (Yzerbyt and Schadron, 1996), namely in the field of relationships' development between consumers and frontline employees. This could have an impact on the functional quality of a service that is one of the two determinants of total quality of services (Gronroos, 2007). So we believe that the study of stereotypes effects on relations is important in the service field. Since relationships are influenced by stereotypes and since stereotypes are automatically activated during the first meeting (Fiske, 2004), we may assume that B2C service relationship will be influenced by consumers' stereotypes about frontline employees. This experimentation will try to confirm stereotypes effects on B2C relationships. This research is based on a qualitative study about consumers' stereotypes effects on interpersonal relationships (Bienfait and Decrop, 2012). This qualitative study shows that consumers' stereotypes about frontline employees can have some effect on consumers' emotions, interpersonal trust, satisfaction and engagement. Except for emotions, these concepts refer to the relational chain of Aurier, Benavent and N'Goala (2001). In this study, we will not investigate the effect of stereotypes on emotions because this has already been done by Babin, Boles and Darden in 1995 and by Lee, Beatson and Taylor in 2007. Therefore, we will only focus on stereotypes effects on relational chain.

2. Theoretical framework

2.1. Relation

2.1.1. Definition

In this research, we will study the effect of consumers' stereotypes on services relationships. Based on the paradigm of social exchange, dominant paradigm in relationship marketing (N'Goala, 1997), Kelley et al. (1983) offer a definition of relation concept if the behaviors, emotions and thoughts of two people are interconnected in a mutual and causal way, then people are interdependent and a relationship exists. A relationship is defined as close if it lasts and involves interactions that are causal, intense, frequent and diverse. Some conditions are necessary to get a relation within the meaning of relationship marketing (Jallat, Stevens and Volle, 2009):

- Interactions have to take place between at least two parties and those parties can have a mutual influence.
- Passed interactions influence future interactions, this implies continuous interactions
- Interactions are influenced by real events and by subjective interpretations.

In our qualitative study (Bienfait and Decrop, 2012), we studied high and low contact services. High contact services are services for which consumers are in interaction with frontline employees and require the expertise of frontline employees (Lovelock et al., 2008). On the opposite, for low contact services, consumers are not necessary in contact with employees and if it is the case, the interaction is brief and tenuous (Lovelock et al., 2008). Furthermore, when this interaction occurs, consumers pay more attention to technical quality of the service than to the interaction with frontline employees (Mittal and Lassar, 1998).

Based on the literature and on our qualitative results (Bienfait and Decrop, 2012), it seems that we have to exclude the four selected low contact services to study consumers' stereotypes effect on relational chain. Indeed, firstly our results showed that informants had very few stereotypes about low contact services and secondly conditions for establishing a relation are not meet for the studied low contact services. For singers, we do not believe that passed interactions with a particular consumer will influence future interactions and that a particular consumer can really influence singers' behaviours. For express deliverymen and train controllers we think that we could not speak about a mutual influence between both parties. Based on our qualitative study, we realised that, most of the time, express deliverymen, train controllers and phone banking counsellor are different. This implies that interaction continuity does not occur and leads us to exclude these four low contact services from our experimentation.

This research will focus on the following four professions: Aesthetician, gardener, psychotherapist and insurance broker. These jobs fit the Jallat, Stevens and Volle conditions and consumers are able to select an exchange partner and change of partner whenever they want to. Consequently, relationship creation seems to be a profitable goal for these professions.

2.1.2. Relational chain

Our qualitative results (Bienfait and Decrop, 2012) show that consumers' stereotypes can have some effect on relational concepts: trust, satisfaction and commitment. Those concepts were studied by Aurier, Benavent and N'Goala (2001) in the relational chain. This chain goes from the perceived quality to consumers' commitment passing by satisfaction and trust (Angot, Chumpitaz and Swaen, 2009). Perceived quality could have a positif effect on satisfaction, trust and commitment (Angot, Chumpitaz and Swaen, 2009). Satisfaction could influence trust and commitment (at least for very satisfied consumers). Finally, trust could have positive effects on commitment (Angot, Chumpitaz and Swaen, 2009). This relational chain does not perfectly reflect reality, those interactions are not automatic but this chain is a way to study customer relationship as a whole (Angot, Chumpitaz and Swaen, 2009) that is why we suggest studying consumers' stereotypes effects on this relational chain.

2.2. Stereotypes, prototypes and typicality

Stereotypes are shared beliefs within an "in-group" about the personal characteristics (traits or behaviors) of a group of people refered to as the "out-group" (Yzerbyt, Schadron, 1996).

The prototype can be defined as the exemplar that possesses the typical properties of the category it belongs to (Amossy, Herschberg Pierrot, 1997). It can be a cognitive construct or a real exemplar (Ladwein, 1995). There is a link between prototype and stereotypes; indeed the main stereotypes have a significant effect in the prototypical organisation of the category (Geeraerts, 1985).

Rosch and Mervis (1975), substitute the concept of prototype by typicality. This concept allows the positioning of every exemplar of a class with respect to each other (Ladwein, 1995). The advantage of typicality in relation to the notion of prototype is to enable the categorical judgment of all elements belonging to one category, while the prototype involves only an exemplar of the class. Following Lambert and Wyer (1990), a person who possesses

categorial stereotypes is perceived as a typical member, while a person who do not possesses stereotypical traits of his group membership will be perceived as an atypical member.

2.3. Stereotypes and categorization

Stereotypes affect relationships because they modify the way people think and the way they perceive incoming information about their social environment. In a service context, the social environment is namely composed of frontline employees. The perception of these employees may be affected by new information.

Indeed, during the perception process, people use different strategies to sort an exemplar in an existing category (Salès-Wuillemain, 2006). This category is described by people's stereotypes and prejudice. Prejudice can be defined as emotional reactions, either positive or negative about a member of an out-group or of an in-group based on general feelings about his group (Fiske, 2004, Salès-Wuillemain, 2006). During an encounter with frontline employees, consumers receive information about employees. They will use one-categorization strategies to categorize frontline employees and if consumers already have some stereotypes about some frontline employees and if they are confirmed by incoming stimuli, the literature tells us that those employees will be categorized and perceived as typical employees of the category they belong to (Lambert and Wyer, 1990). It is called the perception bias in the literature (Tajfel, 1972). However, if stereotypes are unconfirmed by incoming information (frontline employee perception), employees will not be perceived as typical employees (Lambert and Wyer, 1990).

One consequence of this categorization process is the social judgment of targets. Based on the social judgment theory (Schadron and Yzerbyt, 1993), target judgments are based on stereotypes if people think they received information about category membership of targets (Salès-Wuillemin, 2006). Social judgment valence depends on the general orientation of stereotypes (positive or negative): people with positive and negative stereotypes about a target will negatively judge this target if he has more negative than positive stereotypes about the target (Lepore and Brown, 1997). This general orientation of stereotypes depends on consumers' prejudices about the targeted category (Salès-Wuillemin, 2006). On the other side, social judgments of atypical targets will not be based on stereotypes (Schadron, Yzerbyt, Leyens and Rocher, 1994). People will use incoming information to judge the target and not stereotypes. This effect is called the dilution effect of the stereotype (Salès-Wuillemin, 2006). Based on Vidal's hypothesis (2003) about the centrality of stereotypes, we believe that this will be the case when central stereotypes won't be confirmed.

Based on the categorization literature and on the results of a qualitative study (Bienfait and Decrop, 2012), we propose the figure one that represents the categorization process. This model is inspired by the Babin and Babin model (2001) and shows that categorization process can have cognitive, affective and behavioural effects as the literature (Fiske, 2004) and the qualitative study of Bienfait and Decrop (2012) show.

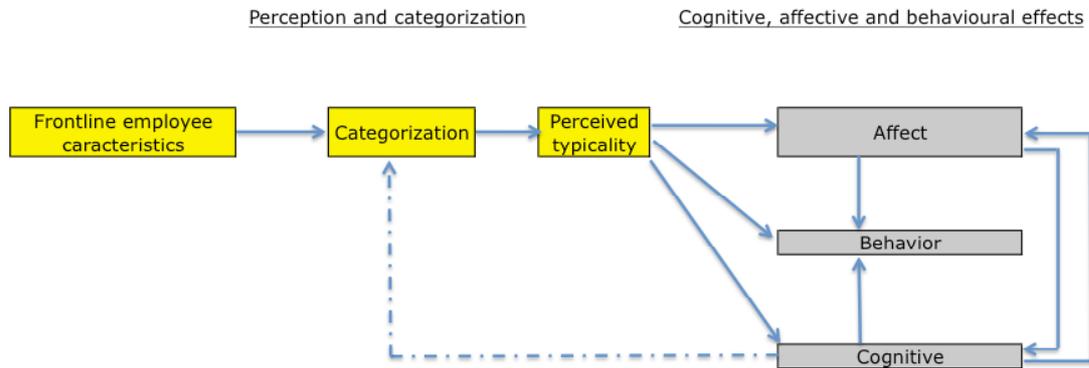


Figure 1 : Categorization process and effects

2.4. Stereotypes in marketing

We believe that stereotypes had to be taken into account in the field of services because it may influence one of the two main dimensions of service quality (Gronroos, 2007): the functional quality of the process. Indeed, Gronroos (2007) defines the functional quality as the quality of the process used to deliver services to consumers and buyer-sellers interactions are part of this process. Based on the psychosocial literature it seems that those interactions could be influenced by consumers' stereotypes about frontline employees. For those reasons, we believe that stereotypes had to be taken into account in the field of services.

Stereotypes have been studied in the field of marketing. However, most often these studies were not significant and one of the reason maybe that the studied stereotypes were coming from a review of literature and not from an empirical study: "There is little rigorous empirical research available which explores the exact content of these stereotypes, and their effects" (Lee & al., 2007, p.2). A few studies have examined gender stereotypes, but only one (a qualitative study) really brings conclusive results: "these stereotypes negatively influence the ability of men nurses to develop comfortable and trusting relationships with their patients" (Evans, 2002, p. 442). Ethnic stereotypes have also already been studied. Harrison-Walker (1995) found that ethnic stereotypes have an effect on the selection of a service provider. When the name of the service provider is the only available information, American names are preferred to "foreign" names. Since other studies about stereotypes' effects in the field of marketing are not conclusive whereas psychosocial literature shows that stereotypes affect interpersonal relationships, there is a need for new studies designed to identify consumers' stereotypes and their influence on interpersonal relationship.

3. Conceptualizing and measuring stereotypes effects on relational chain

Based on the psychosocial literature we see that stereotypes may influence consumers' social judgment, and by the way the relational chain. Our main proposition is that stereotypes influence relational chain concepts through typicality.

Lambert and Wyer (1990) argue that a person who possesses categorial stereotypes will be perceived as a typical member, while a person who do not possesses stereotypical traits of his group membership will be perceived as an atypical member. Our first hypothesis will verify this theory in a service contexte:

Hypothesis one a): congruence between incoming information about frontline employee and categorial stereotype has a direct positive impact on typicality.

Based on our qualitative study (Bienfait and Decrop, 2012) and on Vidal's hypothesis about stereotype centrality, we believe that stereotype centrality will moderate the effect of stereotype on typicality.

Hypothesis one b): Stereotype centrality will moderate the effect of stereotypes on typicality.

Social judgment will be based on the categorization process and a typical exemplar will be judged positively or negatively depending of prejudice valence (Salès-Wuillemin, 2006). However, atypical exemplars will be judged on available information and not on stereotypes, this effect is called the dilution effect (Schadron, Yzerbyt, Leyens and Rocher, 1994). We will apply this to the relational chain concepts.

Hypothesis two a): Typicality has a direct positive effect on relational chain concepts: perceived quality, satisfaction, trust and commitment.

Hypothesis two b): Prejudice valence will moderate the effect of typicality on relational chain concepts for high typical exemplars.

Hypothesis two c): Perceived valence of incoming information will moderate the effect of typicality on relational chain concepts for low typical exemplars.

Based on our exploratory study (Bienfait and Decrop, 2012), we identified two other possible moderators: the nature of the service act and the direct recipient of the service. Our results reveal that there were some differences between informants' stereotypes depending on the nature of service act (tangible vs intangible) and depending on the direct recipient of the service (people vs goods). For the nature of the service act, our qualitative results showed that informants were more concerned about tangible elements with tangible service act. So we believe that the nature of the service act could be a moderator between typicality and relational chain concepts, mainly with perceived quality that is the most tangible concept of the relational chain. We also found that informants reported more ideas about relational chain concept for intangible service act. So the effect of the nature of the service act is not clear and should be investigated.

Based on our first exploratory study (Bienfait and Decrop, 2012), it seems that the direct recipient of the service has some moderation effects. Indeed, we found that informants pointed out more effect related to relational chain concepts if the direct recipient of the service was a person than if it was a goods. We propose to test the moderation effect of this variable on the relational chain and we believe that typicality will have a greater effect if the direct recipient of the service is a person.

Hypothesis two d): the nature of the service act moderate the effect of typicality on relational chain concepts.

Hypothesis two e): the direct recipient of the service act moderate the effect of typicality on relational chain concepts.

These interactions are included in the figure 2.

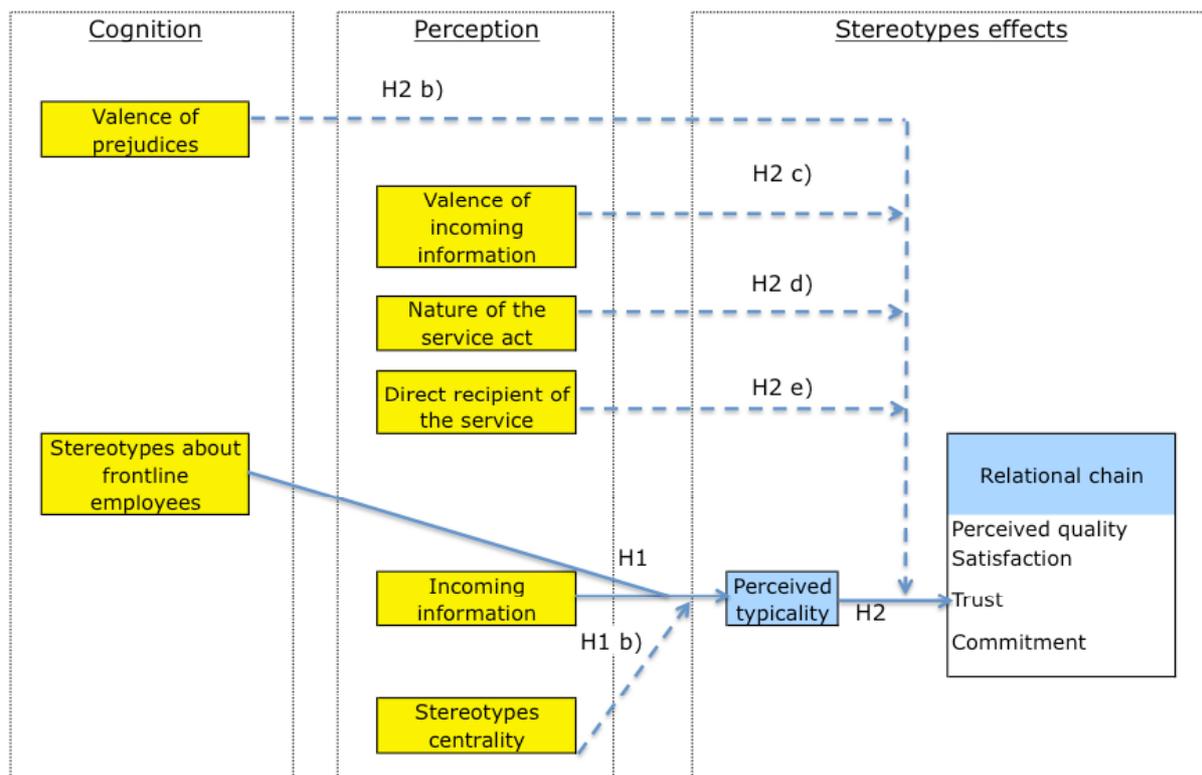


Figure 2 : Model and research hypothesis

4. Research methods

Our empirical study concerns service relationships between consumers and frontline employees. It will test the influence of consumers' stereotypes about frontline employees on relational chain concepts. Four different professions were selected as previously mentioned: aesthetician, gardeners, psychotherapist and insurance brokers. Stereotypes associated to these professions were already studied in two exploratory studies (Bienfait and Decrop, 2012, Bienfait, Nils and Bertinchamps, 2012). These high contact services differ on the following points: the nature of the service act and the direct recipient of the service.

4.1. Data collection, samples, measurement and methodology

Based on two exploratory studies (Bienfait and Decrop, 2012, Bienfait, Nils and Bertinchamps, 2012) we developed an experimentation based on questionnaires. 32 conditions were created. These 32 scenarios focused on the first steps of a relationship since our qualitative study (Bienfait and Decrop, 2012) points out that stereotypes may influence only the first step of relationship development.

Eight experimental conditions were created for each profession. Each scenario describes a fictitious meeting between a consumer and a frontline employee. During this meeting, respondents are approached by a frontline employee and exposed to information about this person. The eight conditions per profession differ on the following points: stereotype valence, stereotype centrality and stereotype confirmation. Stereotypes included in each experimental condition were coming from two exploratory studies (Bienfait and Decrop, 2012, Bienfait, Nils and Bertinchamps, 2012). Details of those experimental conditions are given in the table one.

Aesthetician

| Stereotype | Positive | Negative |
|------------|-----------------|-------------|
| Central | Neat appearance | Superficial |
| Peripheral | Tanned | Vulgar |

Gardener

| Stereotype | Positive | Negative |
|------------|---------------|----------|
| Central | In good shape | Dirty |
| Peripheral | Sympathetic | Infidel |

Psychotherapist

| Stereotype | Positive | Negative |
|------------|--------------|------------|
| Central | Tuned | Charlatan |
| Peripheral | Do not judge | Disorderly |

Insurance broker

| Stereotype | Positive | Negative |
|------------|---------------------|----------|
| Central | Well dressed | Pushy |
| Peripheral | Resistant to stress | Pressed |

Table 1 : Details of stereotypic conditions

For counter stereotypical conditions, we selected antonyms from the CNRTL database (Centre National de Ressources Textuelles et Lexicales – CNRS – France). However, for some stereotypes there were no antonyms, the negation was thus used. The counter stereotypical conditions are listed in table 2.

Aesthethician

| Stereotype | Positive | Negative |
|------------|----------------------|-----------------|
| Central | Neglected appearance | Not superficial |
| Peripheral | Pale | Distinguished |

Gardener

| Stereotype | Positive | Negative |
|------------|---------------|----------|
| Central | Bad shape | Neat |
| Peripheral | Unsympathetic | Faithful |

Psychotherapist

| Stereotype | Positive | Negative |
|------------|-----------|----------|
| Central | Not tuned | Sincere |
| Peripheral | Judge | Ordained |

Insurance broker

| Stereotype | Positive | Negative |
|------------|-------------------------|-----------|
| Central | Badly dressed | Not pushy |
| Peripheral | Not resistant to stress | Slow |

Table 2 : Details of counter stereotypic conditions

This experimentation was conducted mainly on Internet. Online questionnaires were constructed with the limesurvey software and were hosted on UCL website (Université Catholique de Louvain – Belgium). A unique URL with a PHP script was created and redirected people to one of the 32 conditions on the UCL website. The PHP script was designed to randomly assign people to one condition. People were asked to respond to this questionnaire via email, social networks, Belgian and French forums. More than 60% of answers were collected online. An offline questionnaire was also available. It was mainly distributed through sports center in Walloon Brabant and Brussels area and school evening classes in Brussels and Hainaut area. Our sample is composed of 855 participants aged between 16 and 84 years old. The average age of our sample is 38,66 years old for all respondents, 38,62 years old for women and 38,74 for men. These averages are not significantly different from the average of the Belgian population (p-value of 0,122). For gender, we can see that we have 42 % of men and 58 % of women in our sample, which is not

significantly different from the Belgian population (based on the year 2010, the most recent statistic publicly available). For professions, we had 143 students, 88 retired people and 3 inactive people. We also had 35 unemployed people and 586 active people. This distribution is not significantly different from the Belgian population (p-value 0,418). Based on these point biserial correlation tests, we could conclude that this sample is representative of the Belgian population with respect to age, gender and profession.

The object under evaluation was the relationship with one of the four-selected frontline employee. All survey metrics used a 7-point Likert scale and were adapted from the literature. Perceived quality can be defined as a global judgment about a product or a service. It is the first step of relational chain. If consumers perceive poor quality, they will end the relation (Angot, Chumpitaz and Swaen, 2009). To measure this element, we will use the Bergeron, Fallu and Roy (2008) scale (3 items). It is a scale developed and validated in French in B2C field. We also measured the satisfaction about consumption experience defined as a psychological state coming after a consumption experience and related to this experience (Angot, Chumpitaz and Swaen, 2009). To measure properly the satisfaction and its dual character (affective and cognitive), Vanhamme (2002) advocates using Westbrook (1980) (6 items) and Oliver (1980) (one item) scale. We used these scales translated in French by Vanhamme (2001). Interpersonal trust and institutional trust were measured. Institutional trust is an additional measure in order to check if stereotypes could have an effect on the relationship with the firm. This trust can be defined as a set of accumulated assumptions that consumers have about firm credibility, integrity and benevolence (Angot, Chumpitaz and Swaen, 2009). The Ganessian and Hess (1994) scale has been used. Aurier and N'Goala have translated it in French in 2010. It is a four items scale. Interpersonal trust, consumer's beliefs about salesperson benevolence and competence (Angot, Chumpitaz and Swaen, 2009), was assessed on a four items scale adapted in French by N'Goala (2010) from the Ganessian (1994) and the Ganessian and Hess (1997) scale. Three items were also used to measure explicit commitment. We used the Frisou (2000) scale to measure this explicit behavioural intention to maintain a lasting relationship, it was a scale developed and validated in French. Implicit commitment could not be measured in an experimental design. Finally, the hypothesized mediator, typicality, was measured on a one-item scale in accordance with the literature (Rosch and Mervis, 1975, Ladwein, 1994). The possible moderators that have to be measured, that is, prejudice and the perceived valence of incoming information, were measured on one item bi-polar scales (Sales-Wuillemain, 2006).

4.2. Reliability, convergent and discriminant validity of constructs

Based on our study data (n= 855), we performed a confirmatory factor analysis to test the unidimensionality of relational chain concept used in this study (perceived quality, satisfaction, trust and commitment). Spss software was used an oblique rotation was performed using the maximum likelihood procedure. This analysis clearly shows 6 different factors but because of low communalities (proportion of variance explained by the underlying factors) of two items related to satisfaction (below 0,5) we decided to rerun this analysis without these two items (the only negative items of the satisfaction scale). Without these items, all the communalities were above 0,5, which is recommended (Field, 2005). Furthermore, the RMSEA fit measure improve when these two items are dropped (from 0,064 to 0,051, 90% confidence interval = 0,044-0,058) and the total variance explained increases from 73,5% to 78%. All these constructs exhibit a satisfactory degree of reliability, Cronbach's alphas vary between 0,89 and 0,96, and convergent validity: factor loadings are all significant and vary between 0,53 to 0,93. Furthermore all AVE are above 0,5 that means that the variance of each construct is

more explained by his measures than by the error (Fornell and Larcker, 1981). For the convergent validity, all construct average variance extracted (AVE) estimates should be larger than the corresponding squared interconstruct correlation estimates (SIC). As table 3 shows, it is the case here and this indicates that the measured variables have more in common with the construct they are associated with than they do with the other constructs (Keeling, McGoldrick and Beatty, 2010).

| | <u>Variance extracted</u> | <u>Squared interconstruct correlations (SIC)</u> | | | | | |
|---------------------|---------------------------|--|------------|------------|-------------|-------------------|---------------------|
| | | Satisfaction | Commitment | Competence | Benevolence | Perceived quality | Institutional trust |
| Satisfaction | 0,62 | - | 0,37 | 0,32 | 0,32 | 0,51 | 0,43 |
| Commitment | 0,72 | 0,37 | - | 0,15 | 0,22 | 0,37 | 0,21 |
| Competence | 0,77 | 0,32 | 0,15 | - | 0,51 | 0,36 | 0,42 |
| Benevolence | 0,55 | 0,32 | 0,22 | 0,51 | - | 0,29 | 0,51 |
| Perceived quality | 0,6 | 0,51 | 0,37 | 0,36 | 0,29 | - | 0,32 |
| Institutional trust | 0,58 | 0,43 | 0,21 | 0,42 | 0,51 | 0,32 | - |

Table 4 : Discriminant validity : comparison of variance extracted and SIC

5. Results

5.1. Main hypothesis testing

Stereotypes effects on typicality

As table 6 shows, the presentation of a stereotype about frontline employees has a positive and significant effect on perceived typicality; hypothesis one is validated. A person confronted to a stereotype about a frontline employee in service field will perceived this employee as more typical than if this person was confronted to counter stereotypical information.

Typicality effects on relational chain

Typicality has a significant effect on relational chain concepts. All concepts are significantly and positively affected by typicality (all standardized betas are positive and significant at a $p < 0,05$ level). Based on table 5, we can see that all the adjusted R^2 are comprised between 16% and 29.9% and that satisfaction is the concept that is the most affected by perceived typicality with an adjusted R^2 of 29.9%. This means that the more frontline employee will be perceived as typical, the more individuals will be satisfied. This is also true for perceived quality, benevolence, competence, institutional trust and commitment. Benevolence and institutional trust are the concepts that are the least affected by typicality (adjusted R^2 of 16% and 16,6%).

| Hypothesis | Antecedents | Consequence | Standardized beta ($p < 0,05$) | Adjusted R^2 | Hypothesis status |
|---|-------------------------|------------------------|----------------------------------|----------------|-------------------|
| H1: Positive role of stereotypes towards typicality | Stereotype confirmation | Typicality | 0,082 | 0,50% | Confirmed |
| H2: Positive role of typicality on relational chain | Typicality | a) Perceived quality | 0,471 | 22% | Confirmed |
| | | b) Satisfaction | 0,548 | 29,90% | Confirmed |
| | | c) Benevolence | 0,401 | 16% | Confirmed |
| | | d) Competence | 0,418 | 17,30% | Confirmed |
| | | e) Institutional trust | 0,405 | 16,30% | Confirmed |
| | | f) Commitment | 0,425 | 18% | Confirmed |

Table 6 : Stereotypes and typicality effects

5.2. Moderators tests

We based our moderators' tests on the methodology proposed by Chumpitaz and Vanhamme (2003). Multiple regression analyses were performed to test the interaction effects. A moderator effect is revealed if betas of interaction effects are significant. The beta of the interaction effect is noted "c" in the following equation and the simple effect of the variables X and Z was taken into account in the regression model:

$$Y = a + bX + dZ + cXZ + \text{error}$$

| Hypothesis | Antecedents | Consequence | Interaction beta (p<0,05) | Adjusted R ² | Hypothesis status |
|---|--------------------------------|------------------------|---------------------------|-------------------------|-------------------|
| H1 b): Moderation of stereotypes effects on typicality | Stereotypes centrality degree | Typicality | NS | / | Unconfirmed |
| H2 b): Moderation of typicality effects on relational chain | Prejudice valence | a) Perceived quality | 0,302 | 28,40% | Confirmed |
| | | b) Satisfaction | 0,472 | 39,40% | Confirmed |
| | | c) Benevolence | 0,405 | 23,20% | Confirmed |
| | | d) Competence | 0,293 | 23,60% | Confirmed |
| | | e) Institutional trust | 0,421 | 24,30% | Confirmed |
| | | f) Commitment | 0,214 | 22,60% | Confirmed |
| H2 c): Moderation of typicality effects on relational chain | Stimulus perceived valence | a) Perceived quality | NS | / | Unconfirmed |
| | | b) Satisfaction | 0,136 | 46,50% | Confirmed |
| | | c) Benevolence | NS | / | Unconfirmed |
| | | d) Competence | NS | / | Unconfirmed |
| | | e) Institutional trust | NS | / | Unconfirmed |
| | | f) Commitment | NS | / | Unconfirmed |
| H2 d) Moderation of typicality effects on relational chain | Nature of the service act | a) Perceived quality | NS | / | Unconfirmed |
| | | b) Satisfaction | NS | / | Unconfirmed |
| | | c) Benevolence | NS* | / | Unconfirmed |
| | | d) Competence | 0,390 | 18,40% | Confirmed |
| | | e) Institutional trust | NS | / | Unconfirmed |
| | | f) Commitment | NS | / | Unconfirmed |
| H2 e) Moderation of typicality effects on relational chain | Direct receptor of service | a) Perceived quality | NS | / | Unconfirmed |
| | | b) Satisfaction | 0,052 | 30,10% | Confirmed |
| | | c) Benevolence | NS | / | Unconfirmed |
| | | d) Competence | NS | / | Unconfirmed |
| | | e) Institutional trust | NS | / | Unconfirmed |
| | | f) Commitment | NS | / | Unconfirmed |
| | * Significant at a p<0,1 level | | | | |

Table 7 : Moderators effects

Stereotype centrality effect

Based on table 8, we can see that hypothesis 1 b) is not confirmed, that means that the degree of centrality of stereotypes does not have a significant effect on perceived typicality. People will perceived frontline employees as more typical example if a stereotype is confirmed, whatever the degree of centrality of this stereotype.

Prejudice valence effect

Prejudice moderates the effect of typicality on relational chain concepts. The interaction effect is positive and significant at a $p < 0,05$ level for all the concepts. All the adjusted R^2 are comprised between 22,6% and 39,4%. We could notice that variances are more explained by this model than by the model without the moderation effect. Based on the table 9, we could also notice that satisfaction is still the best-explained concept with an adjusted R^2 of 39,4 %. That means that the positive relationship between perceived typicality and satisfaction will be positively moderated by prejudice valence: the highest satisfaction level will be reached with the highest level of typicality and with the more positive prejudices. Figure 3 shows the moderation effect of prejudice on satisfaction. We can see that for low level of typicality prejudices are not taken into account whereas it is the case for high level of typicality.

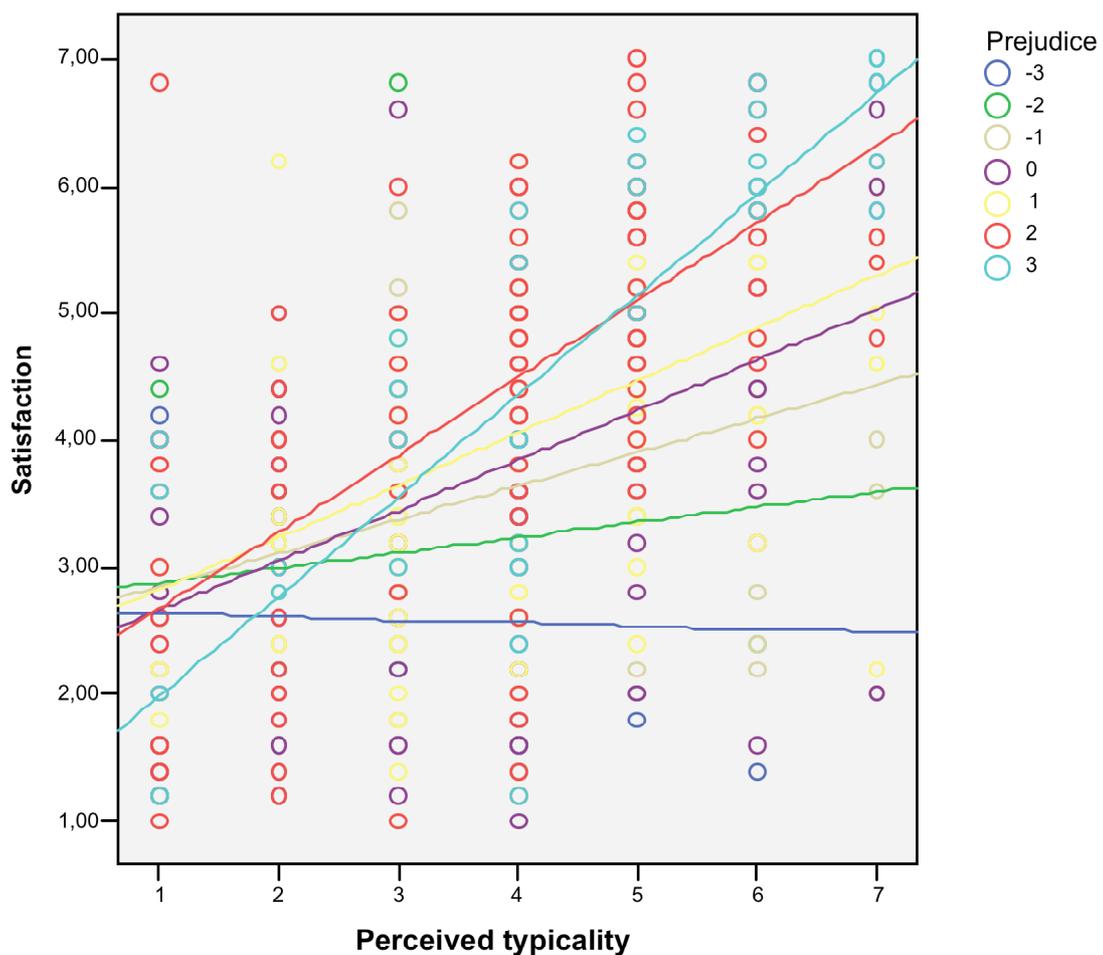


Figure 4 : Moderation effect of prejudices

Stimulus perceived valence

This moderator effect has only a positive, significant effect on satisfaction (adjusted R^2 of 46,5%). This means that the relationship between typicality and consumers' satisfaction will be moderated by the perceived valence of the stimulus: the highest satisfaction level will be reached with the highest level of typicality and with the more positive stimulus. The relationships between typicality and the other relational concepts are not moderated by the stimulus perceived valence. The figure 5 shows the moderation effect of stimulus valence on satisfaction, we can see that respondents will have higher levels of satisfaction with typical employee and positive information about this employee.

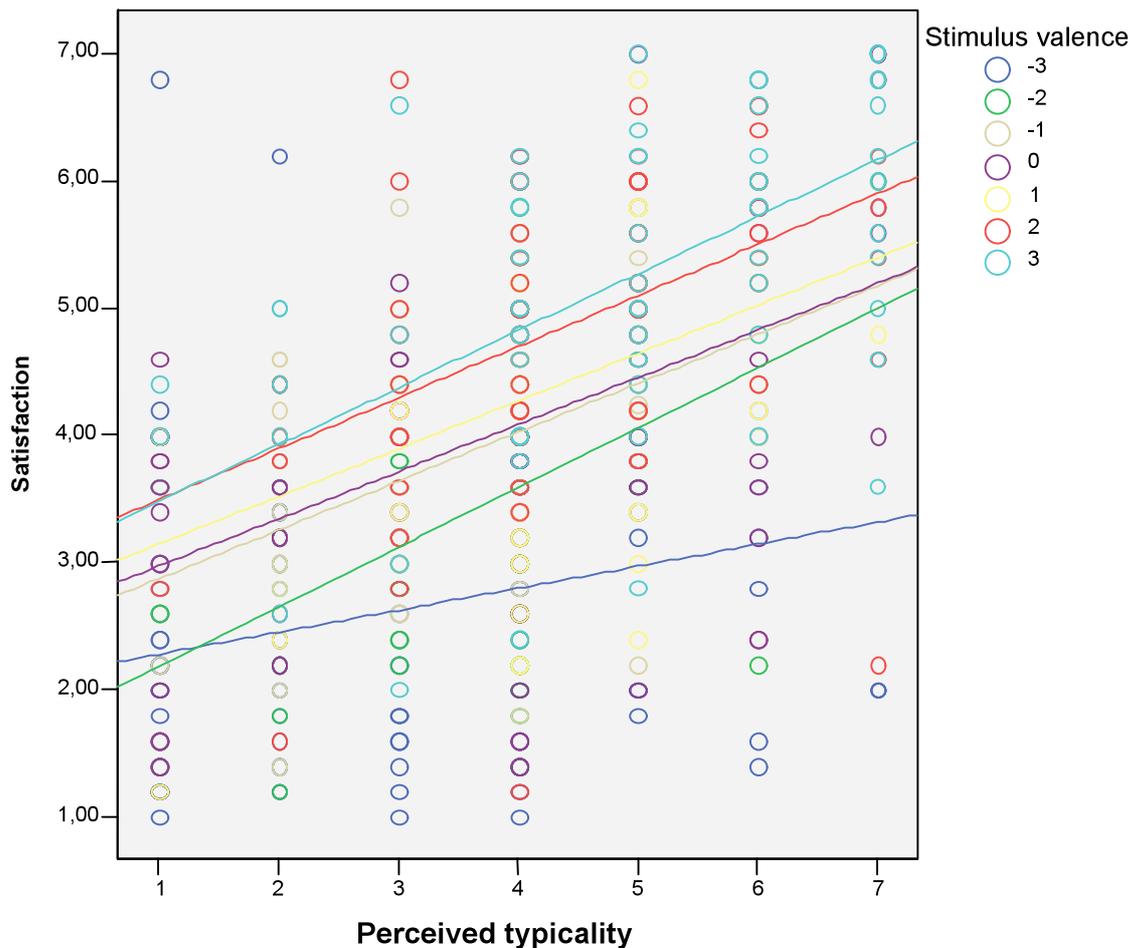


Figure 5 : Moderation effect of stimulus valence

Nature of the service act

The nature of the service act moderates the effect of typicality on frontline employee perceived competence (adjusted R^2 of 18,4%). Based on table 10 and figure 6, we can see that the effect of typicality on perceived competence is moderated by the nature of the service act, we can see that perceived competence is higher for services with tangible service act (aesthetician and gardener) than for services with intangible service act (psychotherapist and insurance broker) except for very high level of perceived typicality. In this case, perceived competence will be higher for services with intangible service act. The same effect is observed for perceived benevolence although this interaction is only significant at a $p < 0,1$ level in this case.

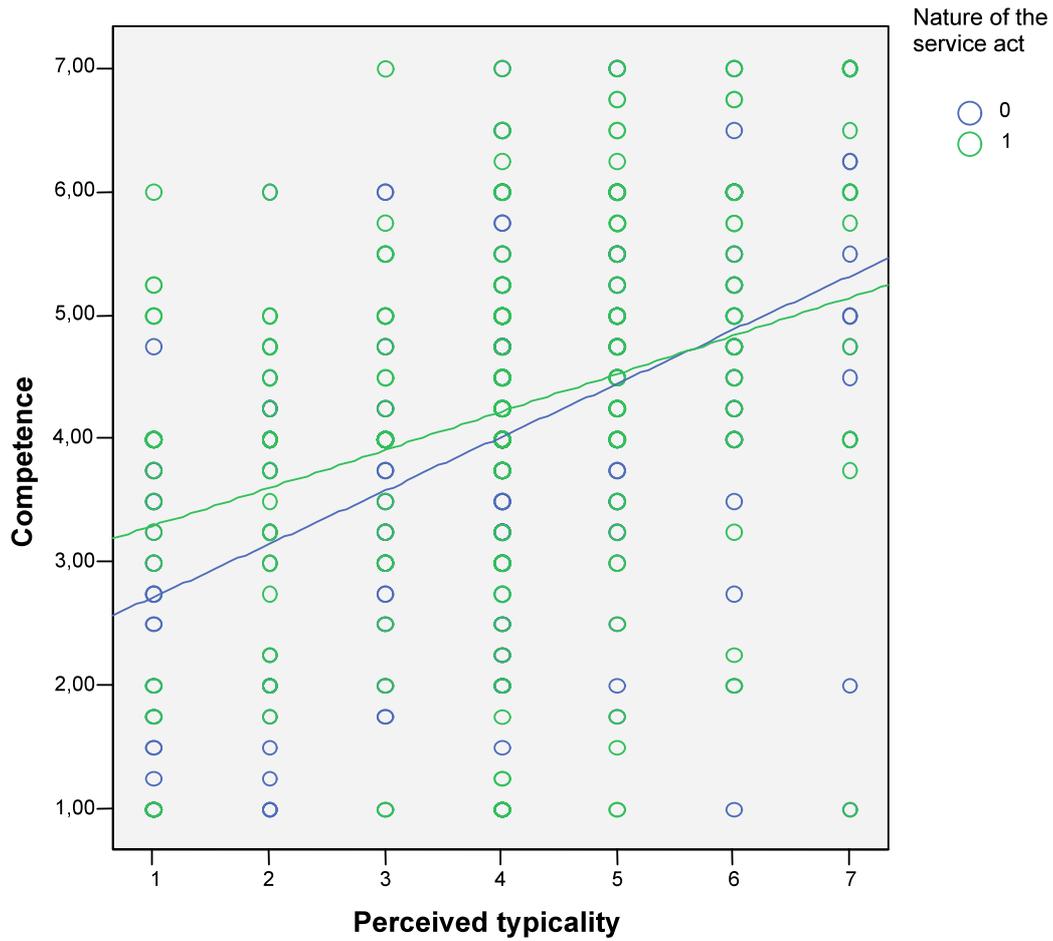


Figure 6 : Moderation effect of the nature of the service act

Direct receptor of service

The direct receptor of service moderates the effect of typicality on satisfaction (adjusted R^2 of 30,1%). Satisfaction levels are greater when the direct recipients of the service are goods (gardener and insurance broker) except for the highest level of perceived typicality. In this case, it is the opposite; satisfaction is greater when direct recipient of the service is a person (aesthetician and psychotherapist) The following figure 7 shows this moderation effect.

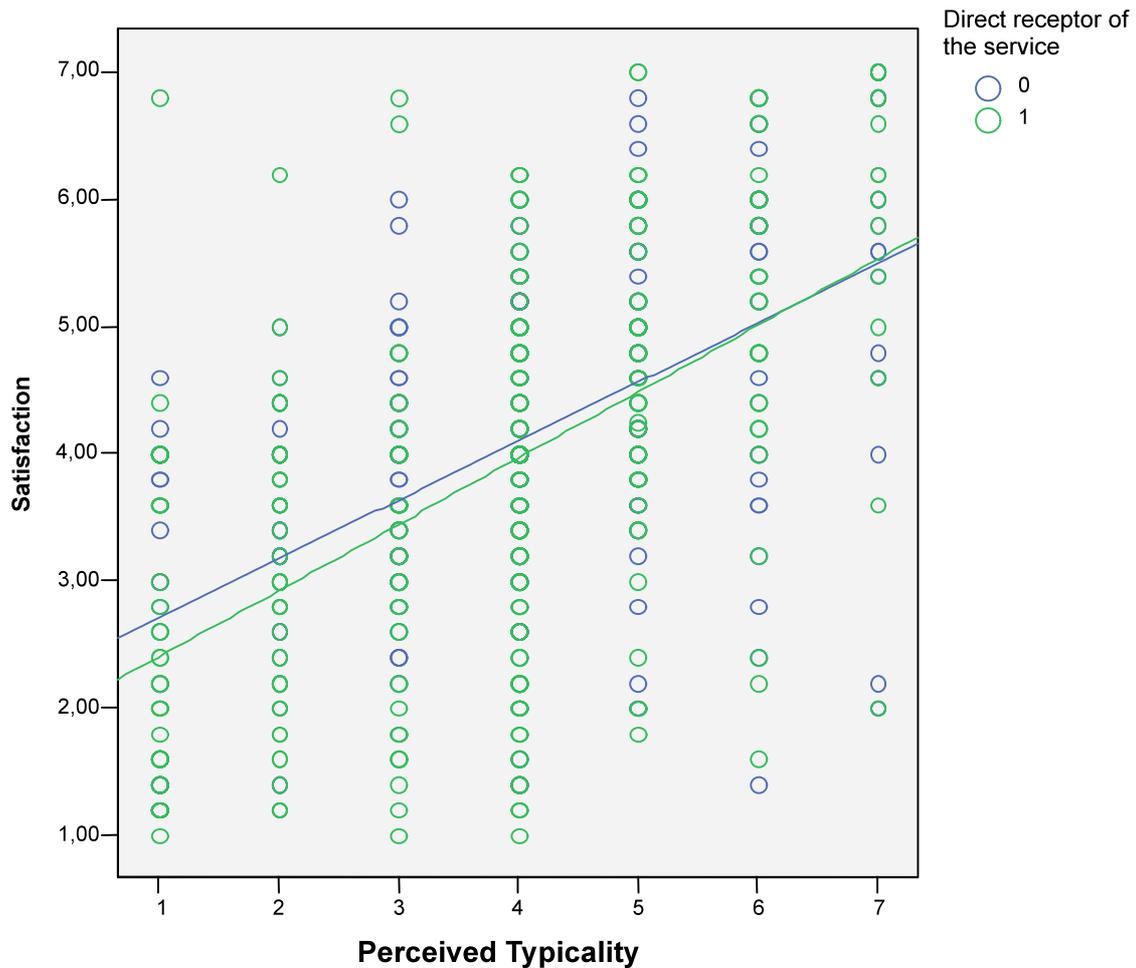


Figure 7 : Moderation of the direct recipient of the service

5.3. Test of the entire model

Based on the methodology proposed by Chumpitaz and Vanhamme (2003) we try to reveal a moderated mediation as expected in figure 2. Five conditions have to be met in order to reveal a moderated mediation. The first condition is to have a significant interaction between the independent variable and the moderator on the dependent variable (a significant effect of beta 3):

$$Y = a + b_1X + b_2Z + b_3(X*Z) + \text{error}$$

The second condition is to get a significant effect of the interaction between the independent variable and the moderator on the mediator:

$$Y = a + b_1X + b_2Z + b_3(X*Z) + \text{error}$$

The third condition is to get a significant effect of the mediator (beta 4 is significant) when the interaction $X*Z$ is controlled:

$$Y = a + b_1X + b_2Z + b_3(X*Z) + b_4M + \text{error}$$

The fourth condition will check the complete mediation, if beta 3 in the previous equation is non significant while beta 4 is significant then we get a complete mediation and Z is a moderator completely mediated.

The fifth condition will check the existence of a moderated mediation. It will add the interaction effect between the mediator and the moderator to the previous equation:

$$Y = a + b_1X + b_2Z + b_3(X*Z) + b_4M + b_5(M*Z) + \text{error}$$

To get a moderated mediation, beta five should be significant. In our data, we do not find evidence of a moderated mediation but we found evidence about the existence of mediated moderations. Stereotypes effects on typicality are moderated by the direct receptor of the service and typicality acts as a mediator between stereotypes and four relational chain concepts: satisfaction, competence, benevolence and commitment. We found evidence of complete mediated moderation on satisfaction and partial mediated moderation for competence, benevolence and commitment. This model is represented in the figure 8 below and explains 30,5 % of the observed variance for satisfaction, 19,3% of the observed variance for competence, 17,4% of the observed variance for benevolence and 22,1% of the observed variance for commitment. Based on these analyses, we can see that the direct receptor of the service moderates stereotypes effects on typicality. With services directed at people’s goods (gardener and insurance broker), stereotypes presentation will increase typicality (beta of 0,629 and p-value<0,05) while it has no significant effect if the direct recipient of the service is a person (p-value of 0,285 when only aesthician and psychotherapist are taken into account). Finally, typicality will increase satisfaction, competence, benevolence and commitment. So stereotypes effects on relational chain concept will be higher with services directed at people’s goods.

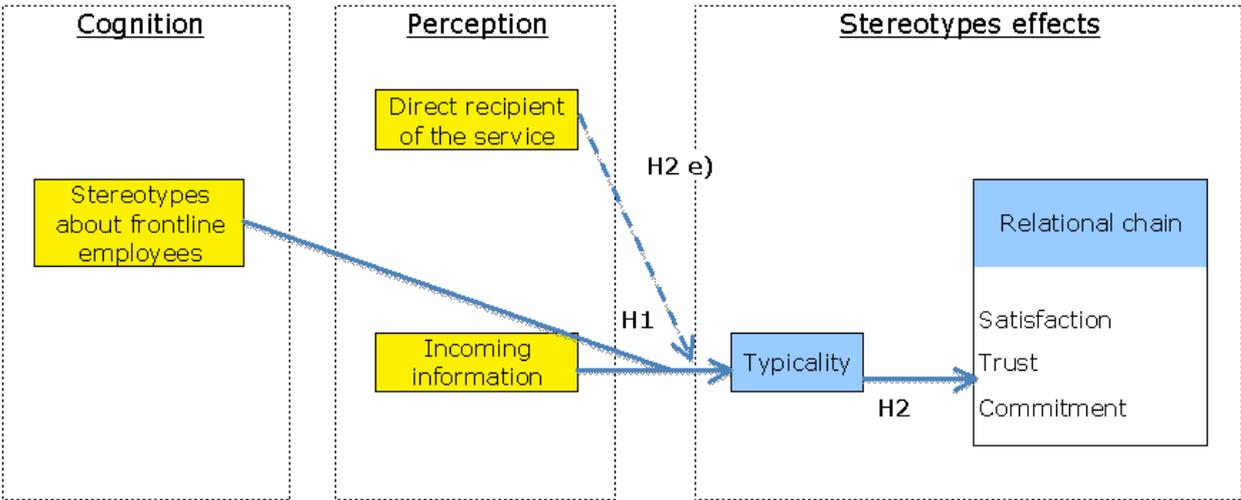


Figure 9 : Mediated moderation

6. Discussion, limits and future research

Do stereotypes have some effects on B2C relationships? This study tends to confirm it: stereotypes have an effect on satisfaction, competence, benevolence and commitment through perceived typicality. This study reveals that it is mainly satisfaction that is affected by stereotypes and that stereotypes have more effects with services directed at people's goods than with services directed at people. Prejudices act as a moderator of typicality effects on relational chain concepts. Unfortunately, the model incorporating stereotypes (as independent variable), typicality (as mediator) and prejudice (as moderator) was not significant. However, we found some interesting results. Indeed, our results clearly show that, whatever the prejudice, frontline employees should always appear as typical exemplar of their category even if people have negative prejudices. The valence of incoming stimuli does have a significant moderator effect on the relationship between typicality and satisfaction, which is quite obvious. Finally, the nature of the service act only affects perceived competence but explains only 18% of the observed variance.

Based on these results, we can see that Lambert and Wyer (1990) theory about stereotypes effects on typicality is confirmed. The presentation of stereotypes has a significant positive effect on perceived typicality. However, the adjusted R^2 is very small (0,05%), this could be explained by the selection of stereotypes and / or by the automatic activation of stereotypes; people stereotypes can be automatically activated during the utterance of the category to which the person belongs (Salès-Wuillemin, 2006). All scenarios were the same except of jobs and stereotypes presented. So we believe that the observed variance in typicality should come from stereotypes presented (it was tested and significant) and stereotypes automatically activated. Maybe, high levels of typicality were reached when presented stereotypes fit perfectly with respondents' stereotypes automatically activated.

Stereotypes effects on typicality were not significantly affected by stereotypes centrality. Vidal (2003) may be right about the existence of central and peripheral stereotypes, but this does not have an effect on typicality nor on relational chain concepts.

For the satisfaction measure, our results clearly show a dilution effect of the stereotype in step with social judgment theory (Salès-Wuillemin, 2006). Indeed, we see that for typical members, people take into account their prejudice to evaluate their satisfaction level while for atypical member, respondents does not take into account their prejudice to evaluate their satisfaction. They seem to take into account the stimulus valence instead but the three way interaction model (typicality effect on satisfaction moderated by prejudice and stimulus valence) was not significant at a p-value $< 0,05$ level but well at a p-value $< 0,1$ level (p-value of 0,063).

This study extends Campbell, Davis and Skinner's (2006) study about key elements to build successful relationships and is one of the first to reveal significant effects of stereotypes on relationships. Thereby, it completes Evans (2002) and Harrison-Walker (1995) study and enriches the marketing literature about stereotypes

It also extends the management of frontline employee literature (Lovelock et al. 2008) by providing some new elements that frontline employees and frontline employees managers had to take into account. This study clearly shows that frontline employees and frontline employees manager should consider consumers' stereotypes because it can have an impact on the functional quality of the service trough the relational chain and by the way impact the total

quality of the service. Employees should try to appear as typical exemplars of the category they belong to especially for services directed at people goods.

Of course, this study presents a few common limitations. Indeed, stereotypes' content and effects are inherent to a culture (Mc Carty, Yzerbyt and Spears, 2002) and (part of) our results may have been influenced by the four services that have been selected and by the stereotypes used in the experimental conditions.

In the future, we should clearly investigate perceived typicality antecedents and automatic activation of stereotypes to get a better understanding of the relationship between stereotype presentation and perceived typicality. Although, the relationship is significant, the link between those concepts is surprisingly weak. Future research should also investigate the results about moderation effects of the nature of the service act and the direct recipient of the service and try to replicate this with other service jobs.

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