
Advertisements: The Congruity Effect with the Communion-Self and Pursuit-Self

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Abstract:

Purpose: The study aims to present how the self-congruity mechanism is responsible for advertising evaluation processes which result from the similarity of the content in the advertisement to one's own self and goals. The importance of different content in advertisements has been the subject of numerous studies. Some of these studies have provided support for the importance of communion in the effectiveness of marketing, while others have omitted the role of agency. It is proposed that this inconsistency can be explained by taking into account the fact that people evaluate products in advertisements through self-congruity with their own communion and goals.

Design/Research questions: Two questions are answered in the article: 1) What personal characteristics are related to attitudes toward agentic and communal advertisements? 2) Which mechanism mediates between these personal characteristics and attitudes toward agentic and communal advertisements?

Findings: The set of three studies (N = 136, N = 163, N = 134) showed that experimental advertisements were perceived as highly agentic or highly communal. Furthermore, the experiment (N= 354) showed that the agentic advertisement influenced stronger relations between a recipient's goal and attitudes. Additionally, the communal advertisement influenced stronger relations between recipient's communion and attitudes. In both conditions, the self-congruity mechanism mediated these relations.

Practical recommendations: The study shows that the valuation of products is consistent with fundamental dimensions of human life, namely pursuing personal goals and initiating and maintaining social relationships.

Originality: The research is an attempt to fill the gap in the literature by contributing to measuring the self-congruity mechanism between personal dispositions and the content in product advertising. Moreover, the form of the influence of experimental advertisements on a

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series of measurements, verified using the SEM-PLS modeling technique, is a novelty in the field of self-congruity research and is the basis for drawing cause-and-effect conclusions. Despite the declarative measurements, the nature of the experiment allows for conclusions about the influence of its conditions on different patterns of relations and intensity of crucial measurements.

Keywords: Communion, agency, advertising effectiveness, self-congruity, PLS-SEM.

JEL classification: M31, M37, Y8.

Paper type: Research article.

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1. Introduction

1.2 Communion and Agency in General

Research on social cognition shows that communal and agentic content plays a different role in managing behavior (Abele and Wojciszke, 2014). It turns out that the communal content (e.g., warm, empathic, fair, truthful) has greater importance for people's behavior than the agentic content (e.g., intelligent, energetic, smart, effective), but sometimes this pattern is inverted. Recent studies have shown that communion plays a more important role than agency in forming impressions of others (Brambilla *et al.*, 2011).

A communal person is more liked than an agentic person (Wojciszke *et al.*, 2009), and people discern and process communal words faster than agentic ones (Abele and Bruckmüller, 2011). Communion has higher availability in the human mind and people are more interested in that content because it is crucial for them when they formulate impressions of real and fictitious people (Wojciszke *et al.*, 1998). Not only do people describe others more in a communal manner, but they also mention communion earlier than agency (Abele and Bruckmüller, 2011). This is often called a communion-over-agency effect.

Nevertheless, sometimes agency has greater importance than communion. Such a pattern is called as an agency-over-communion effect (Abele and Bruckmüller, 2011; Wojciszke *et al.*, 1998).

It appears when people are goal-oriented and then they assign greater importance to agency (Abele, 2003; Abele and Wojciszke, 2007). For example, when personal

outcomes depend on someone else's behavior, then his/her agency is more important than communion (Roczniewska and Kolańczyk, 2014; Wojciszke and Abele, 2008).

This pattern is pronounced in business-oriented organizations where the employees' bonuses, their goals, and results depend on the management skills of their superiors. Therefore, for the employees of such companies, their leaders' agency is more valued than their communion, which is called a relation of interdependence (Wojciszke and Abele, 2008). Abele and Wojciszke (2007) also confirmed that agency is more important in a close friendship than in a distant one, and this effect is mediated by the perceived outcome dependency.

1.2 Communion and Agency in a Consumer Behavior

The aforementioned agency and communion content is an object of studies on advertisement effectiveness and consumer behavior (Howle *et al.*, 2017; Infanger and Sczesny, 2015) due to the fact that people are able to attribute mental states and traits to non-social objects (Ally and Oh, 2019; Guthrie, 1993; Kervyn *et al.*, 2012; Laksmidewi *et al.*, 2017; Windhager *et al.*, 2008).

The socio-cognitive potential of agentic and communal content provides an opportunity to test their effectiveness in marketing communication (MacKenzie *et al.*, 1986) with well-established theoretical frameworks (Abele and Wojciszke, 2014; Cuddy, Fiske, and Glick, 2007; Kervyn *et al.*, 2012; Kurt and Frimer, 2015; Sirgy, 1985; Sirgy, Johar, Samli, and Claiborne, 1991).

To date, researchers have indicated the communion-over-agency effect, but this pattern seemed to be rather different in the past. Jorgeson (1981) showed that the dominant content in goods advertisements in a women-targeted magazine significantly changed. His analysis of 5,486 full-page advertisements from *Ladies Home Magazine* revealed that between 1910 and 1919 communal content dominated, but between 1970 and 1979 the agentic one was the most common.

Another study in the area of advertising effectiveness has shown that a communal (vs agentic) endorser in an advertisement causes greater liking among the recipients, which increases positive attitudes toward both the advertisement and the brand (Infanger and Sczesny, 2015).

These results persist irrespective of the endorser's and participant's gender, which is not in line with the results showing that males respond more favorably to agentic than communal content, and that females similarly respond to both types of content (Hupfer, 2006; Mayers-Levy, 1988; Mayers-Levy and Mashewaran, 1991). These gender differences may result from changes in the dominant values in the population (Sendén *et al.*, 2019) or changes in socialization (Helgeson, 1994). Correspondingly, the changes in socialization may entail changes in attitudes toward agentic and communal content in advertising (Jorgeson, 1981).

The communal advertisements may also be forming positive attitudes toward offered sports services and the sense of greater self-efficacy, which in turn leads to the intention to use them (Howle *et al.*, 2017). This pattern persists irrespective of the experimentally induced prime (an agentic or communal writing task). These results are also incoherent with studies showing the action-oriented people are more prone to follow their goals and intentions (Ajzen, 1985; Ajzen and Kruglanski, 2019; Dufner, Leising, and Gebauer, 2016; Gollwitzer and Sheeran, 2006; Hryniewicz and Borchet, 2019; Kuhl, 2000; Roczniowska and Kolańczyk, 2014).

Some evidence supports the conclusion that the liking, favorable attitudes, and self-efficacy caused by an advertisement are associated with greater effectiveness of the advertisements saturated with communal content because people are inclined to expect communion from friends and strangers (Abele and Hauke, 2019; Abele and Wojciszke, 2007; De Bruin and Van Lange, 1999, 2000; Hauke and Abele, 2019). This could be the reason why communal advertisements are usually evaluated higher. However, is the content nested in the advertisement the only reason for its effectiveness?

The role of agency and communion in advertising becomes a little brighter when personal characteristics are considered. A recent study showed that the recipient's communal traits correlate with positive attitudes toward advertisements that express communal traits (Hryniewicz, 2020b), but this study also showed no such correlations between the recipient's agency and attitudes toward agentic advertisements. Thus, there are two unsolved problems regarding agentic and communal content in advertisements.

Problem 1. What personal characteristics are related to attitudes toward agentic and communal advertisements?

Problem 2. Which psychological mechanism mediates between personal characteristics and attitudes toward agentic and communal advertisements?

The consumer goal, rather than the agency, seems to be an interesting personal variable which accurately predicts attitudes toward the advertised product. A vast body of literature shows that the goal influences motivation, intention, attitudes and direct action (Ajzen, 1985; Goschke and Kuhl, 1993; Kazén *et al.*, 2008; 2014; Kuhl, 2000; Kuhl *et al.*, 2020b), as well as influences the consumer behavior (Bagozzi and Dholakia, 1999; Gollwitzer and Sheeran, 2006; Houston and Walker, 1996; Hryniewicz, 2020a).

It is difficult to expect assigning a positive value to a well-equipped city bike if a person is not able to or does not want to ride it, and it is quite clear that a goal-oriented person will express higher positive attitudes when the product is in line with their goals (Hryniewicz, 2020a; Wojciszke and Abele, 2008).

There is a certain gap in the literature on agentic and communal content in advertisements. In the marketing literature, there are pieces of evidence presenting the communion-over-agency effect (Howle *et al.*, 2017; Hryniewicz, 2020a; 2020b; Infanger and Sczesny, 2015; Kurt and Frimer, 2015). However, little is known about why the inverted effect appears (Jorgeson, 1981).

In this article, we relate the personal communal characteristics and goals to solve problem no. 1 and add new insights to the discussion about the agentic and communal content in social cognition. To solve problem no. 2, we introduce the self-congruity theory (Grzeskowiak and Sirgy, 2007; Sirgy, 1985; 2015) to better understand the processes of evaluating an advertisement of a product related to one's relative constant self-concept (Epstein, 1973; Kuhl, 2000; Sirgy, 2015).

Based on the earlier work, we lay the ground for a hypothesis related to positive attitudes toward advertisements imbued with agentic or communal content, predicted by the personal characteristics, and mediated by the self-congruity effect. This paper elaborates on the nature of agentic and communal content in the advertisement. Study limitations and directions for future research are also mentioned.

2. Background

2.1 Communion and Agency Dimensions Providing the Dual Perspective on Human Life

Bakan (1966) was among the first researchers who wrote about a human being in the context of agency and communion. According to his dual vision of human life, every person is a pursuer of his or her goals (she or he is agentic), but at the same time, everyone is a member of a community and is involved in various social relations (he or she is communal).

Currently, agency and communion are known as the Big Two (Abele and Wojciszke, 2014), which are theoretical concepts used to explain human behavior. Researchers agree that the dimension of the communion content refers to the functioning in social relations, and the dimension of the agency content refers to the implementation of tasks and achieving goals (Abele and Wojciszke, 2014; Cuddy *et al.*, 2007; Kervyn *et al.*, 2012). The former one contains such characteristics as warm, nice, helpful, cooperative, trustworthy, etc., and the latter one refers to features such as efficient, competent, active, persevering, energetic, etc.

Agency and communion are the content of social reality which have a certain adaptive value for the people (Lorenz, 1966; Peeters, 2008). Abele and Wojciszke (2014) claim that communal traits in other people are beneficial for the observer because they inform him or her about the intentions (good or bad) of the observed person (Cuddy *et al.*, 2007; Fiske *et al.*, 2007).

The knowledge that another person is communal, for example, is warm and moral, allows the observer to infer their good intentions.

On the other hand, agentic traits are beneficial for the person pursuing their goal because they allow the goal owner to achieve it (Abele and Wojciszke, 2014; Helgeson, 1994). This distinction is also reflected in the hemispheric laterality.

Agency-related stimuli are associated with left hemisphere superiority (planning and linear thinking), whereas communion-related stimuli are associated with right hemisphere superiority (holistic and intuitive processing) (Kuhl and Kazén, 2008). Nevertheless, how can agency and communion be evaluated in the consumer context? Is this dualism in social cognition somehow related to the consumer's self?

2.2 Self-Congruity as a Mediator between the Marketing Content and the Self

Sirgy (1985) claims that products and services are perceived to possess characteristics similar to those of people. Self-congruity models are based on the notion of cognitive matching between value-expressive characteristics of the marketing content and the consumer's self-concept (Aguirre-Rodriguez *et al.*, 2012; Grzeskowiak and Sirgy, 2007; Kressmann *et al.*, 2006). These models are designed to predict variables related to consumer behavior, such as attitudes, purchase intention, and brand loyalty (Sirgy, Johar, Samli, and Claiborne, 1991).

Therefore, it seems important to fully understand the purchasing behavior in a situation where consumers share certain similarities with the product. The aforementioned similarity can be seen as a peculiar coincidence that combines convictions about oneself with the symbolism present in the promotion of goods and services (Quester *et al.*, 2000).

In his theory of convergence between the image of a product and the consumer's self-image, Sirgy (1982) explains that an image of a product usually relates to self-concept which contains the same image in the recipient's mind. For example, an advertised product with the "friendly" image can relate to the concept of the recipient's own self including the content of "being friendly".

The resulting belief can be either positive or negative: "I am a friendly person" or "I am not a friendly person". Sirgy claims that product valuation is influenced by self-image. If the product is a car and its main image in the advertisement refers to "friendly", the value assigned to the image of the "friendly car" depends on the nature of the self-image on the dimension containing "friendly" in the recipient. If "friendly" has a highly positive (negative) value in the image of the recipient, the highly positive (negative) value is projected onto the advertised car.

Recent studies showed that the personal goals are related to attitudes toward specific behaviors and intention to perform them (Ajzen and Kruglanski, 2019; Kuhl, 2000,

2001; Roczniowska and Kolańczyk, 2014). Thus, self-concept is also characterized by goals, and the product is evaluated through these goals. Such functional congruity between the person and the goal (Baig *et al.*, 2015; Johar and Sirgy, 2015) can be defined as the fulfillment of an individual expectation or perception utilizing a specific product. If the product meets these expectations, then positive attitudes appear (Sirgy *et al.*, 1991). For example, a person who wants to move quickly and efficiently around the city will positively evaluate cars presented as a combination of perfect technology and design because these features are congruent with his/her goals.

Sirgy (1982) indicates that there are two motives related to the self-concept that can explain the self-congruity mechanism: self-esteem and self-consistency (Epstein, 1973). The attitudes toward a given product or brand, as well as the desire to buy, are a result of the motivational state stemming from the need to strengthen one's value and maintain behavior consistency (Epstein, 1973; Sirgy, 1985).

Research indicates that the self-congruity effect is associated with many variables important in marketing, such as loyalty to the brand (Carrim, 2018; Kressmann *et al.*, 2006; Wijaya, 2017), the purchase intention (Quester *et al.*, 2000; Sirgy, 1985; Yu, Lin, and Chen, 2013), as well as the attitudes toward the product, the advertisement, and the brand (Do, Ko, and Woodside, 2015; Hryniewicz, 2020b, 2020a; Hughes, 1976; Jeong and Jang, 2016; Liu, Li, Mizerski, and Soh, 2012).

3. Current Study

By equivalently transposing the predictions of the self-congruity theory into the universe of communal and agentic advertisement processing, we can formulate testable predictions about the emergence of positive attitudes resulting from this effect. An advertisement saturated with agentic and/or communal content can be evaluated from the perspective of the recipient's self-concepts. Therefore, the following hypotheses were proposed:

(H1) Higher communion-self influences positive attitudes toward a communal advertisement. In other words, the more the recipient identifies the self with communion, the more positive will be his/her attitudes toward an advertisement which is saturated with communal content.

By contrast, an advertisement saturated with more agentic content can activate content which is positively evaluated in goal pursuing. That leads to Hypothesis 2:

(H2) Higher pursuit-self toward a specific goal influences more positive attitudes toward an agentic advertisement. The more the recipients identify the self with pursuing a specific goal, the more positive attitudes they assign to an agentic advertisement.

Finally, we wanted to test a model that would consider both the abovementioned relations in the context of self-congruity. Therefore, the following hypothesis was formulated:

(H3) *Self-congruity mediates the relation between communion-self and attitudes in a communion advertisement, and the relation between pursuit-self and attitudes in an agentic advertisement.*

3.1 Pilot Study

In cooperation with an artist, two animated advertisements for the JANZOF carrots with sound and a narrator have been created. We chose the carrot product because in the former study (Hryniewicz, 2020b) it turned out that a carrot is neutral in terms of agency and communion. We gave the product human characteristics (Laksmidewi *et al.*, 2017). Such anthropomorphization allowed us to imbue the advertisement with agentic and communal content.

The advertisements lasted around 1 minute. They were narrated by a female voice and accompanied with music (soft and warm in the communal condition vs dynamic and rising in the agentic one). The samples from the advertisements are presented in Figure 1.

Figure 1. *Screenshots of the agentic (ad1) and communal (ad2) advertisement*



Note: Top panel: the agentic version of the advertisement; bottom panel: the communal version of the advertisement

Source: Own elaboration.

3.2 Method

All participants were volunteers. In accordance with APA 3.10 standard (American Psychological Association, 2010), informed consent was obtained from all the participants before they started the survey.

Participants and procedure:

We presented the animated advertisements in three online surveys conducted on Polish adults. The participants of these non-overlapping subsamples rated agency and communion of 1) the perceived product (N = 136), 2) the advertisement (N = 163), and 3) the brand (N = 134), according to the study condition. All three subsamples consisted of 242 females and 191 males in total.

The study participants were $M = 22.16$; $SD = 3.68$ years old. The vast majority of the participants (N = 246) had higher education. 179 participants had secondary education, whereas 8 people had primary education. In each of the 3 subsamples, the participants were randomly assigned to the condition of agentic or communal advertisement. Then, the participants were asked to complete a brief survey. Specifically, participants responded to a researcher-designed questionnaire on their demographic data and agency, communion, and anthropomorphization measures.

3.3 Measures

Agency and Communion:

The participants rated the product, the advertisement, and the brand on the adjective Scale of Agency (10 items: efficient, confident, competent, never gives up, smart, leader type, effective, dominant, intelligent, copes well under pressure), and the Scale of Communion (10 items: trustworthy, caring, acts fairly, kind, just, cordial, considerate, empathic, reliable, warm). That scale is well validated and has been used in a few recent studies (e.g., Abele *et al.*, 2016a; Abele and Hauke, 2019; Bocian *et al.*, 2018).

We adapted it for the assessment of the content of the advertisement. Ratings were recorded on a Likert scale (1 = 'Definitely not characterized with' to 5 = 'Definitely characterized with'). The reliability of the measure for agency and communion was $\alpha = .90$ and $\alpha = .92$, respectively,

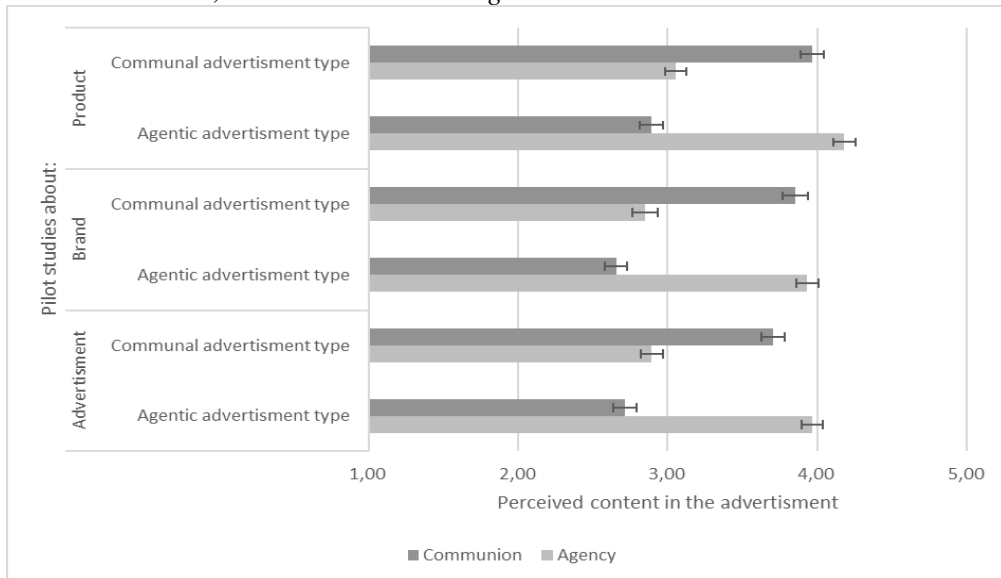
Anthropomorphization:

The participants were also asked to rate the level of the product anthropomorphization on a Likert scale (1 = 'Definitely not characterized with' to 5 = 'Definitely characterized with'). This measure was based on 4 researcher-designed items: The product behaved like a human; The product resembled a human; The product was very human; The product had human characteristics. The reliability of the measure was $\alpha = .70$.

4. Results

A series of ANOVA tests made for the product ratings showed that the respondents were more likely to attribute agentic traits than communal traits to the agentic carrots $F(1,134) = 116.94, p < .001; \eta^2 = .47$. In contrast, the communal carrot was higher rated as communal than agentic $F(1,134) = 94.46, p < .001, \eta^2 = .41$. The analysis made for the advertisement and the brand showed a similar pattern of results: $F(1,161) = 111.03, p < .001; \eta^2 = .41, F(1,161) = 80.02, p < .001, \eta^2 = .33$, respectively. The results are shown in Figure 2. In terms of product anthropomorphization, ANOVA showed that, in both the agentic and communal advertisements, the level of product anthropomorphization was similar: $M = 3.98; S.E. = .08$ and $M = 4.15; S.E. = .08, F(1,134) = 2.42, p > .05; \eta^2 = .02$. The results were satisfying. The video advertisements enabled conducting the main study.

Figure 2. The ratings of perceived agentic and communal features of the product, the advertisement, and the brand in the agentic and communal advertisements



Note: The error bars show the standard error bars.

Source: Own elaboration.

4.1 Main Study

Method, Participants:

354 participants were involved in this study (197 of them were female). They were $M = 29.85; SD = 3.00$ years old and earned $M = 2,583.50; SD = 1,255.01$ (PLN). 91 participants had a university degree, while 263 participants completed secondary education. 179 participants were in a formal relationship; 175 participants were single. All the participants lived in Poland, 132 of them lived in a city, 89 participants declared living in a town, and 133 lived in the countryside. 180

participants were assigned to the agentic advertisement condition, whereas 174 participants were assigned to the communal condition.

Procedure:

Prior to the study, the participants gave their informed consent to take part in the study, in accordance with the APA 3.10 standard (American Psychological Association, 2010). The research was carried out using the Lime Survey program (Schmitz, 2012) on Facebook groups which united traders (cars, electronics, home appliances, clothing, apartments). The respondents could take part in a nine-prize lottery as a reward for participation (the average value of the prizes was about \$30). All the items within each survey step were randomized.

In the first step of the survey, after the participants gave their informed consent to take part in the study, they provided their demographics. In the second step, they attributed the traits of the adjective Scale of Orientation toward Agency and Communion (Wojciszke and Szlendak, 2010) and evaluated their pursue toward carrot eating.

These three variables served as independent variables. In the third step, the participants were randomly assigned to one of the two advertising conditions, and the respondents were acquainted with the animated advertisement of the JANZOF carrots. In the fourth step of the survey, the participants assessed their attitudes toward the presented version of the product (agentic or communal carrot).

The measure of attitudes was the measurement of the dependent variable. At the end of the survey, the participants described themselves on a 4-item self-congruity scale. That measure was the measurement of the mediator. Participation in the survey took about 25 minutes.

4.2 Measures

Agency and communion:

The participants assessed their communion and agency levels using the adjective Scale of Orientation toward Agency and Communion (Wojciszke and Szlendak, 2010). The scale measures personal orientation toward communion (focus on other people and interpersonal relations) and agency (focus on the self and own goals). This scale is similar to the one used in the pilot study, but it has five extra items added to each scale. Ratings whether the trait describes the participant were recorded on a Likert scale (from 1 = ‘Definitely not’ to 7 = ‘Definitely yes’).

The reliability of the measure for agency and communion was $\rho_A > .85$ and $\rho_A > .83$, respectively. Coefficient ρ_A is a Dijkstra consistent reliability coefficient estimated in consistent PLS-SEM procedure (Dijkstra and Henseler, 2015) which was used in this study.

Goal to eat carrots:

The participants declared their goal to eat carrots. This scale measures the pursuit-self. This scale comprised 6 items: 'In the near future, I want to eat more carrots'; 'One of my goals is to eat tasty carrots'; 'I am going to eat carrots more often'; 'I intend to eat carrots in various forms, e.g. juice, salad, cake, etc.'; 'I do not want to eat more carrots' (reversed scoring); 'Somehow I am not trying to eat more carrots' (reversed scoring). Ratings were recorded on a Likert scale (from 1 = 'It definitely doesn't describe me' to 5 = 'It definitely describes me'). The reliability of the measure for the goal to eat carrot was $\rho_A > .81$.

Marketing Effectiveness:

The participants assessed their attitudes toward the presented version of the product (i.e., carrot), the advertisement, and the brand on a five-degree Likert scale (1 = 'Definitely doesn't suit me' to 5 = 'Definitely suits me'). The attitudes were tested with nine items: 3 for the product ('I want to have this product'; 'I like the product very much'; 'I would buy a product like that'); 3 for the advertisement ('The advertisement sounds cool'; 'The product advertisement is catchy'; 'The advertisement is pleasing to the eye and ear'); 3 for the brand ('The producer can be trusted', 'The producer is likable', 'The producer really knows what he or she is doing').

We combined all items on one scale, because there was no theoretical reason to test 3 types of attitudes independently. The reliability of the measure for Marketing Effectiveness was $\rho_A > .90$.

Self-congruity:

The participants described themselves on a 4-item Self-congruity scale (Luna-corte, 2018; Sirgy et al., 1997): 'I completely identify with the product I saw' (actual-self); 'I identify with the people who have this kind of product' (social-self); 'Having this product is consistent with how I like to see myself' (ideal-self); 'The characteristics of this product correspond to how I like others to see me' (ideal social-self). Ratings were recorded on a Likert scale (from 1 = 'It definitely doesn't describe me' to 5 = 'It definitely describes me'). The reliability of the measure for Self-congruity was $\rho_A > .85$.

4.3 Data Analysis

The analysis was conducted on participants who passed the attention check. They had to click the right answer after the presentation of the advertisement. To assess the differences between groups (agentic vs communal advertisement) in terms of personal characteristics in relation to the Self-congruity and Marketing Effectiveness, the PLS-SEM was conducted in WarpPLS 7.0 software (Kock, 2010, 2020). In accordance with Dijkstra and Hensler (Dijkstra and Henseler, 2015), the Consistent PLS algorithm was selected to establish a reflective latent variables measurement model and path estimates in the proposed model.

5. Results and Discussion

The fit statistics and quality indices shown in Table 1 inform that the tested model had small collinearity within the path model (AVIF) and the variables measurement model (AFVIF) (Kock, 2015; Kock and Mayfield, 2015), and high predictive power (GoF) (Tenenhaus *et al.*, 2005).

The path signs (SPR) and path values (SSR) in the model were similar to the signs and values of the independent zero-order correlations between the tested variables (Pearl, 2009; Tenenhaus *et al.*, 2005). The analysis also displayed a good data fit to the measurement model of latent variables (SRMR, SMAR, χ^2).

Invariance analysis showed that the factor loadings were similar in both conditions ($t < 1.83$). These results are shown in Table 3. To check construct validity and discriminant validity, heterotrait-monotrait (HTMT) ratios were calculated (Henseler *et al.*, 2014).

Average Variance Extracted coefficients (Fornell and Larcker, 1981) and zero-order correlations were calculated. The obtained results, presented in Table 2, were far better than acceptable threshold levels (Hair *et al.*, 2012, 2018; Kock, 2020).

Table 1. Model Fit and Quality Indices

Statistics	Coefficient	
	AG	CM
AVIF	1.27	1.17
AFVIF	1.62	1.55
GoF	0.41	0.42
SPR	0.86	0.71
SSR	0.86	0.86
SRMR	0.11	0.11
SMAR	0.08	0.09
χ^2	56.53***	30.69***

Note: AVIF = Average Variance Inflation Factor (accepted if AVIF ≤ 5.00 , ideally AVIF ≤ 3.30); AFVIF = Average Full Variance Inflation Factor (accepted if AVIF ≤ 5.00 , ideally AVIF ≤ 3.30); GoF = Goodness of Fit (low if GoF ≥ 0.10 , moderate if GoF ≥ 0.25 , high if GoF ≥ 0.36); SPR = Simpson's Paradox Ratio (accepted if SPR ≥ 0.70 , ideally SPR = 1.00); SSR = Statistical Suppression Ratio (accepted if SSR ≥ 0.70 , ideally SSR = 1.00); SRMR = Standardized Root Mean Squared Residual (accepted if SRMR ≤ 0.10); SMAR = Standardized Mean Absolute Residual (accepted if SMAR ≤ 0.10); χ^2 = Chi Square; AG = Agentic condition; CM = Communal condition

Source: Own elaboration.

Table 2. Zero order correlations (top panel), htmt ratios (bottom panel), and average variance extracted (diagonal) between the tested variables

Condi tion	Measure	M	SD	1	2	3	4	5
AG	Self-congruity (1)	2.65	0.84	(0.76)	0.68***	0.16*	0.18*	0.54***
	Marketing effectiveness (2)	3.28	0.71	0.69***	(0.68)	0.02	0.11	0.42**
	Recipient's communion (3)	5.53	0.72	0.17***	0.14***	(0.60)	0.43***	0.18*
	Recipient's agency (4)	4.70	0.81	0.20***	0.17***	0.44***	(0.57)	0.11
	Goal to eat carrot (5)	2.82	0.90	0.55***	0.43***	0.19***	0.19***	(0.64)
CM	Self-congruity (1)	2.58	0.89	(0.80)	0.67***	0.41***	0.00	0.37***
	Marketing effectiveness (2)	2.96	0.82	0.68***	(0.74)	0.42***	0.16*	0.27***
	Recipient's communion (3)	5.43	0.71	0.42***	0.43***	(0.60)	0.22*	0.26***
	Recipient's agency (4)	4.82	0.80	0.20***	0.21***	0.35***	(0.53)	0.16*
	Goal to eat carrot (5)	2.67	0.93	0.37***	0.27***	0.26***	0.21***	(0.68)

Note: The bottom panel of the table presents the HTMT ratios (good if < 0.90, best if < 0.85) with one-tailed p values (good if < 0.05); The top panel of the table presents the zero-order correlations; square roots of average variances extracted (AVEs) are shown on diagonal line; AG = Agentic advertisement condition; CM = Communal advertisement condition; * p < 0.05, ** p < 0.01, *** p < 0.001

Source: Own elaboration.

Table 3. Invariance results

Measure	Item	Factor loadings		Invariance test	
		AG (a)	CM (b)	Absolute loading differences	t (a vs b)
Self-congruity	I completely identify with the product I saw.	0.71	0.79	0.08	0.91
	I identify with the people who have this kind of product.	0.78	0.80	0.02	0.16
	Having this product is consistent with how I like to see myself.	0.80	0.83	0.03	0.35
	The characteristics of this product correspond to how I like others to see me.	0.75	0.78	0.04	0.42
Marketing effectiveness	I want to have this product.	0.71	0.75	0.04	0.47
	I like the product very much.	0.76	0.83	0.07	0.76
	I would buy a product like that.	0.73	0.82	0.09	1.03
	The advertisement sounds cool.	0.73	0.76	0.02	0.26

	The product advertisement is catchy.	0.56	0.73	0.17	1.83†
	The advertisement is pleasing to the eye and ear.	0.65	0.74	0.09	0.93
	The producer can be trusted.	0.70	0.71	0.01	0.14
	The producer is likeable.	0.64	0.71	0.07	0.77
	The producer really knows what he or she is doing.	0.59	0.65	0.06	0.65
Recipient's communion	Communion1	0.61	0.68	0.07	0.75
	Communion2	0.58	0.59	0.02	0.19
	Communion3	0.56	0.51	0.05	0.57
	Communion4	0.64	0.65	0.02	0.19
	Communion5	0.28	0.37	0.09	0.88
	Communion6	0.65	0.62	0.02	0.26
	Communion7	0.62	0.69	0.07	0.75
	Communion8	0.56	0.54	0.02	0.19
	Communion9	0.61	0.57	0.04	0.43
	Communion10	0.67	0.67	0.01	0.07
	Communion11	0.63	0.72	0.09	0.96
	Communion12	0.56	0.43	0.13	1.35
	Communion13	0.66	0.61	0.05	0.48
	Communion14	0.55	0.59	0.03	0.35
	Communion15	0.68	0.63	0.06	0.59
Recipient's agency	Agency1	0.58	0.61	0.03	0.27
	Agency2	0.65	0.58	0.07	0.73
	Agency3	0.52	0.45	0.08	0.78
	Agency4	0.55	0.44	0.11	1.19
	Agency5	0.62	0.55	0.07	0.76
	Agency6	0.63	0.50	0.12	1.31
	Agency7	0.49	0.53	0.05	0.5
	Agency8	0.49	0.56	0.06	0.68
	Agency9	0.55	0.52	0.02	0.25
	Agency10	0.52	0.59	0.07	0.76
	Agency11	0.55	0.50	0.05	0.54
	Agency12	0.49	0.39	0.10	0.99
	Agency13	0.70	0.56	0.13	1.41
	Agency14	0.59	0.56	0.03	0.31
	Agency15	0.56	0.56	0.01	0.09
Goal to eat carrots	In the near future I want to eat more carrots.	0.71	0.77	0.06	0.69

One of my goals is to eat tasty carrots.	0.66	0.65	0.02	0.19
I am going to eat carrots more often.	0.78	0.77	0.01	0.09
I intend to eat carrots in various forms, e.g., juice, salad, cake etc.	0.58	0.65	0.08	0.82
I do not want to eat more carrots (R).	0.54	0.52	0.02	0.21
Somehow, I am not trying to eat more carrots (R).	0.57	0.66	0.08	0.90

Note: $t(a \text{ vs } b) = t$ student test for differences between experimental groups in terms of the factor loadings; AG = Agentic advertisement condition; CM = Communal advertisement condition; † < 0.10, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Own elaboration.

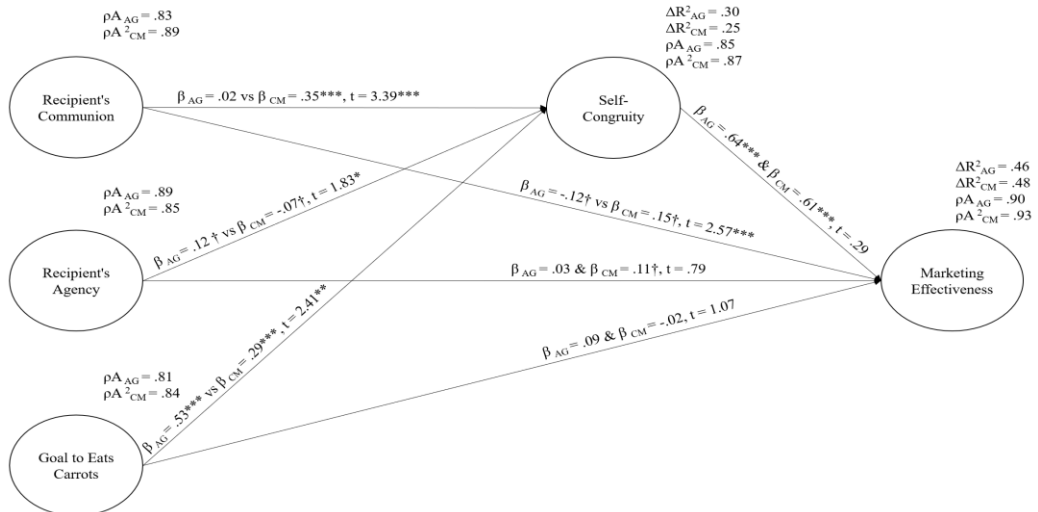
To verify direct relationships between the recipient's characteristics and the marketing effectiveness in two different groups (agentic vs communal advertisement), a multi-group analysis (MGA) was conducted (Kock, 2014; Rodríguez-Entrena *et al.*, 2016). The MGA aims to verify differences between groups in terms of the estimated path values. MGA results shown in Figure 3 inform that the path between the recipient's communion and self-congruity was stronger in the communal advertisement condition than in the agentic one. The results also showed that the path between the recipient's communion and the marketing effectiveness was stronger in the communal advertisement condition than in the agentic one.

Nevertheless, these path estimates, due to the mediation effect, were weak and close to insignificant. Data showed that the path between the recipient's goal to eat carrots and the marketing effectiveness was stronger in the agentic advertisement condition than in the communal one. MGA also indicated that the path between the recipient's agency and the marketing effectiveness was stronger in the agentic advertisement condition than in the communal one. Nevertheless, just as in the previous case, these path estimates were weak and close to insignificant.

To better understand the indirect relationships between the tested variables in both groups, we conducted an analysis where indirect effects were moderated by the advertisement conditions. Table 4 shows that the relationship between the recipient's communion and the marketing effectiveness was mediated by the self-congruity in the communal advertisement condition, but not in the agentic one.

The results showed that the relationship between the recipient's goal to eat carrots and the marketing effectiveness was mediated in both conditions, but this effect was significantly stronger in the agentic advertisement condition than in the communal one. The analysis also indicated that the relationship between the recipient's agency and the marketing effectiveness was mediated by the self-congruity in both conditions, and this effect was higher in the agentic advertisement condition than in the communal one. Nevertheless, these indirect effects estimates were weak and close to insignificant.

Figure 3. Results of the conducted PLS-SEM multi-group analysis



Note: ΔR² = adjusted R square; pA = Dijkstra's consistent reliability; β = standardized path coefficient; t = t Student statistic for between group differences; AG = agentic advertisement condition; CM = communal advertisement condition; † p < .10, * p < .05, ** p < .01, *** p < .001

Source: Own elaboration.

Table 4. Moderated mediation results

Indirect effects	AG (a)		CM (b)		Z (a vs b)
	β	s.e	β	s.e	
Recipient's communion □ Self-congruity □ Attitudes	0.01	0.05	0.23***	0.05	2.92*
Recipient's agency □ Self-congruity □ Attitudes	0.07 †	0.05	-0.08 †	0.05	2.02*
Recipient's goal to eat carrots □ Self-congruity □ Attitudes	0.34***	0.05	0.18***	0.05	2.11*

Note: Z (a vs b) = Z statistic test for differences between experimental groups in term of the indirect effect; AG = Agentic advertisement condition; CM = Communal advertisement condition; † < 0,10, * p < 0.05, ** p < 0.01, *** p < 0.001

Source: Own elaboration.

The advertisements used in the pilot study were characterized by desirable psychological properties. The communal advertisement was perceived more as communal than agentic. The opposite result pattern was observed among the participants in the agentic advertisement condition. We also noted that in both advertisement conditions the level of the product anthropomorphization was similar. Due to strong manipulation effectiveness, both JANZOF carrot advertisements used in the further investigation can be perceived as possessing high discriminatory properties.

In the main study, the analysis showed high construct reliability, internal validity (both high ρ_A and AVEs), and construct discriminant validity of the used measurements (low and significant HTMT ratios). Personal characteristics, and the marketing effectiveness, were invariant (similar factor loadings in both groups). These results indicate that the differences between experimental groups in terms of the intensity of path values can be attributed to the properties of the advertisements and error, rather than to the measurement properties of the variables (Jorg and Ringle, 2016).

The path model showed that in the communal advertisement condition recipient's communion was related to self-congruity more than in the agentic one. Nevertheless, in the agentic advertisement condition recipient's goal to eat carrots was related to self-congruity more than in the communal one.

In both conditions, self-congruity was related to marketing effectiveness similarly. Moderated mediation analysis showed that self-congruity mediated the relationship between recipient's communion (goal to carrot eating) and the marketing effectiveness more strongly in the communal (agentic) advertisement condition than in the agentic (communal) one. We do not mention results related to the recipient's agency and attitudes in both conditions because they were small and close to insignificant. We shall explain the weakness of those effects in the discussion section.

The importance of the agency and communion in an advertising context has been observed to differ. This study contributes to social cognition, self-congruity, and advertising effectiveness literature in several ways. In this contribution to the discussion about agency and communion in marketing, we solved two problems. Problem 1 was concerned with what personal characteristics are related to attitudes toward agentic and communal advertisements, while problem 2 was concerned with which psychological mechanism mediates between personal characteristics and attitudes toward agentic and communal advertisements.

We pointed out that the recipient's communion and goals predict attitudes toward these two types of advertisements, and self-congruity is the psychological mechanism that mediates between these personal characteristics and attitudes. More precisely, we confirmed H1 because, in the experiment results, we observed that the increased level of recipient's communion was related to increased attitudes in the communal advertisement condition. We also confirmed H2 because the increased level of the recipient's goal to eat carrots was related to increased attitudes in the agentic advertisement condition. In both conditions, the self-congruity mechanism mediated these relations, but the strength of this mediation was significantly stronger or weaker depending on the type of advertisement (communal vs agentic) and recipient characteristics (communion vs goal to eat carrots). Thus, H3 was also confirmed.

6. Conclusion

This study indicates specific self-images (i.e., communion-self and pursuit-self) which navigate a consumer to evaluate objects and people, and thus satisfy the psychological needs for achievement and affiliation (Bakan, 1966; Deci and Ryan, 2000; Koole *et al.*, 2018; Kuhl *et al.*, 2015; Ryan *et al.*, 2008). This distinction between self-image types is also consistent with the concept of self-congruity and functional-congruity (Johar and Sirgy, 2015; Kressmann *et al.*, 2006; Sirgy *et al.*, 1991). It is possible that the communal self evaluates products by self-congruity as a relatively constant self-image.

This conclusion is coherent with a small meta-analysis where the recipient's communal traits were correlated with positive attitudes towards different products that also express communal traits (Hryniewicz, 2020b). On the other hand, the pursuit-self evaluates product rather by a functional congruity because the agentic product offers some kind of functional support in achieving personal goals. This self-image is more variable because goals and intentions are changing over time (Ajzen and Kruglanski, 2019; Kuhl *et al.*, 2020a; Schwarzer, 2008).

An interesting result was observed in the communal advertisement condition. Beyond the relationship between the recipient's communion, self-congruity, and attitudes, there was a significant relationship between the recipient's goal and the aforementioned variables.

The relationships between the recipient's goal, self-congruity, and attitudes were significant in the communal condition, and this pattern of the results indicates that the communal product also has properties that are congruent with pursuit-self. This result shows that regardless of advertising creation, the product has constant functional nature in the human mind (Johar and Sirgy, 2015; Sirgy *et al.*, 1991).

The weak influence of personal agency raises the question of its underlying factors. It is suggested that agency may be multidimensional (Ybarra *et al.*, 2008). It concerns social cognition and thus many objects and people can be assessed as both more agentic and effective as well as less agentic and effective, too. Overall, a recipient's agency means as much as his or her generalized efficiency in performing actions in various areas of life (Helgeson, 1994) and opportunities to evaluate this dimension in the perspective of self and others (Abele *et al.*, 2016; Abele and Hauke, 2019; Chen *et al.*, 2019).

It is assumed that the agency dimension may specify how effectively someone pursues goals rather than what a person strives for. It is hard to expect a person to evaluate something or someone through their own effectiveness in goal achievement. This conclusion is coherent with the theory of the dual perspective of agency and communion (Abele and Wojciszke, 2014). It predicts that evaluation of others depends on personal goals (e.g., a relationship between student and his promoter).

It can suggest that the weak effects observed in our experiment were due to the assertiveness component in personal agency (Abele *et al.*, 2016; Abele and Hauke, 2019; Bocian *et al.*, 2018). Assertiveness and power have an influence on product involvement. A former study showed that the power motive influences purchase intention of expensive cars and clothes (Schmidt and Frieze, 1997). However, it is possible that agentic content is not related to simple attitudes toward advertisement, but to utilitarian attitudes, with the hedonic and utilitarian distinction, respectively (Roy and Ng, 2012; Scarpi, 2020).

It is assumed that communal content has universal and unambiguous meaning for people (Ybarra *et al.*, 2008), like the need for relatedness (Deci and Ryan, 2000; Schöler *et al.*, 2008). As mentioned in the introduction, this type of meaning in marketing content clearly relates to one of two general dimensions of human life which are to establish and maintain safe and satisfactory relationships with others (Abele and Wojciszke, 2014; Bakan, 1966). The intention to strive for different goals is the second general dimension of human life, but it is more specific (Ajzen, 1985; Ajzen and Kruglanski, 2019; Gollwitzer and Sheeran, 2006).

People may have different goals in their lives and their ways to accomplish them may change (Schwarzer, 2008). Goal-oriented recipients value marketing content only if it demonstrates agentic features which help them to achieve their goals, but communion-oriented ones value the product embedded in warm social relations (Abele and Wojciszke, 2014; Bakan, 1966). The study findings can help to develop cost- and content-effective communication procedures that can be applied in various fields (e.g., marketing, social campaigns or health promotion).

7. Limitations and Future Directions for Research

The study was not free of limitations. Primarily, the goal to eat carrots could have been measured within a broader context of pro-health behaviors. Even though a former study showed that carrots are neutral, neither communal nor agentic stimuli (Hryniewicz, 2020b), the participants could have associated eating them with a pro-healthy lifestyle. That might have led to an overestimation of their goal to eat carrots as this behavior might have been considered as something socially desirable (Latkin *et al.*, 2017).

Controlling habits related to a healthy lifestyle could be considered in the future. Another limitation is that the study does not take participant's gender into consideration. That could be very interesting and definitely is a direction for future studies because the results of the gender effect on agentic and communal advertisements reception are still ambiguous (Bakir and Palan, 2013; Hupfer, 2002; Infanger and Sczesny, 2015; Jorgeson, 1981).

Moreover, the gender effect on communal/agentic advertisement influence may vary due to the participant's age because the socialization process changes with time

(Jorgeson, 1981; Wojciszke and Szlendak, 2010; Zawadzka and Zdunek, 2015). Adolescents, youth, adults, and seniors may react differently to the agentic and/or communal advertisement content. Future studies could not only investigate the gender effects, but also other types of marketing communication. This study employed the animated video advertisement, whereas the former study involved a paper advertisement (Hryniewicz, 2020b).

Future studies may apply different types of advertisements, such as an audio version or augmented reality (Hanif *et al.*, 2018; Lewinski *et al.*, 2016). The type of advertisement may influence the tested relations due to the fact that advertisement effectiveness varies according to its modality (Hernández-Méndez and Muñoz-Leiva, 2015; Jacoby, 1989). Also, the advertisements could be presenting different types of products than a vegetable, that could have been perceived positively as something associated with a healthy lifestyle (Kreausukon *et al.*, 2012; Schwarzer, 2008).

Studying the effect of an advertisement that presents a negatively associated product could be interesting, e.g., a boycotted brand or an emerging technology (Bagloee *et al.*, 2016). Also, replicating the study in various cultural settings would be highly appreciated (Abele *et al.*, 2016; Sendén *et al.*, 2019; Ybarra *et al.*, 2008). The generalizability of the findings is subject to certain limitations and requires future research, specifically in an experimental model.

Further experiments should focus on the pre-test and post-test of the attitudes which were not controlled. It is unclear how experimental manipulation changes attitudes. Adding a control group would also be crucial, because natural relationships between personal characteristics and attitudes are unknown.

Further studies are necessary because a new contradiction has appeared. In the current study, the increased willingness to use a product (carrot) was related to the increased marketing effectiveness in the agentic advertisement condition.

Albeit, Hryniewicz and Grzegorzczuk showed in their second study (2020), that the increased willingness to use a technology product (autonomous car) was higher related to the increased technology acceptance in a communal experimental condition than in an agentic one. It seems that the type of product (generic vegetable vs new technology) interacts with communal and agentic content in the advertisement processing.

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