Doru Postica

Self-image Congruence and Brand Preference: analysis by product usage role and level of country development.

Universidade Fernando Pessoa

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Abstract

Past research assumed and successfully proved self-image congruity to have a positive impact on product/brand choice, purchase intentions, and brand preference. The purpose of the research is to study the self-concept dimensions (actual and ideal) and their relation to brand preference. Type of product (conspicuous and inconspicuous) and type of country (Moldova as developing country and Portugal as developed country) were examined in the relationship between actual/ideal self-image congruence and brand preference. Hypotheses were formulated and data were collected through survey method. A preliminary questionnaire was designed to test the instrument's efficiency and choose the most representative brands. Then, data were collected through student surveys, written in Romanian for Moldova, in Portuguese for Portugal and in English for Erasmus students. The perceptions of 208 respondents about their self-congruity and brand preference were obtained for two types of products: clothes and toothpaste, with two brands being compared for each type. An understanding of self-image congruence impact can give clearer directions in developing better marketing programs. These notions are also crucial in determining the relation between the person's image and the final purchase behavior. It was found that self-image congruence has a significant impact over brand preference, while actual self-image congruence influencing more the inconspicuous products and ideal self-image congruence – conspicuous ones. Other practical and theoretical implications are also discussed. The work's originality is in the cross-analysis of products and countries.

Key words: Actual self, ideal self, brand preference, self-image congruence, type of product usage, developed/developing country.

Resumo

Investigações anteriores provaram com êxito o impacto positivo da congruidade da auto-imagem sobre a escolha do produto / marca, intenção de compra e preferência de marca. O objetivo desta pesquisa é estudar as dimensões de auto-conceito (real e ideal) e sua relação com a preferência de marca. O tipo de produto (conspícuos e discreto) e do tipo de país (Moldávia como país em vias de desenvolvimento e Portugal como país desenvolvido) foram examinados na relação entre a congruência entre a auto-imagem real/ideal e a preferência da marca. As hipóteses foram formuladas e os dados foram recolhidos por meio de sondagem. Um questionário preliminar foi elaborado para testar a eficiência do instrumento de recolha e para escolher as marcas mais representativas. Em seguida, os dados foram recolhidos por meio de uma sondagem a estudantes, escrita em romeno para a Moldávia, e em português para Portugal, e em inglês para os estudantes Erasmus. As perceções dos 208 inquiridos sobre a sua auto-congruência e a marca foram obtidas através de dois tipos de produtos: roupa e pasta de dentes, com duas marcas utilizadas respetivamente para cada tipo. Uma compreensão do impacto da congruência da auto-imagem pode dar indicações mais claras no desenvolvimento de melhores programas de marketing. Essas noções são também cruciais para determinar a relação entre a imagem do consumidor e do comportamento de compra final. Verificou-se, assim, que a congruência da auto-imagem tem um impacto significativo sobre a preferência de marca, embora a congruência da auto-imagem real influencie mais os produtos discretos e a congruência da auto-imagem ideal, os produtos conspícuos. Outras implicações práticas e teóricas também são discutidos. A originalidade do trabalho reside na análise cruzada de produtos e países.

Palavras-chave: auto-conceito real, auto-conceito ideal, preferência de marca, congruência da auto-imagem, produto conspícuos, produto discreto, país em vias de desenvolvimento, país desenvolvido.

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Introduction

Past studies have argued that self-congruence is an important influencing factor in consumer preference formation. The self-congruity theory (Sirgy, 1982) suggests that consumers compare their self-image with the product image. Thus, consumers are expected to prefer a product that shares a similar image to their own. People prefer a certain brand because they see themselves as similar to the type of individuals that they generally thought to use this product. Self-image congruence is supported by several studies (Wu, 2011; Peng, Wong and Wan, 2012; Upamannyu, Mathur and Bhakar, 2014). To our knowledge, past studied did not make any type of cross-country comparisons. Therefore it seems relevant to see if the relationship between the variables holds up in different countries.

Previous studies tried to demonstrate that product conspicuousness influences the relationship between type of self-concept and consumer's behavior (Khan and Bozzo, 2012; Upamannyu, Mathur and Bhakar, 2014). Researchers hypothesized that ideal self-concept is associated more with a preference for conspicuous products than actual self-concept, and that actual self-concept is more associated with a preference for inconspicuous products. It might sound like an obvious statement that should be easy to prove, but literature review shows controversy among results. The current study deals with two separate facets of self-image: "actual self-image" - the way individuals see themselves, and "ideal self-image" - the way individuals would ideally like to see themselves.

According to Curtis (2001), behavioral economic principles state that in the purchase process you could get people to behave irrationally, if they link products to their desires and feelings. Any object can become a symbol of how you want to be seen by other people, and then the value of the good increases. It is not an arguable economic theory, rather than a type of human behavior which manifests in the presence of abundance. Our economy requires consumption to be our way of live, to transform the purchase and use of goods in rituals, to seek spiritual satisfaction through it. Measurements of social status, prestige and acceptance is now found in consumption terms. The more the pressure over the individual to conform to socially accepted standards, the more he tends to express his aspirations in terms of what clothes he wears, what food he eats, hobbies etc. The central idea is that a great variety of needs can be satisfied through consumption. It has the capacity to reinstall emotional balance by offering symbolical benefits that make the

consumer fulfill his personal wants. The modern individual is more and more preoccupied with his self-image, image that he perfects as he can. From this tendency resides the desire to take care of one's self image, by acquiring clothes, mainly brands that have a positive reputation for the public, sustaining the idea of wealth, comfort and social status (Curtis, 2001).

The research aim is to elaborate an empirical investigation of actual/ideal self-image congruence and measure the relationship between self-image congruence and brand preference.

First, the conceptual background is argued and hypotheses are developed. The reviewed literature explains the different types of self-image congruence, the relationship between self-image and the product's image, and the possible impact of several grouping variables. Then, methodology is described. The development of the questionnaire and its measurement scales are presented along with the data collection procedure. The methods that were used for the data analysis are discussed. The third chapter provides a demographic description on the current sample and examines validity and reliability of the scales used. Each hypothesis is tested and conclusions are made.

Chapter I. Conceptual background and hypotheses development

"Since appearance tyrannizes over truth and is the lord of happiness, to appearance I must devote myself." (Plato)

Introduction. The theoretical chapter is aimed to help the reader get a better grasp on the concepts mentioned in the analysis later on, to see similar findings of other authors and be able to compare them with the present findings. First, the notion of brand preference is debated as viewed by different authors. Then, the chapter examines how important researchers see the relationship between self-image and the product's image by showing past studies. Self-image congruence is discussed later on, along with its different types. A series of findings are put together to improve the reader's understanding. Several studies are included to show the relationship between self-image congruence and brand preference. The last sub-chapters refer to different grouping variables over which differences in this relationship will be examined.

1.1 Brand preference

If you have a good story and enough money to make it heard, you could build awareness on any matter rather quickly. It is a slower process, however, to build brand preference. We are what we repeatedly do. Excellence is then not an act, but a habit (Durant, 1991). Transposed to brands, it is important not only to attain, but to sustain preference, loyalty and attitude. This will increase the company's market share, make more revenues and get the company one step ahead its competitors.

Bronnenberg, Dube and Gentzkow (2012) define brand preference simply as willingness to pay. This term includes all channels such as learning that are not seen in the utility function. It is a measure of brand loyalty in which a consumer will choose a particular brand in presence of competing brands, but will accept substitutes if that brand is not available (Online Business Dictionary). It is a biasness toward a certain company's brand, in which the consumer favors it over another. Brand preference is manifested differently depending on the salient beliefs that are present at a certain time; the consumer biasness towards it; the extent to which a consumer favors one brand over another (Ebrahim, 2011).

Through this concept it is understood that the consumer's predisposed to evaluate in a specific way a product compared to other products. Therefore the consumer formulates an attitude towards each of the available brands, after which he chooses the one that

fulfilled his prerequisites. In this process, the consumer expresses a multitude of preferences. These factors can be of cognitive nature (all the beliefs based on knowledge), affective nature (positive feelings and emotions, indifference or negative feelings which a product generates) and conative nature (making a conclusion by evaluating the goods and manifesting the desire to act).

Individuals are ready to pay for a specific brand, even though its physical features are not much different from other brands. Research shows that most of consumers typically buy a single brand of beer, cola, or margarine (Dekimpe et al., 1997), even though the price may change significantly in the course of time, and consumers often cannot tell their preferred brand apart from others in blind "taste tests" (e.g. Pepsi Challenge, blind tasting between Pepsi and Coca-Cola). It happens because consumers want to ease their purchasing process. They develop brand preferences so they wouldn't have to analyze all available goods every time.

The associations consumers have with brands make them distinctive. It goes beyond perceived quality that the brand promises. It relates to the intangible properties. In the minds of consumers, Coca-Cola is "All American" and Mercedes is "prestigious" (Aaker, 1997). The brand is a distinguishing feature of a product and is often important to customers.

Usually, brand preference is built when the company has been for a long time on the market. Research shows that individuals could have a preference for a good sold by a company, just because that company has a name on the market during its long presence (Dinlersoz and Pereira, 2007). Consumers can exhibit little brand preference toward a new and unfamiliar brand when exposed to it.

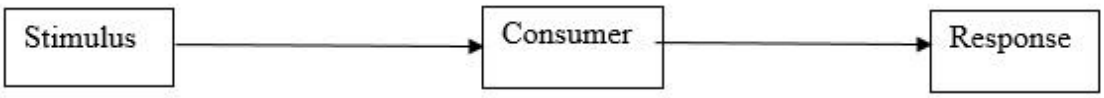
1.2 Relationship between self-image and product image

The root of the self-image congruence comes from social psychology, where interpersonal relations are analyzed. People perceive others they like to be more similar to themselves than the people they don't like. The opposite relation was also proven: people like more the people that are similar to them and like less those who are different (Newcomb 1961, Broxton 1963). If we transpose these conclusions in the context of consumer behavior, we could predict that people would prefer brands which they think people similar to them use.

According to Rosenberg (1979), self-concept is "the totality of the individual's thoughts and feelings having reference to himself as an object". The self-concept is the totality of all the beliefs an individual holds about himself. It is the way he defines himself. The self-concept might serve as an anchor for comparison and evaluation.

If we take a behaviorist perspective, we can see the consumer as a "black box". This is due to the fact that companies do not fully understand what drives a consumer's motivation, i.e. what really stimulates an individual's desire to buy a specific item. They can only project a stimulus, and check the response, to evaluate the stimulus' efficiency. There are multiple factors that influence consumer behavior: cultural, social, personal and psychological (Kotler 2003, Solomon 2014, Kardes, Cronley and Cline 2014).

Figure 1. Consumer as "black box"



The self-concept is also inside that black box. This is why it would be of interest for marketers to understand the way a consumer makes choices.

The literature on the subject of "self" concept is fragmented and not coherent (Sirgy, 1982). In different papers, it may be found either as a single construct or as consisting of multiple constructs. Some authors do not make any classification on the "self" concept, others (the majority) treat it as having two components: actual self (as one sees himself) and ideal self (as one would like to see himself ideally). Table 1 presents different concepts analyzed in a multitude of papers.

Table 1. Summary of selected studies on self-concept / self-image congruence

Authors	Actual self	Ideal self	Social self	Ideal social self
Birdwell (1968)	X			
Dolich (1969)	X	X		
Landon (1974)	X	X		
Belch and Landon (1977)	X	X		
Malhotra (1988)	X	X	X	
Hong and Zinkhan (1995)	X	X		
Ericksen (1996)	X	X		

Sirgy et al. (1997)	X			
Quester et al. (2000)	X	X		
Ekinci and Riley (2003)	X	X		
Back (2005)		X	X	
Kressmann et al. (2006)	X	X		
He and Mukherjee (2007)	X	X	X	X
Jamal and Al-Marri (2007)	X			
Ekinci et al. (2008)	X	X		
Han and Back (2008)			X	X
Ibrahim and Naijar (2008)	X	X		
Kwak and Kang (2009)	X	X		

Source: Hosany and Martin (2012)

Individuals are searching to maintain and enhance their self-concept (Graeff, 1996), and want to be in a position where their actual self-image is so good, that it matches their relevant ideal self (Higgins, 1987). In the present environment, brands act as symbols, means through which consumers can express their identity and interact easier with others of similar interests (Sirgy 1982). Research in the past shows that consumers of a specific brand have a similar self-concept with others that use the same brand, and a significantly different self-concept than those that use a different brand (Grubb & Hupp, 1968). This implies that consumers seek brands that would match their self-image (Sirgy 1982).

The self-image of the individual is formed based on the reactions he gets from the surrounding people: friends, family, colleagues etc. It is natural for the person to want positive reactions from these groups of people. But the interaction between them does not happen in an isolated environment. Rather, they are affected by the environmental setting and personal opinions of each of the persons involved. A person tries to transmit information about himself through the use of products that can be used as symbols (Grubb & Hupp 1968).

In the literature, that are more perspectives over the notion of "self" concept. As described by Sirgy (1982), it has been seen through different lenses, such as psychoanalytic theory (a system with a conflict between what we are and what we want to be), behavioral theory

(the totality of the responses to stimulus), cognitive theory (a conceptual system that processes information about the self), and as symbolic interactionism (a system formed from the totality of interpersonal interactions). The current research treats the "self" concept as a construct with different types of selves. Some presume that "self" is conditioned by consistency (because the individual tends to behave consistently with his view of himself) and by esteem (because the individual tends to improve his image).

1.3 Self-image congruence

For consumers, brands have symbolic attributes, which construct the brand-user image, meaning how would a typical user of this brand look like and behave. To decide if they like the brand, individuals try to match their own perceived image with that of the typical user. This is called "self-image congruence". If these two have a lot of things in common, the individual will have a positive attitude towards the brand. Everybody has a particular identity, preference and habit that they are aware of. And once their "self" is set, individuals tend to protect it (Kressmann et al., 2006).

In the decision making process of the consumer, it is considered that a self-image belief interacts with a product image perception, where the results lead to:

Table 2. The effects of self-esteem and self-consistency motives on purchase motivation

Self-image	Product image	Result in	Self-image/product image congruity	Mediating factors		Purchase motivation
				Self-esteem motivation	Self-consistency motivation	
Positive	Positive	→	Positive self-congruity	Approach	Approach	Approach purchase motivation
Negative	Positive	→	Positive self-incongruity	Approach	Avoidance	Conflict
Negative	Negative	→	Negative self-congruity	Avoidance	Approach	Conflict
Positive	Negative	→	Negative self-incongruity	Avoidance	Avoidance	Avoidance purchase motivation

Made from literature review of Sirgy (1982)

The purchase decision will be different in these cases. The strongest motivation to buy is determined by positive self-congruity, followed by positive self-incongruity, negative

self-congruity, and negative self-incongruity, respectively. These results can be explained through the consistency and esteem criteria mentioned above. Referring to esteem, the consumer wants to buy a product with good image to maintain a positive self-image (positive self-congruity) or to improve himself by being close to his ideal image (positive self-incongruity condition). He will avoid purchasing a negatively valued product to elude self-abasement (negative self-congruity and self-incongruity conditions). Conversely, consistency posits that the consumer will want to purchase a product with an image (positive or negative) that is congruent with his image about himself. This happens in order to keep consistency between behavior and self-image beliefs (positive and negative self-congruity) and to avoid behavior/self-image belief discrepancies (positive and negative self-incongruity). The overall result of motivation to buy is the net effect arising from the esteem and consistency needs.

Levy (1959) was among the first to mention the relation between self-image and product image. He focused his research upon what image different products had. What he found is that we buy not only for the utility of the product, but also for what it means, what it symbolizes for us. He presumed that consumers preferred goods with a perceived image that matched theirs. As this topic became more and more popular in the academic environment, more research shed light upon the matter.

Birdwell (1968) was the first one to actually try and prove these arguments (up until this point academics had only hypothesized these relationships). Having chosen to analyze car brands, he selected a sample of 100 car owners and divided them into 4 groups, corresponding to 4 car brands. Respondents were given a questionnaire containing 22 bipolar scales (e.g. sophisticated-unsophisticated, exciting-dull etc.). He found there are significant differences in each ownership group's perception of cars and that there is a high degree of congruity of how respondents perceive their cars and themselves.

Other researchers (Grubb & Hupp, 1968) tried to replicate the study. They chose Volkswagen car owners and Pontiac car owners (they assumed the projected images for these 2 brands are significantly different) and asked them to rate themselves and the 2 different brands according to 16 bipolar scales. The findings were similar to that of Birdwell (1968): consumers of the two different brands of cars perceived themselves significantly different one from another and they had specific stereotype perceptions of

the owners of each brand. Also, they perceived themselves to be like others who owned the same car brand and quite different from owners of competing brands.

However, there is one limitation in the studies mentioned above, pointed out by Evans (1968). Both studies analyzed consumers that already owned cars included in the study. It is a rational assumption that product ownership may have influenced on the product image or the self-image, resulting in a higher relation.

Dolich (1969) tested the relationship on a sample of 200 students and found that preferred brands of products were perceived to be more similar to self-concepts than least preferred product brands. Graeff's research (1996) has very similar findings: the greater the degree of congruence between brand image and self-image, the more favorable were subjects' brand evaluations.

There is also research that diminishes or denies the importance of self-image congruence altogether. Hughes and Guerrero (1971) argue that you cannot put all types of consumers into one basket. They make the point that brand preference of some individuals (especially innovators) can be explained better by incongruity rather than congruity, as they want to stand out of the crowd. They suggest examination not only of self-congruity, but social congruity, social incongruity, and self-incongruity as well. In their research, Green, Maheshwari and Rao (1969) fails to confirm the relationship between self-congruity and consumer choice at all. However, self-image congruence is generally supported in the academic environment.

Furthermore, this research examines recent studies on self-image congruence and its impact other different pre-consumption and post-consumption variables similar to brand preference: brand personality, purchase intention, intention to recommend.

Kressmann et al. (2006) researched brand loyalty by asking 600 respondents to complete a questionnaire with respect to their car, by choosing from the 15 brand personality facets (honest, down to earth, etc.) that were appropriate for them. He found a direct positive effect of self-congruence on brand loyalty.

Li, Wang and Yang (2011) studied the effects of self-image congruence on purchase intention. Their sample was made of 477 respondents from 4 major cities in China. They found that the more congruent an individual's self-image is with corporate-brand image, the higher the purchase intention tends to be.

Usakli and Baloglu (2011) analyzed tourist destinations instead of regular consumer products and used another research instrument. While most of the research in the 80's employed semantic differential, this one uses a 5-point Likert scale with 29 items. They found that self-congruity has a positive impact on tourists' behavioral intentions, intention to return and to recommend.

Hosany and Martin (2012) also analyzed a service to see if the assumption of self-image congruence's positive impact still holds. Their sample were 169 cruise passengers. The research employed a 7-point bipolar scale to rate cruisers' self-concept, experiences, satisfaction, and intention to recommend. Their findings confirm the general accepted ideas: higher congruity between customers' self-concept and perceived images of other tourists taking the same cruise contribute to overall favorable experiences.

Choi and Rifon (2012) focused their attention on goods that were endorsed by celebrities. They analyzed how the consumers' self-image related to that celebrity can influence the individual's attitude. Respondents had to watch an ad where a celebrity endorsed a product. Then they completed a questionnaire about the ad. Findings suggest that congruence between consumer's self-image and celebrity image plays an important role in endorsement process. More than that, the positive attitude towards the ad was higher when the celebrity's image was more congruent to the product image.

Peng, Wong and Wan (2012) made an attempt to compare genuine and counterfeit products. They measured brand attitude, self-image and product's image to test for possible differences. Results show that the greater the congruence level between brand image and self-image, the more favorable were subjects' product evaluations. Findings are valid for both genuine and counterfeit products.

Wu (2011) studied the effect of self-image congruence as a moderating variable between brand evaluation and brand crisis (e.g. Nike's brand crisis). Wu found that self-image congruence is a moderating variable in brand crisis. Consumers with high self-image congruence tend to be less influenced by the negative information available, and still hold preference to that brand.

As can be seen from the literature review, there is a significant amount of evidence for self-image congruence's impact on brand preference, brand attitude, brand evaluation and brand personality not only on consumer goods, but on services as well.

Table 3 shows the different relationships that were studied with respect to self-image congruence. A difference in research directions over the years can be observed. The first papers were looking at the relationship between self-image congruence and the factors that influenced the buyer before its purchase (purchase intentions, product preferences and product choice). The second direction (started mainly after Sirgy's paper from 1997) was to extend self-image congruence concept over what happened in the post-consumption period, including variables like satisfaction, loyalty, perceived quality and attitudes. Prior studies show that self-image congruence is associated with better product evaluation, greater satisfaction, and even higher purchase intention (e.g. Sirgy, 1985).

Table 3. Summary of relationships examined with respect to self-image congruence

Authors	Study settings	Dependent variables
Birdwell (1968)	Automobile	Brand ownership
Dolich (1969)	Various products	Product preference
Landon (1974)	Various products	Purchase intention
Belch and Landon (1977)	Various products	Purchase intention
Malhotra (1988)	Houses	Product choice
Hong and Zinkhan (1995)	Automobile and shampoos	Product preference, purchase intention, memory
Ericksen (1996)	Automobile	Product preference, purchase intention
Sirgy et al. (1997)	Various: products and services	Brand preference, consumer satisfaction, brand attitude, choice
Quester et al. (2000)	Functional and status related products	Product evaluation
Ekinci and Riley (2003)	Hospitality services	Satisfaction, attitude, service quality and purchase intention
Back (2005)	Hospitality services	Satisfaction
Kressmann et al. (2006)	Automobile	Brand loyalty
He and Mukherjee (2007)	Retailing	Satisfaction, perceived value, loyalty
Jamal and Al-Marri (2007)	Automobile	Satisfaction, brand preference
Ekinci et al. (2008)	Hospitality services	Satisfaction, attitudes, intention to return
Han and Back (2008)	Hospitality services	Consumption emotion, loyalty

Ibrahim and Naijar (2008)	Retailing	Attitudes
Kwak and Kang (2009)	Sports merchandise	Perceived quality, purchase intention

Source: Hosany and Martin (2012)

1.4 Types of self-image congruence

Self-image congruence can be deconstructed into multiple facets. Table 1 from subchapter 1.2 shows the various elements researchers analyze when referring to self-image congruence. As it can be seen, the majority of consumer studies in marketing treat the self as a two-component construct: actual and ideal. Simply put, the actual self-concept is how you view yourself, while the ideal self-concept is how you would like to be perceived by others in an ideal state (Hong and Zinkhan, 1995).

Others, however, go beyond the duality dimension. He and Mukherjee (2007) included in their research the notions of actual self-image, ideal self-image, social self-image, and ideal social self-image. The social self-concept has been defined as the image that one believes others hold, while the ideal social self-concept denotes the image that an individual would like others to have of him.

The current research chooses the dual dimension (actual and ideal) of self-image congruence, because it receives the most empirical support in research (Kressmann et al. 2006). It is established there is common acceptance over the impact of self-image congruence over brand preference. However, there are different opinions of how actual and ideal self-image as separate constructs influence it.

Some academics argue that ideal self-image is more important. For example, Hong and Zinkhan (1995) researched the two facets of self-image congruence relationship with brand memory, brand attitude and purchase intentions. Findings suggest that ideal self-congruency has more effect than actual self-congruency on purchase intentions and brand attitude, regardless of the discrepancy between self-concept and product image. This may happen because the consumer does not want to express himself when buying a product, especially when his own self-image is negative (consumer does not like himself). It could be that the individual wants to project some specific image that is seen positively by others, his ideal self (Landon, 1974). This superiority of ideal self-image over actual self-image is supported by recent studies as well (i.e. Hosany and Martin, 2012).

Other researchers reached different conclusions. Ross (1971) analyzed consumption preferences for automobiles and magazines in relation to self-image congruence (also using the dual facet: actual and ideal). While evidence supported the general idea of congruence and that individuals preferred brands that were more similar to their own image, actual self-concept was in fact more accurate to describe consumption preference than ideal self-concept for each of the six brands of both products.

The third possible outcome that research suggests is that neither actual self-image, nor ideal self-image was dominant, with no significant differences between them when analyzing brand preference. These findings were taken as evidence of a useless attempt to distinguish the self-concept components. In touristic destinations, both ideal and actual self-congruity stimulate the likelihood of having favorable attitudes (Usakli & Baloglu, 2011). In Dolich's paper (1969) there is also no evidence that ideal self-image was more closely related to consumer choice decisions than the real self-image for most preferred brands. That is why some even question the necessity and practicality of making a distinction among the aspects of self-concept (Onkvisit and Shaw, 1987). However, it is justified theoretically. By analyzing different facets we can see if consumer behavior is more influenced by what the individual is or what he tends to be (actual or ideal self).

Given the various opinions on the 2 facets of the self-image congruence (actual and ideal), we formulate the following hypotheses:

H1a: Actual self-congruence has a significant and positive effect on brand preference.

H1b: Ideal self-congruence has significant and positive effect on brand preference.

H2: Actual and ideal self-congruence are significantly and positively correlated.

1.5 Product conspicuousness

The idea that consumption can be used as a signal if far from new. It is commonly associated with the American economist Thorstein Veblen, in his 1899 classic "The theory of the Leisure class", who coined the term to describe consumption that is motivated by an attempt to advertise wealth. However, more simplified views over the matter were present in the literature two millennia before, exemplified by Plato's quote from the beginning of chapter I.

On a historical perspective, Veblen (1899) argued that social status is based on wealth rather than intelligence, ethics or moral integrity. In this case, rich people spend sums of money that have no other objective than showing their wealth. He named this "conspicuous consumption". Veblen's linguistic construct has by now become so widely used in popular culture that it has an entry in the English dictionary. It is defined as "lavish or wasteful spending thought to enhance social prestige" (Merriam Webster Dictionary). As consumers, many of us engage in it. As members of society, we often recognize it when we see it.

Consumer behavior is defined not only by satisfying needs, but obtaining a prestige as well. In case of some products, if the price is higher - the consumer is more decided to purchase it, given that other members of society know it as well. According to Veblen (1899), individuals and groups have, obviously, a powerful influence over attitudes and behavior, which tends to become the expression of an imitation consumption. According to the theory of social diffusion formulated by Veblen, inferior social classes imitate those situated above. The influence is transmitted from top to bottom, from the rich to the poor, as the "poor" classes seek a way to improve. The environment influence is reflected by other two concepts, which are also along the line of conspicuous consumption: the bandwagon effect and the snobbism effect (Dobre, 2000). The bandwagon effect serves to explain the social phenomena associated to fashion. The consumer feels the need to be alike other members from his environment. To do that, he will imitate their behavior – will buy and use specific products that others do. The snobbism effect is the consumer's tendency to differentiate himself, through consumption of goods perceived as having high value. This effect allows takes into consideration the influence of prestigious brands over consumer behavior. To be appreciated by others, people seek to offer a self-image that is as advantageous as possible. In social interactions, the individual is preoccupied with leaving the best impression possible. That is why he might be determined to adopt certain behaviors, especially buying behavior, for the simple fact of having a flattering self-image.

As Heffetz (2007) points out, we do not live isolated from the world. Society and consumption, along with similar domains, surround us as a socio-cultural phenomenon. In relation to our self-image concept, the following questions appear:

- When a person engages in an act of consumption because he wants to impress others with that act of consumption, is he more concerned in projecting his actual or ideal self?

- When he consumes something because it provides him physical utility and others are not necessarily observing his consumption, is he more concerned with his actual or ideal self? (Ross, 1971)

From our natural understanding, the answer to these questions are self-evident truths. We presume that when consumption of a product takes place mainly in public, the consumer will be more concerned of others' responses. Meaning, ideal self-concept, the image an individual wants others to have of him, is likely to be more significant than actual self-concept. On the other hand, when a product is consumed inconspicuously (in private), he/she will not think of the image he projects towards others.

These self-evident truths have been largely debated (Sirgy, 1982). Multiple different results emerge from this hypothesis. Most of the researchers assumed actual self-image congruence to be more related to inconspicuous consumption, whereas ideal self-image congruence to be more related to conspicuous consumption. Here is a brief literature review on the various findings that are not consistent one with another.

The first group of researchers, with the example of Dolich (1969) found no support for these assumptions. In his study, using a sample of 200 students, he chose beer and cigarettes as visible consumption, soap and toothpaste as private consumption. After crunching the data, self-congruence with most preferred brands of socially consumed products was equal to self-congruence with most preferred brands of privately consumed products.

The second group of academics found partial support for the influence of product conspicuousness.

Onkvisit and Shaw (1987) argued there is a higher congruence between self-concept and images of publicly consumed products and lower congruence between the self-concept and images of products consumed privately, without differentiating ideal or actual self-image.

Munson's study (1974) showed that preference for conspicuous products was related to ideal self-concept for upper social class respondents. However, the relationship did not

hold for lower class respondents, where preference was not related to either actual or ideal self-concepts for either conspicuous or inconspicuous products.

Graeff (1996) examined the congruence between brand image and two types of self-images (actual self-image and ideal self-image) and consumers' evaluation of two types of brands (publicly and privately consumed). His findings suggested that consumers' evaluations of publicly consumed brands were more affected by the congruence between brand image and ideal self-image as compared to actual self-image (as hypothesized), whereas actual and ideal congruence have equal effects on consumers' evaluations of privately consumed brands (no support for the second part).

In his research, Ross (1971) expected to prove the same hypothesis as Dolich (1969). His results showed that actual self-concept was in fact more similar to consumption preference than ideal self-concept for each of the six brands of both products analyzed (magazines and cars), regardless of conspicuousness.

Hong, Zinkhan (1995) obtained the opposite results of Ross (1971). Their data showed ideal self-congruity to be a better predictor for brand preference than actual self-congruity with both product classes used. They attributed the result to the likelihood of the human tendency to aspire toward upgrading oneself to an ideal state. Consumers can satisfy their desire to approach an ideal state by preferring the product that has an appeal consistent with their ideal self-image rather than actual self-image.

The third group of academics has found some evidence for both parts of this hypothesis. Khan and Bozzo (2012) analyzed eight brands of shoes and eight brands of toothpaste. Upamannyu, Mathur and Bhakar (2014) chose seven mobile phone brands and seven brands of soap. The sample in both studies was 400 respondents. Actual self-congruence has no positive impact on brand preference in the context of role of product usage (conspicuous), whereas the positive result was found in respect to actual self-congruence on brand preference. At the same time, ideal self-congruence had a positive significant effect on brand preference in the context of role of product usage (conspicuous) and there was no effect of ideal self-congruence on brand preference in the context of role of product usage (inconspicuous).

Due to the fact that the most recent findings suggest this assumption to be valid, the following hypotheses are formulated:

H3: Self-image congruence is significantly higher for conspicuous products rather than inconspicuous products.

H4a: Relationship between actual self-congruence and brand preference is stronger for inconspicuous products compared to conspicuous products.

H4b: Relationship between ideal self-congruence and brand preference is stronger for conspicuous products as compared to inconspicuous products.

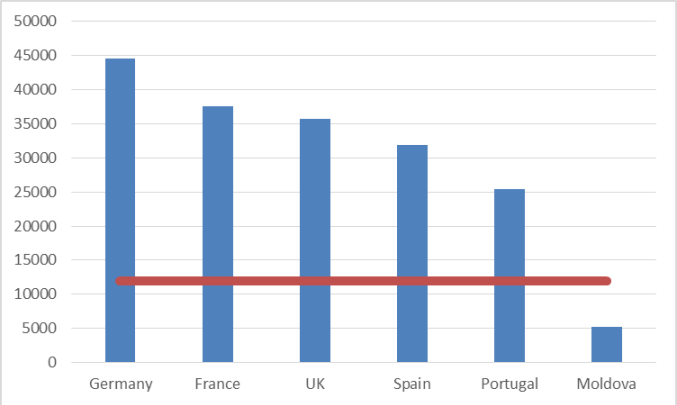
These hypotheses found strong support in other studies. In Jamal and Goode's research (2001) results show self-image congruity to be a very strong predictor of consumers' brand preferences. Respondents with higher levels of self-image congruity were more likely to prefer the brand as compared to those with lower levels of self-image congruity. In the context of type of product usage, Upamannyu, Mathur and Bhakar (2014) proved H3, H4a and H4b, but for different types of products. Their findings are aligned with those of Khan and Bozzo (2012).

1.6 Level of country development

A developing country is "one in which the majority lives on far less money—with far fewer basic public services—than the population in highly industrialized countries" (World Bank definition). The International Statistical Institute classifies Moldova as a developing country, as are all the countries with the Gross National Income (GNI) less than 11.905 USD, condition specified by the World Bank in 2012 (International Statistical Institute). Gross national income (GNI) is defined as the sum of value added by all producers who are residents in a nation, plus any product taxes (minus subsidies) not included in output, plus income received from abroad such as employee compensation and property income (Investopedia definition).

Portugal's GNI per capita in 2013 was 25360 USD and Moldova's GNI was 5190 USD (World Bank). For a better understanding, figure 2 offers more information on the difference of GNI per capita in several European countries and compares European levels of GNI to the same indicator in Moldova. Also, the requirement of being classified as a developed country is included in the graph.

Figure 2. GNI per capita in several countries (2013)



Made according to data from World Bank for 2013

Even though over the last 35 years academics studied the relationship between self-image congruence and brand preference (or other similar behavioral concepts), an analysis between countries, to our knowledge, has not been done yet. Therefore it is relevant to analyze the possible differences in the two types of countries of the relationship between self-image congruence and brand preference.

People are attracted to and are involved in aspects of conspicuous consumption before they have adequate food, clothing and shelter. That is, at almost every class level, consumers have the desire to consume for social status (Belk, 1988). That is what conspicuous consumption represents: the desire to be recognized and obtain social status. Evidence that conspicuous consumption is related to projecting the ideal self is given by Kempen (2003). His research suggests that consumption of counterfeit goods (as status signaling device) is popular among low-income consumers in developing countries. Another research from India supports this relationship. Bloch, Rao and Desai (2004) considered wedding celebrations as conspicuous consumption. They show how in rural India, the wedding budget is a status signaling attempt. The celebration size is a signal of the groom's family wealth and, thus, the improved social status that the bride's family gets. Charles, Hurst and Roussanov (2009) present a model of status-seeking and conspicuous consumption in which individuals use conspicuous spending as a signal of income. There is growing theoretical literature that suggest visible consumption should rise as poorer persons are added to a reference group. Research shows that visible consumption both within and across races falls as the mean of reference group income rises. These findings suggest conspicuous consumption patterns to be the same across countries.

In his book, Assael (2004) explains how cultures are becoming closer in terms of consumer behavior. Tastes in music, fashion, and technology among the young are similar across the world and this process will continue to deepen. It implies that self-image congruence across countries would not be significantly different.

De Mooij's (2003) findings are not completely aligned with those presented by Assael (2004), the statement being true for only certain products. There is both convergence and divergence in consumer behavior across countries. If products converge across countries, convergence is weakest in economically heterogeneous regions and strongest in economically homogeneous regions. Also, consumers in developing countries tend to be less individualistic than in developed ones. They care more for a larger local community, and like to be identified as part of it. This might suggest significant differences in self-image congruence across countries.

Given the contradictory findings, we formulate the following hypotheses:

H5a: Relationship between self-image congruence and brand preference in a developing country is significantly different than the one in a developed country.

H5b: Self-image congruence is significantly different for the two types of countries.

Conclusion. As discussed in the first chapter, a body of research shows self-image congruence to have a significant impact over brand preference. Even though there are multiple facets to self-image congruence, only two of them get the most attention in academic research (actual and ideal), which is the main reason the current analysis will focus on them. Product conspicuousness is seen to influence the relationship between self-image congruence and brand preference, with the ideal being more important for conspicuous products, and actual – with inconspicuous ones. However, results are mixed, with some researchers supporting it, others - only partially. The level of country development could be a cause for differences in self-image congruence. However, research findings vary over this matter.

Chapter II. Methodology

Introduction. The second chapter aims to describe the methodological approach used in the research. The research aim, hypothesis and model are defined in more detail in relation to the theoretical review from the first chapter. Furthermore, the development of the questionnaire and its measurement scales are presented along with the data collection procedure. Afterwards the methods that were used for the data analysis are discussed.

2.1 Research aim

The research aim is to elaborate an empirical investigation of actual/ideal self-image congruence and measure the relationship between self-image congruence and brand preference.

2.2 Research hypotheses and model

A research model involves a set of assumptions. It shows, more in a hypothesized form, a formal representation of theory and the relationship between the main theoretical constructs.

Actual self-congruence and ideal self-congruence are the independent variables and brand preference is the dependent variable. The same model was created for each individual brand, all together and for conspicuous and inconspicuous groups apart. With this purpose, additional variables have been computed.

The six self-congruity measures were subsequently reduced to two measures (actual and ideal congruity) and the four brand preference measures were reduced to one, by calculating their mean score. The added computed variables can be seen in table 4.

Table 4. Additional variables computed in initial data analysis*

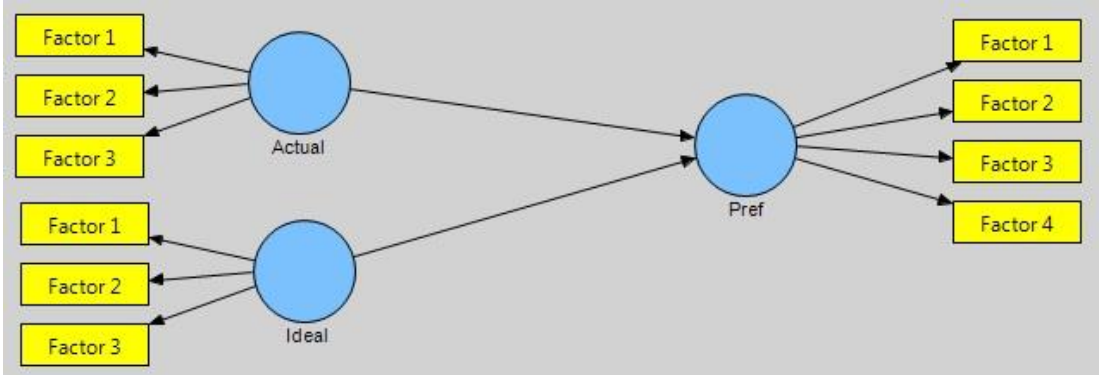
Variable computed	Formula used
Self-image congruence of Mango	(Q1M+Q2M+Q3M+Q4M+Q5M+Q6M) /6
Self-image congruence of Benetton	(Q1B+Q2B+Q3B+Q4B+Q5B+Q6B)/6
Self-image congruence of Colgate	(Q1C+Q2C+Q3C+Q4C+Q5C+Q6C)/6
Self-image congruence of Sensodyne	(Q1S+Q2S+Q3S+Q4S+Q5S+Q6S)/6
Brand preference for Mango	(Q7M+Q8M+Q9M+Q10M)/4
Brand preference for Benetton	(Q7B+Q8B+Q9B+Q10B)/4
Brand preference for Colgate	(Q7C+Q8C+Q9C+Q10C)/4
Brand preference for Sensodyne	(Q7S+Q8S+Q9S+Q10S)/4
Actual Self-image congruence for Mango	(Q1M+Q2M+Q3M)/3
Actual Self-image congruence for Benetton	(Q1B+Q2B+Q3B)/3
Actual Self-image congruence for Colgate	(Q1C+Q2C+Q3C)/3

Actual Self-image congruence for Sensodyne	(Q1S+Q2S+Q3S)/3
Ideal Self-image congruence for Mango	(Q4M+Q5M+Q6M)/3
Ideal Self-image congruence for Benetton	(Q4B+Q5B+Q6B)/3
Ideal Self-image congruence for Colgate	(Q4C+Q5C+Q6C)/3
Ideal Self-image congruence for Sensodyne	(Q4S+Q5S+Q6S)/3
Self-image congruence conspicuous prod.	(Q1M+Q2M+Q3M+Q4M+Q5M+Q6M +Q1B+Q2B+Q3B+Q4B+Q5B+Q6B)/12
Self-image congruence inconspicuous prod.	(Q1C+Q2C+Q3C+Q4C+Q5C+Q6C+Q 1S+Q2S+Q3S+Q4S+Q5S+Q6S)/12
Brand preference conspicuous products	(Q7M+Q8M+Q9M+Q10M+Q7B+Q8B +Q9B+Q10B)/8
Brand preference inconspicuous products	(Q7C+Q8C+Q9C+Q10C+Q7S+Q8S+Q 9S+Q10S)/8
Ideal Self-image cong. conspicuous prod.	(Q4M+Q5M+Q6M+Q4B+Q5B+Q6B)/ 6
Actual Self-image cong. conspicuous prod.	(Q1M+Q2M+Q3M+Q1B+Q2B+Q3B)/ 6
Ideal Self-image cong. inconspicuous prod.	(Q4C+Q5C+Q6C+ Q4S+Q5S+Q6S)/6
Actual Self-image cong. inconspicuous prod.	(Q1C+Q2C+Q3C+Q1S+Q2S+Q3S)/6
General self-image congruence	(Q1M+Q2M+Q3M+Q4M+Q5M+Q6M +Q1B+Q2B+Q3B+Q4B+Q5B+Q6B+Q 1C+Q2C+Q3C+Q4C+Q5C+Q6C+Q1S +Q2S+Q3S+Q4S+Q5S+Q6S)/24
General brand preference	(Q7M+Q8M+Q9M+Q10M+Q7B+Q8B +Q9B+Q10B+Q7C+Q8C+Q9C+Q10C +Q7S+Q8S+Q9S+Q10S)/16
General actual self-image congruence	(Q1M+Q2M+Q3M+Q1B+Q2B+Q3B+ Q1C+Q2C+Q3C+Q1S+Q2S+Q3S)/12
General ideal self-image congruence	(Q4M+Q5M+Q6M+Q4B+Q5B+Q6B+ Q4C+Q5C+Q6C+ Q4S+Q5S+Q6S)/12

*Formula components are displayed according to Appendix 1 “Questions”

The current research’s model is represented in Figure 3, where “actual” = actual self-image congruence, “ideal” = ideal self-image congruence, “pref” = Brand Preference; each being constructed through a multitude of factors.

Figure 3. Model Representation for an Individual Brand



The model will test the following hypotheses previously discussed in the literature review:

H1a: Actual self-congruence has a significant and positive effect on brand preference.

H1b: Ideal self-congruence has a significant and positive effect on brand preference.

H2: Actual and ideal self-congruence are significantly and positively correlated.

H3: Self-image congruence is significantly higher for conspicuous products rather than inconspicuous products.

H4a: Relationship between actual self-congruence and brand preference is stronger for inconspicuous products compared to conspicuous products.

H4b: Relationship between ideal self-congruence and brand preference is stronger for conspicuous products as compared to inconspicuous products.

H5a: Relationship between self-image congruence and brand preference in a developing country is significantly different than the one in a developed country.

H5b: Self-image congruence is significantly different for the two types of countries.

Following the footsteps of Ross (1971), Hong and Zinkan (1995), the current research analyzed clothing brands as goods consumed publicly and toothpaste brands as goods consumed privately. Products were selected with a view that respondents are familiar with them and these are accessible and affordable to all social classes and also used by all ages and education levels. Two types of products on the basis of usage were selected:

toothpaste (there is not no common awareness of what toothpaste your friends use) and clothing (they are likely to be evaluated using symbolic criteria).

An exploratory research was conducted in order to find the right number of brands to use. A pre-test questionnaire was first launched in Moldova with 5 brands in each category (the most popular ones), to check for response rate and questionnaire reliability. Clothing brands were Mango, Oodji, Benetton, Aridon and Motivi. Toothpaste brands were Colgate, Blend a Med, Sensodyne, Aquafresh and 32 Ulybka. A sample of 55 responses were collected. Even though choosing a large number of brands has the advantage of increasing generalizability and robustness of the measurement scale, the preliminary questionnaire contained evidence of subject fatigue and boredom, which potentially could result in response bias. The dropout rate was 29% (out of 55 responses, 16 were only half-way done). In addition, 3 more had to be dropped due to missing values.

To minimize this problem, two brands were chosen from each type to be included in the research. For the remaining 36 responses a reliability analysis was done. The Cronbach's alpha was high for all brands, and we chose the two brands in each category that were popular both in Moldova and Portugal (due to type of country as moderating variable). Mango and Benetton were chosen as clothing brands and Colgate and Sensodyne - as toothpaste brands.

2.3 Research instrument, questions and scales.

Before Sirgy's paper from 1997, the common method of measuring the self-concept involved the use of semantic differential scales or bipolar Likert-type scales (Grubb and Hupp, 1968; Malhotra, 1981). In the case of semantic differential scales, the self-concept profile of a person in terms of selected personality traits was generally obtained (e.g. adventurous, young, classic, and stylish). The second part of the questionnaire collected the individual's perceptions of a brand on the same traits. In the case of bipolar Likert-type scales, at one end of the scale was an attribute, while at the other – the opposite characteristic (e.g. classic-modern, young-old, and adventurous-safe). By comparing the two profiles, the researchers could identify the match/gap between the person's self-concept and his/her perception of the personality of the brand.

Sirgy et al. (1997) identified three important problems with traditional methods as follows:

- Use of discrepancy scores. The method only combined two constructs together: a list of chosen adjectives about the respondent with a list of chosen adjectives about the brand/product. It would be more reliable if researchers could measure self-congruity in a more direct way.

- Possible use of irrelevant images. The research instrument also has a list of attributes built in. This way, respondents have to indicate their possible congruence with images that may or may not be relevant. It would be better if a research instrument could capture self-congruity through images that are conjured up by subjects at the moment of response and not predefined.

- Possible use of compensatory decision rule. Respondents feel self-congruity through a multitude of images. It is not possible to include all of them in the research, or not to include others that may seem appropriate, but do not really attribute to the product. The predictive value could be increased if self-congruence was to be measured globally instead of dimension-based.

Based on these shortcomings, Sirgy et al. (1997) proposed an alternative method. The new method measured the self-image congruence directly rather than through the use of a list of adjectives. The instrument guided respondents to rate their self-image congruence globally. In their study, Sirgy et al. (1997) compared the predictive validity of these two methods over six studies involving different customer groups, products, consumption settings, and dependent variables. Their findings provide significant support for high validity of the new method over and beyond the traditional one. This is the main reason for us to choose the measures of self-image congruence and brand preference from the new method reported by Sirgy et al. (1997).

The constructs of actual self-congruence and ideal self-congruence were measured on 3-items scale for each. Whereas the construct 'brand preference' was measured on 4-item scale adopted by Sirgy et al (1997). All questions can be seen in Appendix 1. The expressions used in the questionnaire for actual self-congruence are: "The typical person who uses this brand is very much like me", "Having this brand is consistent with how I see myself", "The image of the typical customer of this brand is similar with how I see myself". The expressions used in the questionnaire for ideal self-image congruence are: "The typical person who uses this brand is very much like the person I would like to become", "Having this brand is consistent with how I would like see myself", "The image

of the typical customer of this brand is similar with how I would like to see myself". The expressions used in the questionnaire for brand preference are: "I like this brand better than any other brand", "This brand is my preferred brand over all other brands", "I would be inclined to buy this brand over any other brand", and "I would be inclined to buy this brand over any other brand".

All items used for this study were measured on 7-point Likert scale from strongly disagree (1) to strongly agree (7). Table 5 shows a summary of research instruments used in studying the self-concept or self-image congruence along the years.

Table 5. Summary of research instruments used in self-concept / self-image congruence

Authors	**Type of scale**
Birdwell, A.E. (1968)	Semantic differential scale
Grubb, L., Hupp, G. (1968)	Semantic differential scale
Dolich, I. (1969)	Semantic differential scale
Ross, I. (1971)	Semantic differential scale
Malhotra (1981)	Semantic differential scale
Hong and Zinkhan (1995)	Combined a 7-point Likert scale with bipolar evaluative items
Sirgy, J., Grewal, D., Mangleburg, T.F., Park, J., Chon, K., Claiborne, C.B., Johar, J.S. and Berkman, H. (1997)	Likert scale (from current paper Sirgy et al., 1997)
Jamal, A., Al-Marri M. (2007)	Likert scale (from Sirgy et al., 1997)
Li, Y., Wang, X. and Yang, Z. (2011)	Likert scale (from Sirgy et al., 1997)
Wu, J. (2011).	Likert scale (from Sirgy et al., 1997)
Khan, M., Bozzo, C. (2012).	Likert scale (from Sirgy et al., 1997)
Upamannyu, N., Mathur, G. and Bhakar, S. (2014)	Likert scale (from Sirgy et al., 1997)

Source: Made by author.

2.4 Data gathering methods and sample

The survey method was used for data collection. The sample of the current study is divided into 3 sub-groups: students from Moldova, students from Portugal and Erasmus students of different nationalities.

The services of Qualtrics online platform were used for online collection of responses. There were 3 versions of the questionnaire for the different subgroups: in English, Romanian and Portuguese.

A sample of 114 respondents from Moldova was collected, out of which 11 responses were dropped due to missing values. Subgroup sample was 103 responses.

The Portuguese questionnaire was distributed through the university's e-mail list of students enrolled in Fernando Pessoa. An application to the Ethics Commission was sent to obtain approval of this action (see Appendix 2). As result, a sample of 87 respondents was collected, out of which 7 responses were dropped due to missing values. Subgroup sample was 80 responses.

The third sub-group consisted of foreign students that were once on Erasmus in Porto, but are not anymore. The distribution of the questionnaire was made online through the researcher's friend list. A number of 35 respondents was collected, out of which 4 responses were dropped due to missing values. Subgroup sample was 31 responses.

When the data was imported in SPSS, the whole sample of 214 respondents was checked for outliers. The software flagged 6 respondents, which upon a closer inspection, were found to have only "1" scores from a 1 to 7 scale on all questions. They were deleted from the sample. Final sample consisted of 102 respondents from Moldova, 76 respondents from Portugal and 30 Erasmus students, a total of 208 answers.

Most of the respondents are students. Because of time, distance and money considerations, students are often used as quick and convenient sources of information. Although use of student samples and 'young consumers' is limited in representing the broader population, it has been heavily debated that student samples are appropriate for theory testing. Any sample is relevant if it permits operationalization within the domain of the theory.

Studies were made to determine whether students can be used as sample to represent another group. Enis, Cox and Stafford (1972), Shuptrine (1975) made studies to compare the answers students and housewives gave. The accumulating empirical evidence shows that sometimes students are good predictors of housewives' behavior, and sometimes they are not. The results tended to be inconclusive. Khera and Benson (1970) researched the

potential of using student samples for the analysis of businessmen. They concluded that students may be good substitutes for businessmen under certain conditions.

More recent studies also support use of student sample. Ok, Shanklin and Back's (2008) study encourage the use of student samples in theory testing and/or applied research contributes to the body of literature. Following this line of thought, Herbst and Schwarz (2011) researched student sample validity in negotiation research and concluded that sampling with student groups is applicable in general — as soon as these groups have received some kind of specific negotiation training.

For an MA candidate, the university supplies entire classrooms of potential respondents that are available at little or no cost. They generally follow instructions rapidly and accurately. Academics agree that usefulness of student subjects depends, in part, upon the context of the research—its problem, objectives, and hypotheses. Given the present research, a student sample is considered appropriate, as individuals aged 18-25 (which most of the sample consists of) have the most product involvement when it comes to conspicuous consumption of clothes. A teen is most concerned of projecting an image towards other individuals.

Also, with a student sample, the issue of brand awareness is minimized. The questions presume respondents know Mango, Benetton, Colgate and Sensodyne, and a student sample has the highest chances of having an opinion towards them.

Conclusion. As discussed, the research model, questions and scales are adapted from similar researches. The research instrument was taken from Sirgy (1997), which had several advantages over the research instrument of Malhotra (1981): not using discrepancy scores, avoiding possible use of irrelevant images and measuring the constructs globally instead of dimension-based. Variable constructs are similar to those of Khan & Bozzo (2012), and Upamannyu, Mathur & Bhakar (2014). Actual self-congruence and ideal self-congruence are the independent variables and brand preference is the dependent variable. The same model was created for each individual brand, all 4 brands together and for conspicuous and inconspicuous groups apart. Data gathering methods and use of student samples were justified by previous research.

Chapter III. Model Analysis. Analysis, implications and discussion of results.

Introduction. The chapter begins by providing a demographic description on the current sample. To support the evidence obtained, validity and reliability of the scales used was examined, along with model tests. SPSS IBM© and SmartPLS© softwares were used to analyze the data. Confirmatory Factor Analysis (CFA) was used to test if measures of a construct correspond with the researcher's comprehension of the nature of that construct (construct validity). Factor analysis allows to condense a large set of variables or scale items down to a smaller, more manageable number of dimensions or factors. It does this by summarizing the underlying patterns of correlation and looking for groups of closely related items (Mulaik, 2009). The chapter concludes by testing each hypothesis and analyzing its results in terms of relationship values between constructs and mean differences.

3.1 Sample descriptive statistics

A brief analysis over the demographics of the sample is presented: country, age, income, and number of family members.

Table 6. Sample age distribution over countries

Age	Total	Moldova sample	Portugal sample	Erasmus sample
18-25	75%	89,3%	47,35%	96,67%
26-35	14,4%	10,7%	23,7%	3,33%
36-45	5,7%	0%	15,8%	0%
>45	4,9%	0%	13,15%	0%

Most of the respondents are aged 18-25, as it is a student sample. The percentages for 36 years and older in Portugal is higher, as the questionnaire was distributed through the e-mail database of the university, which included Alumni as well.

Table 7. Sample gender distribution over countries

Sex	Total	Moldova sample	Portugal sample	Erasmus sample
Male	28,8%	30,4%	22,4%	40%
Female	71,2%	69,6%	77,6%	60%

Each country group has more female respondents than male respondents. The male-female ratio does not vary significantly across countries, with 61%-77% females in each country sample.

Table 8. Sample income distribution across countries

Income levels	Total	Moldova sample	Portugal sample
Interval 1 (<3000 MDL for Moldova and >500€ for Portugal)	5,8%	6,9%	2,6%
Interval 2 (3001-5000 MDL for Moldova and 501-1000€ for Portugal)	22,1%	12,7%	35,5%
Interval 3 (5001-7000 MDL for Moldova and 1001-1500€ for Portugal)	25%	25,5%	23,7%
Interval 4 (7001-9000 MDL for Moldova and 1501-2000€ for Portugal)	20,7%	26,5%	18,5%
Interval 5 (>9000 MDL for Moldova and >2000€ for Portugal)	26,4%	28,4%	19,7%

*Exchange rate at the time of questioning was 18 MDL for 1 Euro. Intervals were chosen according to national average income.

Income distribution intervals are the same in both Moldova and Portugal. In each group, except group 1, there are around 20-25% of people.

Table 9. Number of family members in country samples

Nr. of family members	Total	Moldova sample	Portugal sample	Erasmus sample
1	5,3%	1%	10,5%	6,7%
2	8,2%	5,9%	11,8%	6,6%
3	21,6%	14,7%	32,9%	16,7%
4	46,7%	54,9%	35,5%	46,7%
5	13,9%	17,6%	6,7%	20%
>5	4,3%	5,9%	2,6%	3,3%

The frequencies of each group are the same across countries. Most of the people have a family of 4 members. A family with 3 members is the second least popular overall.

Table 10. Student percentage across country samples

% of students	Total	Moldova sample	Portugal sample
Yes	73,1%	73,5%	68,4%
No	26,9%	26,5%	31,6%

As the table shows, most of the respondents are students, ranging from 68% to 73% in country samples.

3.2 Descriptive analysis and normality of the variables

Prior to performing the statistical analyses to check our hypotheses (t-test, ANOVA, correlations, regression), it is required to check that we are not violating any of the assumptions made by the individual tests. Testing these assumptions means obtaining descriptive statistics on our variables, like the mean, standard deviation, skewness and kurtosis.

Standard deviation is needed in addition to the average, as it is a measure used to quantify the amount of variation of a set of values.

The skewness value provides an indication of the symmetry of the distribution. If the distribution is perfectly normal, a sample would have a skewness and kurtosis value of 0. However, in real situations, it is an uncommon occurrence (Pallant, 2010).

Positive skewness values indicate positive skew (scores clustered to the left at the low values). Negative skewness values indicate a clustering of scores at the high end (right-hand side of a graph).

Kurtosis, on the other hand, provides information about the "peakedness" of the distribution. Positive kurtosis values indicate that the distribution is rather peaked (clustered in the center) with long thin tails. Kurtosis values below 0 indicate a distribution that is relatively flat (too many cases in the extremes).

With reasonably large samples, skewness will not "make a substantive difference in the analysis". Kurtosis can result in an underestimate of the variance, but this risk is also reduced with a large sample of more than 200 cases (Pallant, 2010).

Table 11. Descriptive statistics for individual variables

Summated scales	Mean	Standard Deviation	Skewness	Kurtosis
Self-Image Congruence Mango	3.51	1.77	0.08	-1.15
Self-Image Congruence Benetton	3.09	1.59	0.38	-0.78
Self-Image Congruence Colgate	3.60	1.80	0.07	-1.03
Self-Image Congruence Sensodyne	3.74	1.74	-0.09	-1.03
Brand preference Mango	3.27	1.86	0.27	-1.14
Brand preference Benetton	2.74	1.68	0.74	-0.47
Brand preference Colgate	4.01	1.92	-0.12	-1.18
Brand preference Sensodyne	4.31	1.81	-0.22	-0.87
Actual Self-Image Congruence Mango	3.50	1.75	0.11	-1.02
Actual Self-Image Congruence Benetton	3.05	1.64	0.42	-0.84
Actual Self-Image Congruence Colgate	3.69	1.91	0.07	-1.12
Actual Self-Image Congruence Sensodyne	3.91	1.85	-0.11	-1.12
Ideal Self-Image Congruence Mango	3.53	1.93	0.13	-1.28
Ideal Self-Image Congruence Benetton	3.12	1.73	0.38	-0.95
Ideal Self-Image Congruence Colgate	3.50	1.90	0.12	-1.10
Ideal Self-Image Congruence Sensodyne	3.56	1.87	0.07	-1.07

As can be seen from the above table, most of the skewness varies between -0.22 and 0.42, an exception being 0.74 for Benetton brand preference. Most of the values are positive, which means that in most cases scores are clustered to the left.

All the Kurtosis values are negative, most of them ranging from -0.78 to -1.28, an exception being again the distribution for Benetton brand preference scores (-0.47). It means that distribution of scores for the variables is relatively flat in all the cases.

Many of the statistical techniques used later on assume that the distribution of scores on the dependent variable is normal. Normal is used to describe a symmetrical, bell-shaped curve, which has the greatest frequency of scores in the middle, with smaller frequencies towards the extremes. It was assessed partially through skewness and kurtosis values presented above.

However, a more detailed perspective can be offered through the Kolmogorov-Smirnov statistic. This assesses the normality of distribution of scores. A non-significant result (Sig value of more than 0.05) indicates normality. In our cases, all ideal self-image congruence, actual self-image congruence and brand preference variables have a sig value of less than 0.05 (all of them scoring 0.000-0.001), suggesting violation of the assumption of normality. This is quite common in larger samples (Cone and Foster, 2006).

Statistics writers argue that most of the approaches are fairly "robust": that is, they will tolerate minor violations of assumptions, particularly if the study has a good size sample. Cone and Foster (2006) present an easy-to-follow review of the robustness of different tests to defend this argument.

3.3 Reliability tests

An important aspect to a study is to find scales that are reliable. One of the main issues concerns the scale's internal consistency. This refers to the degree to which the items that make up the scale "hang together". One of the most commonly used indicators of internal consistency is Cronbach's alpha coefficient. Ideally, the Cronbach alpha coefficient of a scale should be above 0.7. It is necessary to check that each of the scales are reliable with this particular sample.

Table 12. Cronbach's Alfa for individual variables: SPSS analysis

	Cronbach's Alfa
Actual self-image congruence Mango	0.921
Actual self-image congruence Benetton	0.916
Ideal self-image congruence Mango	0.939
Ideal self-image congruence Benetton	0.929
Brand preference Mango	0.955
Brand preference Benetton	0.950
Actual self-image congruence Colgate	0.938
Actual self-image congruence Sensodyne	0.922
Ideal self-image congruence Colgate	0.941
Ideal self-image congruence Sensodyne	0.935
Brand preference Colgate	0.968
Brand preference Sensodyne	0.957

As can be seen, the three variables measured (actual self-image, ideal self-image and brand preference) for each of the four brands have reliable scales, with the lowest value being 0.916. Let's compare the reliability values to the ones in similar research.

Table 13. Reliability values in other studies

	Actual self-congruence scale	Ideal self-congruence scale	Brand preference scale
Upamannyu, Mathur and Bhakar (2014)	0.830	0.812	0.872
Khan, Bozzo (2012)	0.885	0.827	0.877

The reliability values of the current study are higher than previous ones, which is a positive indicator.

Besides Cronbach's Alfa, another reliability indicator is Composite Reliability. To confirm validity, the composite reliability indicator has to be greater than 0.7. As can be seen from Table 14, the condition is satisfied. The Composite Reliability ranges from 0.843 to 0.943.

Table 14. PLS: Composite Reliability

Model analyzed	Actual Self-Image Congruence	Ideal Self-Image Congruence	Brand Preference
Aggregated (all 4)	0.908	0.926	0.907
Conspicuous	0.910	0.919	0.943
Inconspicuous	0.865	0.912	0.843

3.4 Validity tests

The concept of "average variance extracted" (AVE) was introduced in 1981 (Fornell and Larcker). This indicator measures the amount of variance that is explained by the construct in relation to the amount of variance attributed to measurement error. If the average variance extracted is less than 0.40 (Blunch, 2013), the convergent validity of the construct is questionable.

Table 15. PLS: Average Variance Extracted

Model analyzed	Actual Self-Image Congruence	Ideal Self-Image Congruence	Brand Preference
Aggregated (all 4)	0.455	0.513	0.398
Conspicuous	0.630	0.656	0.675
Inconspicuous	0.537	0.638	0.446

It can be observed that all AVEs are higher than 0.40, an exception being brand preference in the aggregated model, which is very close to the limit.

The objective of Confirmatory Factor Analysis is to check if the data fits the pre-established hypothesized measurement model (Jöreskog, 1969).The research instrument aims to measure several constructs, with each construct measured using multiple items which are combined in a smaller number of factor scores. Item cross-loadings indicate how strongly each item loads on each other factor.

Table 16. PLS: Significance Measures of the relationships towards Brand Preference

Model analyzed	Actual Self-Image Congruence	Ideal Self-Image Congruence
Aggregated (all 4)	3.218**	3.738***
Conspicuous	2.863**	5.630***
Inconspicuous	3.761***	2.684**
Mango	2.529*	6.144***
Benetton	2.381*	5.598***
Colgate	5.030***	5.032***
Sensodyne	4.271***	3.400***

*Significant at 95% confidence level ** Significant at 99% confidence level
***Significant at 99.9% confidence level

Total Variance Explained is an indicator that shows the proportion to which a research model accounts for the variation of a given data set. Across all models, Total Variance Explained ranges from 0.44 to 0.66.

Table 17. Total Variance Explained

Model	Aggregated	Consp.	Inconsp.	Mango	Benetton	Colgate	Sensodyne
Value	0.553	0.563	0.460	0.664	0.534	0.574	0.441

We can observe the current model is working better for conspicuous rather than inconspicuous products, as the difference between their total variances explained is 0.10.

3.5 Model tests

Table 18. CFA Factor Loadings Range (PLS)

Model analyzed	Actual Self-Image Congruence	Ideal Self-Image Congruence	Brand Preference
Aggregated (all 4)	0.54 – 0.77	0.62 – 0.77	0.35 – 0.79
Conspicuous	0.70 – 0.85	0.77 – 0.84	0.79 – 0.86
Inconspicuous	0.40 – 0.90	0.68 – 0.90	0.31 – 0.90
Mango	0.90 – 0.95	0.91 – 0.96	0.86 – 0.99
Benetton	0.87 – 0.97	0.92 – 0.95	0.64 – 0.99
Colgate	0.93 – 0.96	0.85 – 0.97	0.87 – 0.99
Sensodyne	0.91 – 0.94	0.92 – 0.95	0.93 – 0.95

The range is more volatile in case of factor loadings for brand preference in the aggregated model and the inconspicuous model and for actual self-image congruence in the inconspicuous model (because of Sensodyne measurement factors). More details are shown in tables 19 and 20 below, where the cross loadings are shown.

Table 19. Cross Loadings for general, conspicuous and inconspicuous models

		Actual	Ideal	Pref		Actual	Ideal	Pref	
AGGREGATED MODEL	Q1B	**0,617782**	0,516343	0,413276	Q1B	**0,701505**	0,546737	0,450546	CONSPICUOUS MODEL
	Q1C	**0,581293**	0,474961	0,455206	Q1M	**0,808737**	0,666734	0,592855	
	Q1M	**0,727877**	0,617749	0,562122	Q2B	**0,763630**	0,579480	0,460967	
	Q1S	**0,545013**	0,459481	0,303038	Q2M	**0,847716**	0,716902	0,615680	
	Q2B	**0,674390**	0,553725	0,438438	Q3B	**0,792744**	0,659693	0,515653	
	Q2C	**0,639972**	0,547221	0,484894	Q3M	**0,838609**	0,768384	0,635307	
	Q2M	**0,768230**	0,669752	0,593037	Q4B	0,607519	**0,772083**	0,545901	
	Q2S	**0,666185**	0,570658	0,403459	Q4M	0,687205	**0,838680**	0,644890	
	Q3B	**0,725343**	0,654602	0,500333	Q5B	0,639991	**0,775731**	0,540284	
	Q3C	**0,633649**	0,566788	0,471983	Q5M	0,674529	**0,833029**	0,639969	
	Q3M	**0,776231**	0,731225	0,613435	Q6B	0,703334	**0,802677**	0,562683	
	Q3S	**0,695243**	0,624667	0,444806	Q6M	0,738891	**0,835842**	0,630497	
	Q4B	0,602684	**0,717236**	0,519505	Q7B	0,584034	0,622604	**0,790698**	
	Q4C	0,583000	**0,662781**	0,449891	Q7M	0,639220	0,702845	**0,837975**	
	Q4M	0,678365	**0,764554**	0,622637	Q8B	0,542409	0,580836	**0,818738**	
	Q4S	0,643626	**0,748066**	0,433041	Q8M	0,564516	0,644846	**0,859268**	
	Q5B	0,607220	**0,702368**	0,509414	Q9B	0,529606	0,516171	**0,803734**	
	Q5C	0,546770	**0,628901**	0,442263	Q9M	0,582466	0,609942	**0,836635**	
	Q5M	0,644857	**0,729983**	0,607325	Q10B	0,536770	0,538834	**0,808296**	
	Q5S	0,598636	**0,701037**	0,397718	Q10M	0,574751	0,590240	**0,815146**	
	Q6B	0,682665	**0,762125**	0,561182	Q1C	**0,876942**	0,620565	0,641782	INCONSPICUOUS MODEL
	Q6C	0,569168	**0,668606**	0,490577	Q1S	**0,404855**	0,357280	0,171067	
	Q6M	0,696442	**0,770034**	0,626053	Q2C	**0,924633**	0,685416	0,626362	
	Q6S	0,601688	**0,725941**	0,424772	Q2S	**0,552364**	0,468334	0,230381	
	Q7B	0,552314	0,555323	**0,735233**	Q3C	**0,905156**	0,722810	0,623105	
	Q7C	0,397369	0,374925	**0,522739**	Q3S	**0,556813**	0,524305	0,271307	
	Q7M	0,601332	0,640082	**0,783102**	Q4C	0,727729	**0,886395**	0,555667	
	Q7S	0,356310	0,370874	**0,420358**	Q4S	0,476034	**0,688566**	0,275283	
	Q8B	0,536331	0,529341	**0,764884**	Q5C	0,707544	**0,897609**	0,644087	
	Q8C	0,373226	0,367520	**0,537272**	Q5S	0,468051	**0,693225**	0,299049	
	Q8M	0,536479	0,570081	**0,789101**	Q6C	0,742533	**0,905358**	0,638665	
	Q8S	0,338763	0,361752	**0,440619**	Q6S	0,450136	**0,680437**	0,289386	
	Q9B	0,486648	0,456408	**0,751125**	Q7C	0,632811	0,561348	**0,883596**	
	Q9C	0,281712	0,267113	**0,456184**	Q7S	0,233353	0,283277	**0,330009**	
	Q9M	0,541375	0,536707	**0,769522**	Q8C	0,593651	0,535674	**0,900184**	
	Q9S	0,284446	0,308163	**0,355176**	Q8S	0,211840	0,250680	**0,352300**	
	Q10B	0,539462	0,508593	**0,776104**	Q9C	0,539970	0,449604	**0,860463**	
	Q10C	0,335294	0,352458	**0,512778**	Q9S	0,186582	0,266162	**0,312139**	
	Q10M	0,539217	0,544646	**0,758264**	Q10C	0,562911	0,525751	**0,888436**	
	Q10S	0,289313	0,292169	**0,373583**	Q10S	0,205202	0,251453	**0,348561**	

Table 20. Cross Loadings for Individual Brand Models

		Actual	Ideal	Pref		Actual	Ideal	Pref	
MANGO	**Q1M**	**0,905723**	0,754544	0,680122	**Q1C**	**0,961587**	0,683289	0,689484	**COLGATE**
	Q2M	**0,947807**	0,795070	0,711723	**Q2C**	**0,926652**	0,724711	0,664436	
	Q3M	**0,931246**	0,808309	0,699287	**Q3C**	**0,927468**	0,758753	0,665021	
	Q4M	0,772229	**0,911173**	0,732896	**Q4C**	0,737352	**0,851267**	0,597808	
	Q5M	0,781667	**0,959242**	0,771560	**Q5C**	0,711812	**0,955008**	0,670662	
	Q6M	0,841779	**0,959974**	0,772149	**Q6C**	0,752415	**0,973154**	0,683405	
	Q7M	0,734289	0,797911	**0,988051**	**Q7C**	0,712987	0,689041	**0,988336**	
	Q8M	0,652283	0,717111	**0,885153**	**Q8C**	0,667299	0,651385	**0,929234**	
	Q9M	0,687159	0,712740	**0,894210**	**Q9C**	0,653834	0,579964	**0,872541**	
	Q10M	0,659717	0,685481	**0,859578**	**Q10C**	0,663352	0,638516	**0,917868**	
BENETTON	**Q1B**	**0,888135**	0,680818	0,579214	**Q1S**	**0,914320**	0,643706	0,612935	**SENSODYNE**
	Q2B	**0,867977**	0,724105	0,566068	**Q2S**	**0,941616**	0,712484	0,567394	
	Q3B	**0,974515**	0,770907	0,635548	**Q3S**	**0,935811**	0,761368	0,585456	
	Q4B	0,690636	**0,918136**	0,658226	**Q4S**	0,685327	**0,919633**	0,506601	
	Q5B	0,722966	**0,926717**	0,664379	**Q5S**	0,732671	**0,955607**	0,609185	
	Q6B	0,775803	**0,953731**	0,683746	**Q6S**	0,717948	**0,946305**	0,598993	
	Q7B	0,643721	0,713498	**0,992927**	**Q7S**	0,635992	0,596064	**0,934325**	
	Q8B	0,599336	0,640364	**0,900474**	**Q8S**	0,614632	0,566266	**0,948219**	
	Q9B	0,558334	0,594505	**0,836816**	**Q9S**	0,561073	0,583936	**0,943739**	
	Q10B	0,568558	0,599190	**0,845925**	**Q10S**	0,567142	0,550735	**0,936936**	

Upon analyzing all models, all primary loadings are higher than other cross-loadings, which means that each variable relates strongly to its corresponding construct.

3.6 Hypothesis testing

H1a. Actual self-image congruence has a significant and positive effect on brand preference.

H1b. Ideal self-image congruence has a significant positive effect on brand preference

Pearson r correlation is used when the strength of the relationship between two continuous variables is examined. This gives an indication of both the direction (positive or negative) and the strength of the relationship (by looking at the absolute value). A positive correlation indicates that as one variable increases, so does the other. A negative correlation indicates that as one variable increases, the other decreases.

Correlation provides an indication that there is a relationship between two variables; it does not, however, indicate that one variable causes the other. The correlation between two variables (self-image congruence and brand preference) could be due to the fact that self-image congruence causes brand preference, that brand preference causes self-image congruence (as a post-purchase impulse to reduce cognitive dissonance), or that an

additional variable causes both self-image congruence and brand preference. The possibility of a third variable that influences both of the observed variables should always be considered. This is why understanding the difference between correlation and causation is required.

Different authors suggest different interpretations. However, Cohen (2013) suggests the following guidelines:

- 0.10-0.29 – small;
- 0.30-0.49 – medium;
- 0.50-1.00 – large;

The correlations presented in the following table are thus all considered to be large correlations, with a positive value above 0.6. Investigation was made using Pearson r product-moment correlation coefficient in SPSS.

Table 21. Pearson r coefficient for Self-Image congruence and Brand Preference

Relationship*	Pearson r Correlation
General Self-Image Congruence – General Preference	0.729*
Self-Image Congruence Mango – Brand Preference Mango	0.785*
Self-Image Congruence Benetton – Brand Preference Benetton	0.695*
Self-Image Congruence Colgate – Brand Preference Colgate	0.720*
Self-Image Congruence Sensodyne – Brand Preference Sensodyne	0.660*

* Correlations are significant at 0.01 level (2-tailed)

For additional analysis, statistical significance of the difference between correlation coefficients needs to be calculated. The significance level shown under the table (marked with *) provides a test of the null hypothesis that the correlation coefficient in the population is 0. Another test is needed to assess the probability that the difference in the correlations observed for the groups would occur as a function of a sampling error, when in fact there was no real difference in the strength of the relationship for groups. It is indicated as z_{obs} in the tables and is calculated as

$$Zobs = \frac{z1 - z2}{\sqrt{\frac{1}{N1-3} + \frac{1}{N2-3}}}$$

N1 and N2 are sample frequencies, and z_1, z_2 – values corresponding to their r coefficient. (r to z transformations are taken from Pallant, 2010).

The value of Z_{obs} has to be outside the interval -1.96 and +1.96, to be able to say there is a statistically significant difference between the two correlation coefficients.

Another test included in the table below is multiple regression. It is a more sophisticated extension of correlation and is used when it is wanted to explore the predictive ability of a set of independent variables on one continuous dependent measure. Current study uses standard multiple regression, where all the independent variables are entered into the equation simultaneously. Each independent variable is evaluated in terms of its predictive power. This approach also tells how much unique variance in the dependent variable each of the independent variables explained.

Multiple regression procedure assumes there is no multicollinearity or singularity between the independent variables. Correlations were tested in the previous sub-chapter and confirmed assumptions. Also, none of the independent variables is a combination of other independent variables. The conditions are satisfied.

Table 22. Correlations and beta coefficient for actual and ideal self-image congruence

	Actual Self-Image Congruence – Brand Preference Correlations	Ideal Self-Image Congruence – Brand Preference Correlations	z_{obs}	Standardized coefficient (Beta)
General	0.701*	0.705*	-0.08	Actual = 0.361 Ideal = 0.394
Mango	0.729*	0.776*	-1.05	Actual = 0.260 Ideal = 0.557
Benetton	0.624*	0.684*	-1.06	Actual = 0.236 Ideal = 0.500
Colgate	0.699*	0.661*	0.75	Actual = 0.469 Ideal = 0.293
Sensodyne	0.631*	0.607*	0.40	Actual = 0.402 Ideal = 0.303

* Correlations are significant at 0.01 level (2-tailed)

As the table above shows, both actual and ideal self-image congruence have a significant and positive effect on brand preference, because all correlations are higher than 0.6 and are significant at 0.01 level (2-tailed). Looking at the regression coefficients (beta), the same conclusion is valid. All betas are positive, meaning an increase in self-image congruence will trigger an increase in brand preference. Betas range from 0.236 to 0.500.

Another observation is that even though correlations are high and significant, there are no significant differences between correlation of actual self-image congruence with brand preference and correlation of ideal self-image congruence with brand preference. This is valid for the overall average and over each brand in particular. None of the z_{obs} values are higher than 1.96 or lower than -1.96. It suggest that neither actual self-image, nor ideal self-image is dominant.

There is sufficient evidence to support both H1a and H1b. Therefore the null hypotheses for H1a and H1b are rejected.

H2. Actual and ideal self-congruence are significantly and positively correlated.

Table 23. Individual brand actual-ideal self-image congruence correlations

	Actual Self-Image Congruence – Ideal Self-Image Congruence Correlation
Mango	0.844*
Benetton	0.776*
Colgate	0.784*
Sensodyne	0.757*

* Correlations are significant at 0.01 level (2-tailed)

All correlations are positive and higher than 0.750, significant at 0.01 level (2-tailed). There is sufficient evidence to support H2. Therefore the null hypothesis for H2 is rejected.

H3: Self-image congruence is significantly higher for conspicuous products rather than inconspicuous products.

T-tests are used to compare the mean score on some continuous variable. Paired sample t-tests (also called repeated measures) are used when samples are "related", because they are the same people tested each time. Independent sample t-tests are used when there are two different (independent) groups of people (e.g. males and female) and their score has

to be compared. In this case, paired samples t-tests were used, as there are measures from the same person to two different sets of questions.

Table 24. Significance T test for differences between conspicuous and inconspicuous products

	Conspicuous Mean Value	Inconspicuous Mean Value	Sig. (2-tailed)
Total Self-Image Congruence	3.30	3.67	0.000 (t= - 4.05, df = 207
Actual Self-Image Congruence	3.27	3.80	0.000 (t= -5.28, df = 207)
Ideal Self-Image Congruence	3.33	3.53	0.049 (t= -1.98, df = 207)

If sig 2-tailed value is less than 0.05, then we can conclude there is a significant difference between the two scores. In the above table can be seen that general image, actual image and ideal image self-congruence for the two types of products (clothes and toothpaste) record significant differences, with sig. 2-tailed of 0.000, 0.000 and 0.049 respectively.

Having established that there is a significant different, the next step is to find out which set of scores is higher, the one for clothing brands or for toothpaste brands. Comparing the averages given in the table 24, we can conclude that general self-image congruence, as well as actual and ideal self-image are significantly higher for conspicuous products than for inconspicuous ones.

There is no evidence to support H3. Therefore the null hypotheses for H3 is accepted.

H4a: Relationship between actual self-congruence and brand preference is stronger for inconspicuous products compared to conspicuous products.

H4b: Relationship between ideal self-congruence and brand preference is stronger for conspicuous products as compared to inconspicuous products.

Table 25. Analysis of general conspicuous and inconspicuous variables

Conspicuous Products	Inconspicuous Products	z_{obs} (sig)
Mean Brand Preference = 3.00	Mean Brand Preference = 4.16	-
Self-Image Congruence – Brand Preference Pearson r correlation = 0.743*	Self-Image Congruence – Brand Preference Pearson r correlation = 0.640*	2.01
Ideal Self-Image Congruence – Brand Preference Pearson r correlation = 0.732*	Ideal Self-Image Congruence – Brand Preference Pearson r correlation = 0.593*	2.53
Actual Self-Image Congruence – Brand Preference Pearson r correlation = 0.687*	Actual Self-Image Congruence – Brand Preference Pearson r correlation = 0.613*	1.30
Standardized coefficient (Beta): Actual = 0.257 Ideal = 0.520	Standardized coefficient (Beta): Actual = 0.384 Ideal = 0.297	-

* Correlations are significant at 0.01 level (2-tailed)

Inconspicuous products score higher ratings of both self-image congruence and brand preference. The strength and relationship significance can be examined through the correlation coefficient.

Relationship between actual self-image congruence and brand preference is stronger for conspicuous products than for inconspicuous, with correlations of 0.687 and 0.613 respectively. However, this difference is not significant, as the z_{obs} indicator has a value of 1.30 (more than 1.96 confirms significance).

Through regression modelling, actual self-image congruence explains 25.7% of brand preference variation for conspicuous products and 38.4% of brand preference variation for inconspicuous products. Even though correlations are not significantly different, regression beta coefficients show a stronger relation between actual self-image congruence and brand preference for inconspicuous products rather than conspicuous products.

There is partial support for H4a. Therefore the null hypothesis for H4a is rejected.

The table also shows the relationship between ideal self-image congruence and brand preference is stronger for conspicuous products as compared to inconspicuous products,

with correlations of 0.732 and 0.593 respectively. There is a significant difference between them, with the indicator z_{obs} being 2.53.

Ideal self-image congruence explains 52% of brand preference variation for conspicuous products and 29.4% of brand preference variation for inconspicuous products. In this case, regression beta coefficients confirm a stronger relation between ideal self-image congruence and brand preference for conspicuous products rather than inconspicuous products.

There is sufficient evidence to support H4b. Therefore the null hypothesis for H4b is rejected.

H5a: Relationship between self-image congruence and brand preference in a developing country is significantly different than the one in a developed country.

Table 26. Average congruence values in Moldova and Portugal

	Moldova	Portugal
Mean (standard dev.) Self-Image Congruence	3.79 (1.22)	3.10 (1.37)
Mean (standard dev.) Actual Self-Image Congruence	3.80 (1.21)	3.20 (1.36)
Mean (standard dev.) Ideal Self-Image Congruence	3.79 (1.35)	3.00 (1.45)

The above table shows higher congruence ratings for all variables in Moldova sample comparing to Portuguese one.

To test this hypothesis, the correlations of same variables over countries were compared, e.g. correlations of ideal self-image congruence with brand preference in Moldova with the one in Portugal. This was done over general congruence, actual and ideal. Also, values corresponding to each brand were taken, besides the general average. Spotting for significant differences means looking at the z_{obs} value to be flagged as being higher than 1.96 or lower than -1.96.

Table 27. Congruence-Preference correlations and significance tests of differences between congruence variables in Moldova (MD) and Portugal (PT)

	General Self-Image Congruence – Brand Preference Correlations		Actual Self-Image Congruence – Brand Preference Correlations		Ideal Self-Image Congruence – Brand Preference Correlations		z_{obs} (MD vs PT)		
	MD	PT	MD	PT	MD	PT	Gen	Actual	Ideal
General	0.768*	0.637*	0.749*	0.601*	0.722*	0.645*	1.75	1.81	0.91
Mango	0.761*	0.770*	0.691*	0.751*	0.735*	0.751*	-0.16	-0.81	-0.21
Benetton	0.715*	0.673*	0.630*	0.655*	0.682*	0.657*	0.56	-0.28	0.29
Colgate	0.702*	0.681*	0.666*	0.649*	0.644*	0.675*	0.25	0.18	-0.34
Sensodyne	0.717*	0.671*	0.653*	0.675*	0.642*	0.637*	0.56	-0.23	0.05

*Correlations are significant at 0.01 level (2-tailed)

None of the correlations have significant differences over country samples. It means that even though correlations are different between country samples, this difference is not significant and can be easily attributed to sampling error.

Table 28. Beta Coefficient of Self-Image Congruence to Brand Preference

	Actual		Ideal	
	MD	PT	MD	PT
General	0.482	0.059	0.323	0.591
Mango	0.311	0.392	0.498	0.398
Benetton	0.306	0.334	0.471	0.356
Colgate	0.419	0.232	0.334	0.469
Sensodyne	0.412	0.554	0.382	0.133

Table 28 further examines the relationship between the variables over country samples by looking into the beta coefficients. Biggest differences for betas are seen in the general model (0.43 difference for actual, 0.27 for ideal), Colgate model (0.19 difference for actual, 0.14 for ideal) and Sensodyne model (0.14 difference for actual, 0.25 for ideal).

There is partial evidence to support H5a. Therefore the null hypothesis for H5a is rejected.

H5b: Self-image congruence is significantly different for the two types of countries.

Table 29. Significance test for congruence variables between Moldova and Portugal

	Sig 2-tailed (equal variances assumed)
General Self-Image Congruence	0.001 (t = 3.54, df = 176)
Actual Self-Image Congruence	0.002 (t = 3.10, df = 176)
Ideal Self-Image Congruence	0.000 (t = 3.71, df = 176)

If sig 2-tailed value is less than 0.05, then we can conclude there is a significant difference between the two scores. In the above table can be seen that general self-image, actual self-image and ideal self-image congruence for the two types of countries (Moldova and Portugal) record significant differences, with sig. 2-tailed of 0.001, 0.002 and 0.000 respectively.

Having established that there is a significant different, the next step is to find out which set of scores is higher, the one for Moldova or for Portugal. Comparing the averages given in table 26, we can conclude that general self-image congruence, actual and ideal self-image are significantly higher for Moldova than for Portugal.

There is sufficient evidence to support H5b. Therefore the null hypothesis for H5b is rejected.

The general model upon which hypothesis were tested can be found in figure 4 and 5.

Figure 4: T-significance of general model

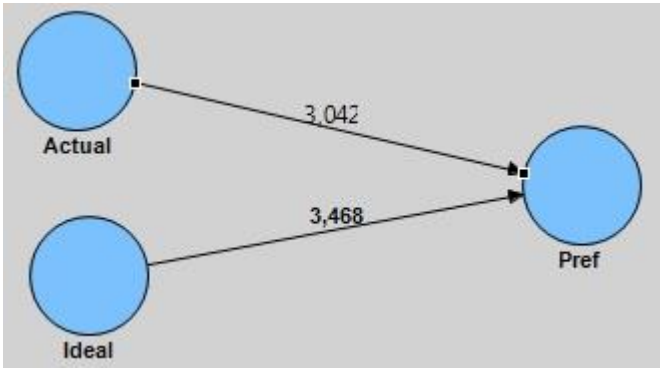
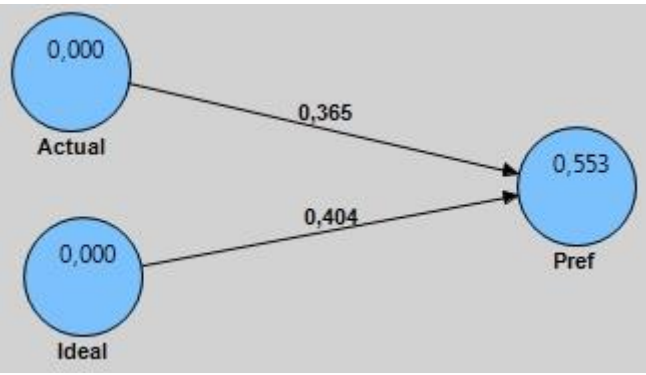


Figure 5: Standardized regression weights and R^2 of general model



As the research instrument samples demographic information, the paper further examines group differences which were not included as hypothesis. Upamannyu, Mathur and Bhaakar (2014) analyzed income and gender in respect to self-image congruence and brand preference. They found that the two gender groups did not have significant differences in the perception of role of product usage (conspicuous & inconspicuous). However, income as demographics elements had significant impact on brand preference for conspicuous and inconspicuous product category. As the table shows, female scores for all congruence variables are higher.

Table 30. Average congruence variable values for genders

	Male	Female
Self-Image congruence	3.19	3.60
Actual Self-Image congruence	3.24	3.66
Ideal Self-Image congruence	3.14	3.54

Table 31. R^2 of Self-Image Congruence to Brand Preference in Genders

	Male	Female
Actual	0.328	0.344
Ideal	0.480	0.375

The beta coefficients are close in both samples. Actual self-image congruence explains 32.8% of brand preference variance for male group and 34.4% for female group. Ideal self-image congruence explains 48% of brand preference variance for male group and 37.5% for female group.

Table 32. Significance test (T-test) for congruence variables in Male and Female Groups

Male-Female	Sig 2-tailed (equal variances assumed)
General Image	0.04 (t = -2.05, df = 206)
Actual Image	0.03 (t = -2.13, df = 206)
Ideal Image	0.06 (t=-1.85, df=206)

T-test shows significant differences for general self-image congruence and actual self-image congruence between male and female groups, with sig values of 0.04 and 0.03 respectively. Even though the beta coefficient from table 31 shows the biggest difference for ideal self-image congruence, the significance test does not give support to that evidence.

Here are the general average scores for congruence variables in different family groups.

Table 33. Average congruence variable values for different family groups

Number of family members	1	2	3	4	5	>5
Self-Image Congruence	2.74	3.59	3.26	3.44	4.06	3.90
Actual Self-Image Congruence	2.75	3.74	3.67	3.45	4.10	4.08
Ideal Self-Image Congruence	2.73	3.44	3.15	3.43	4.02	3.72

Beta coefficients from table 34 do not show a definite picture, as they vary across groups and a general trend is not evident.

Table 34. Beta Coefficient of Self-Image Congruence to Brand Preference in Families

	1	2	3	4	5	>5
Actual Self-Image Congruence	0.871	0.291	0.199	0.529	-0.092	1.431
Ideal Self-Image Congruence	-0.475	0.582	0.624	0.223	0.689	-0.663

One-way ANOVA (analysis of variance) is similar to a t-test, but is used when there are more than two groups and their mean scores on a continuous variable are compared. In our case, we have the number of family members and family income. ANOVA would let us know whether the groups differ significantly.

One-way ANOVA test assumes equal variances. To see if the assumption has not been violated, Levene's test is made (homogeneity of variances). If the number is greater than 0.05, there is homogeneity of the variances. In our case, Levene's numbers are 0.363, 0.429 and 0.503 for general, actual and ideal image respectively. Given that all of them are higher than 0.05, the assumption of homogeneity of variances is sustained.

Table 35. Significance test for variable differences across family groups (ANOVA)

Number of family members	Sig.
Self-Image Congruence	0.038
Actual Self-Image Congruence	0.023
Ideal Self-Image Congruence	0.079

Significant differences have been found in general self-congruence and actual self-congruence, as the sig are lower than 0.05. There are significant differences among groups and table 33 reveals them to be between families with 1 and 5 members. No significant differences have been found between groups for ideal self-congruence.

Here are the general average scores for congruence variables across the different income groups.

Table 36. Average congruence variable values for different income groups

Income Group	1	2	3	4	5
Self-Image Congruence	3.64	3.23	3.65	3.48	3.50
Actual Self-Image Congruence	3.65	3.28	3.73	3.52	3.56
Ideal Self-Image Congruence	3.63	3.18	3.57	3.44	3.44

Beta coefficients from the table below do not show a definite picture, as they vary across groups and a tendency cannot be spotted.

Table 37. Beta Coefficient of self-image congruence to brand preference in income groups

	1	2	3	4	5
Actual Self-Image Congruence	0.928	-0.087	0.432	-0.325	0.559
Ideal Self-Image Congruence	-0.013	0.854	0.320	1.071	0.172

Levene's sig are 0.15, 0.059 and 0.023 for general self-image, actual and ideal self-image respectively. As the assumption of homogeneity of variance is violated, robust tests of equality of means are more reliable (Welch and Brown-Forsynthe tests).

Table 38. Welch and Brown-Forsynthe significance tests

Variable tested	Test conducted	Significance level
General Self-Image	Welch	0.544
	Brown-Forsynthe	0.590
Ideal Self-Image	Welch	0.461
	Brown-Forsynthe	0.530
Actual Self-Image	Welch	0.666
	Brown-Forsynthe	0.692

None of the significance levels are lower than 0.05, which means there are no significant differences of general, actual or ideal self-image congruence between groups of different income.

Conclusion. The current model has good indicators of reliability (Cronbach's alpha and Composite Reliability) and validity. All Average Variance Extracted are more than 0.4, which confirms the convergent validity. All constructs are significant and each of the sub-models has a total variance explained indicator of minimum 0.44. Factor loadings also show satisfactory values and cross loadings have been checked to make sure that each factor measures the right construct. All this evidence allows us to continue with testing hypotheses, as the current research model is deemed adequate. Individual hypothesis testing present some findings aligned with the empirical evidence presented in the first chapter, other having only partial support.

Chapter IV. Conclusions

The current research shows the importance of self-image congruence in consumer behavior and its effect on brand preference.

This chapter summarizes the study results. It presents the research importance through listing its contribution for science and its practical implications for managers. Last but not least, the research limitations are mentioned and directions for future studies are recommended.

The research model treats actual self-congruence and ideal self-congruence as independent variables and brand preference as the dependent variable. The constructs of actual self-congruence and ideal self-congruence were measured on 3-items scale for each; the construct 'brand preference' was measured on 4-item scale adopted by Sirgy et al. (1997). All items used for this study were measured on a 7-point Likert scale. The six self-congruity measures were subsequently reduced to two measures (actual and ideal congruity) and the four brand preference measures were reduced to one, by calculating their mean score. Clothing brands were considered goods consumed publicly and toothpaste brands - goods consumed privately.

The model's reliability was tested for each of the construct and for each individual brand. All Cronbach alpha indicators are higher than 0.9 and all Composite Reliability indicators are higher than 0.8. Validity was also tested. All Average Variances Extracted are higher than 0.40, an exception being brand preference in the aggregated model, which is very close to the limit. All significance measures of the relationships towards brand preference are positive, being higher than the required values of 1.96 at 95% confidence level.

Data was collected through survey method. Final sample consisted of 102 respondents from Moldova, 76 respondents from Portugal and 30 Erasmus students, a total of 208 answers. Most of the respondents are students, aged 18-25. Each country group has more female respondents than male respondents. The male-female ratio does not vary significantly across countries, with 61%-77% females in each country sample. Income distribution intervals are the same in both Moldova and Portugal. Most of the people have a family of 4 members. A family with 3 members is the second least popular overall.

4.1 Results conclusion

Regarding the hypotheses H1a and H1b, both actual and ideal self-image congruence were found to have a significant and positive effect on brand preference. Results suggest that neither actual self-image, nor ideal self-image is dominant, with no significant differences between them when analyzing brand preference. These findings can be interpreted as evidence of a useless attempt to distinguish the self-concept components, aligned with Dolich (1969) and Usakli & Baloglu (2011).

As for the second hypothesis, actual and ideal self-image congruence are significantly and positively correlated. Findings are aligned with Usakli & Baloglu (2011), and partially with Khan & Bozzo (2012) and Upamannyu, Mathur and Bhakar (2014), the latter ones examining this correlation only through the facet of type of product usage (conspicuous and inconspicuous). Individuals have an understanding of how a typical user of a particular brand looks like and behaves. To decide if they like the brand, they match their own perceived image or the one they would like to have with that of the typical user. If these two have a lot of things in common, the individual will have a positive attitude towards the brand.

Examining the third hypothesis, self-image congruence was not found to be significantly higher for conspicuous products rather than inconspicuous products. In fact, evidence suggests the opposite: inconspicuous products register a higher self-image congruence, which is significantly different from the one of conspicuous products. These findings contradict Onkvisit and Shaw (1987). It was assumed people try to match their image with the image of that brand's typical user as a signaling method for other people. It seems the opposite is true.

H4a and H4b tested the impact of product usage type. Relationship between ideal self-image congruence and brand preference was found to be stronger for conspicuous products as compared to inconspicuous products. Partial evidence also suggests that relationship between actual self-congruence and brand preference is stronger for inconspicuous products when compared to conspicuous products (correlations were not significantly different, but regression beta coefficients showed the hypothesized stronger relation). These findings contradict Dolich (1969), who found no support of the assumed relations; Ross (1971), who found actual self-image to explain more variance in both conspicuous and inconspicuous consumption; Hong & Zinkhan (1995), who found ideal

self-congruity to be a better predictor for brand preference than actual self-congruity with both product classes used. They are also partially aligned with Graeff (1996), who had evidence only for the relation between ideal self-image congruence and conspicuous consumption; and are completely aligned with Khan & Bozzo (2012), and Upamannyu, Mathur & Bhakar (2014). When consumption of a product takes place mainly in public, the consumer will be more concerned of others' responses. Meaning, ideal self-concept, the image an individual wants others to have of him, is more significant than actual self-concept. Conversely, when a product is consumed inconspicuously (in private), he/she will not think of the image he projects towards others.

H5a and H5b tested the impact of country development level. Self-image congruence was found to be significantly different for the two types of countries. Also, evidence partially supports the assumption that the relationship between self-image congruence and brand preference in a developing country is significantly different than the one in a developed country (correlations were not significantly different, but regression beta coefficients were different for the two groups). These findings contradict Assael (2004), who talks about similar patterns in consumer behavior across countries and are partially aligned with De Mooij (2003), who says there might be significant differences, but for certain products only. Consumers in developing countries tend to be less individualistic than in developed ones. They care more for a larger local community, and like to be identified as part of it. This might account for the significant differences in self-image congruence.

4.2 Contribution for science

Even though products have almost the same properties, people choose one and not the other. Identifying the reasons for a particular consumer behavior is one of the main tasks for marketing. The consumer wants a product that gives him a feeling that it was made exclusively for him, that it matches his personality, and that it responds to his needs.

The knowledge generated from the self-image congruence research contributes to consumer attitude modeling and consumer decision-making research. Self-image congruence concept is an integral part of attitude research and should be considered as such. Researchers in this field are challenged to develop attitude theories that integrate the social cognitive dynamics involved in explaining, describing, and predicting consumption patterns.

The current research offers a theoretical account and empirical evidence for the importance of the actual and ideal self-image congruence in relation to brand preference and sheds some light on how to accomplish the challenging task of understanding consumer behavior through this perspective.

4.3 Practical implications.

Findings broadly apply to managers in retail and fashion industries. Marketers are under pressure to understand consumers' experiences and the resulting influence on product evaluations. The results show actual and ideal self-image congruence play important roles in determining brand preference.

Congruity of self-image and brand image offers a significant perspective on the understanding of consumer decision making. Consumers may decide not to buy a product or not to shop at a particular store if they feel that these actions are not consistent with their own perceptions of themselves. The results of this study will help marketing managers understand about the self-image congruence of their consumer. They can later use this insight for improving their marketing and promotional activities. According to research, if marketers are planning a communications strategy, they should give more importance to the ideal or actual self-congruence of their target market, depending on what good is being advertised.

The present findings imply that it is useful and valid to represent the consumer's self, your brand's self and your competitors' brands in one network, and that the closeness of the self to a brand will predict preference. Managers can do this in order to understand the effect of new product introductions, new packaging or new communications. Marketers can track the distance between their brand and the self and see how this is altered by new initiatives. They can assess how their brand stands in relation to (congruence) individual consumers, and where other brands may be doing a better job at this.

4.4 Limitations of the research

As any other study, the present research has some limitations that readers have to take into account when they consider the findings.

- Due to budget and time constraints, the sample size consisted of 208 respondents. Further research could be conducted on a larger sample, which will increase the study's robustness.

- Clothing brands were taken as conspicuous products and toothpaste brands were taken as inconspicuous products. Further research could choose other types of goods that are considered highly visible/private in consumption.

- The solely use of students may have increased the sample's homogeneity of perceptions. This might not happen if a representative sample would be used.

- Moldova was analyzed as developing country and Portugal – as a developed one. As self-image congruence has not been extensively analyzed over different types of countries, future studies could research other states, to see if the results can be replicated.

- Some respondents could guess what answers are expected to be found in their forms by looking at how the questions are framed in the survey and tick those particular answers, and not their own.

- Brand knowledge could be a potential mediator in the relationship between brand preference and self-image congruence. Due to the cross country comparison, 2 brands from each category were chosen, as to be well-known in both countries. A possible interference with the study's results could be brand knowledge. It is possible that some of the respondents did not know anything about the brands they were asked.

- Brand involvement has also been identified as a potential factor that influences consumers' purchase decisions. Although buying clothes is a high-involvement situation, there might exist different degrees of involvement with different brands, which may result in various attitudes. Future research should include brand involvement.

- This study measured self-congruity directly, using the global measurement method developed by Sirgy et. al. (1997). However, there has been a considerable debate about whether to use the direct score formula (Sirgy's instrument) or gap score formula (Malhotra's instrument) in measuring self-congruity. Future studies could measure self-congruity using both the direct score and gap score formulas in order to compare the results.

- Some researchers argue that expert customers are different from novice customers in the way their self-images relate to their satisfaction judgments. It may be that experts may

not always feel self-conscious about using some brands as they may be affected by other functional attributes of the brand such as comfort or utility. A study done recently (Jamal and Al-Marri, 2007) concluded that experts value functional attributes more than non-functional attributes such as brand name, price and sales person's opinions. The current research did not divide the sample into sub-groups according to their expertise in the analyzed brands. Further research could employ this, to test if the results of previous studies can be confirmed.

- Finally, we recognize that there are other unexplored factors influencing brand preference, such as personality characteristics, social contexts, and peer pressure. Further research could offer a more complex understanding by including the examination of these variables as well.

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Appendix

Appendix 1. Questions

HOW TO COMPLETE THIS QUESTIONNAIRE

This questionnaire has the objective of collecting information about the European consumer, for a Master Thesis made at Universidade Fernando Pessoa.

The information is **confidential**, your answers will be treated impersonally at group level.

It will only take about **ten minutes** to answer the questions.

Your response is **very important** for this research. Please respond sincerely.

Thank you in advance for choosing to help this research.

This questionnaire is made up of three sections. The first and second section is about your relation toward several brands of clothes and toothpaste. The third section asks questions about you, which will help us to classify the information you have given us.

Please answer all the questions by choosing a number on the scale where:

7 = totally agree 4 = neither agree nor disagree 1 = totally disagree

Clothing brands section

1. The typical person who uses this brand is very much like me.

[Q1M] Mango 1 2 3 4 5 6 7

[Q1B] Benetton 1 2 3 4 5 6 7

2. Having this brand is consistent with how I see myself.

[Q2M] Mango 1 2 3 4 5 6 7

[Q2B] Benetton 1 2 3 4 5 6 7

3. The image of the typical customer of this brand is similar with how I see myself.

[Q3M] Mango 1 2 3 4 5 6 7

[Q3B] Benetton 1 2 3 4 5 6 7

4. The typical person who uses this brand is very much like the person I would like to become.

[Q4M] Mango 1 2 3 4 5 6 7

[Q4B] Benetton 1 2 3 4 5 6 7

5. Having this brand is consistent with how I would like see myself.

[Q5M] Mango 1 2 3 4 5 6 7

[Q5B] Benetton 1 2 3 4 5 6 7

6. The image of the typical customer of this brand is similar with how I would like to see myself.

[Q6M] Mango 1 2 3 4 5 6 7

[Q6B] Benetton 1 2 3 4 5 6 7

7. I like this brand better than any other brand.

[Q7M] Mango 1 2 3 4 5 6 7

[Q7B] Benetton 1 2 3 4 5 6 7

8. This brand is my preferred brand over all other brands.

[Q8M] Mango 1 2 3 4 5 6 7

[Q8B] Benetton 1 2 3 4 5 6 7

9. I would be inclined to buy this brand over any other brand.

[Q9M] Mango 1 2 3 4 5 6 7

[Q9B] Benetton 1 2 3 4 5 6 7

10. I would use this brand more than I would use any other brand.

[Q10M] Mango 1 2 3 4 5 6 7

[Q10B] Benetton 1 2 3 4 5 6 7

Toothpaste brands section

1. The typical person who uses this brand is very much like me.

[Q1S] Sensodyne 1 2 3 4 5 6 7

[Q1C] Colgate 1 2 3 4 5 6 7

2. Having this brand is consistent with how I see myself.

[Q2S] Sensodyne 1 2 3 4 5 6 7

[Q2C] Colgate 1 2 3 4 5 6 7

3. The image of the typical customer of this brand is similar with how I see myself.

[Q3S] Sensodyne 1 2 3 4 5 6 7

[Q3C] Colgate 1 2 3 4 5 6 7

4. The typical person who uses this brand is very much like the person I would like to become.

[Q4S] Sensodyne 1 2 3 4 5 6 7

[Q4C] Colgate 1 2 3 4 5 6 7

5. Having this brand is consistent with how I would like see myself.

[Q5S] Sensodyne 1 2 3 4 5 6 7

[Q5C] Colgate 1 2 3 4 5 6 7

6. The image of the typical customer of this brand is similar with how I would like to see myself.

[Q6S] Sensodyne 1 2 3 4 5 6 7

[Q6C] Colgate 1 2 3 4 5 6 7

7. I like this brand better than any other brand.

[Q7S] Sensodyne 1 2 3 4 5 6 7

[Q7C] Colgate 1 2 3 4 5 6 7

8. This brand is my preferred brand over all other brands.

[Q8S] Sensodyne 1 2 3 4 5 6 7

[Q8C] Colgate 1 2 3 4 5 6 7

9. I would be inclined to buy this brand over any other brand.

[Q9S] Sensodyne 1 2 3 4 5 6 7

[Q9C] Colgate 1 2 3 4 5 6 7

10. I would use this brand more than I would use any other brand.

[Q10S] Sensodyne 1 2 3 4 5 6 7

[Q10C] Colgate 1 2 3 4 5 6 7

Personal information section:

[Age] 1. Age: 18-25 26-35 36-45 >45

[Sex] 2. Sex: Male Female

[Student] 3. Are you a student? Yes No

[Family] 4. How many members are there in your family?

1 2 3 4 5 >5

[Income] 5. What is your family's net monthly income?

<500€ 501-1000€ 1001-1500€ 1501-2000€ >2000€

Appendix 2. Research proposal for Ethics Commission of Universidade Fernando Pessoa

POSTICA DORU

e-mail: 29200@ufp.edu.pt

Enrolled in MA in Business Sciences

Universidade Fernando Pessoa

1. The title of the project.

Master Thesis: "Connection between self-image congruence and brand preference and the role of product usage and type of country development"

2. The objectives of the project.

- Investigate the relationship between the self-congruence and brand preference;
- Check the difference in actual self-congruence and ideal self-congruence;
- See if type of product usage (conspicuous or inconspicuous) moderates this relationship in a significant way;
- Check if type of country development (developed or developing) moderates this relationship in a significant way.

3. Information on the sample.

A sample of 103 students from Moldova and 31 Erasmus students has already been gathered through the administration of an online questionnaire. Given the purpose of our study to do a cross-country comparison, a sample of 100-150 Portuguese students is also needed.

4. Information on methodology and instruments.

The master thesis analyzes clothing brands as goods consumed publicly and toothpaste brands as goods consumed privately, with 2 brands of each type included in the questionnaire.

The constructs of actual self-congruence and ideal self-congruence were measured on 3-items scale for each. Whereas the construct 'brand preference' was measured on 4-item scale adopted by Sirgy et al. (1997). Demographic information is also collected, for

grouping the respondents by different characteristics. All items used for this study were measured on 7-point Likert scale from strongly disagree (1) to strongly agree (7).

The full questionnaire can be seen in Appendix 1, and the online version that is to be administered to the students can be found at https://qtrial2013.qualtrics.com/SE/?SID=SV_9YMHacksTCJ1ywR

5. Information on procedures.

The intention is to distribute the online questionnaire through the database of students registered at Fernando Pessoa. The information will remain confident and will be aggregated into a data set.