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Do followers buy products that influencers endorse online?

The effectiveness of the content value of the user-generated content of influencers on their followers' purchase intention. Taken into account the mediation effect of the PSR between the follower and influencer and the moderating role of the naïve theory of the follower.

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Abstract

The use of social media increased among followers, social media influencers, and brands using social media to promote their products. Social media influencers are an essential part of their followers' social lives and increasingly collaborate with brands to endorse products online.

The goal of the present study is to examine if there is a difference in content's effectiveness with an informative value and content with an entertainment value in persuading a follower to purchase products an influencer endorses online. Therefore, this study aims first to assess what the effect is of informative and entertaining content on the purchase intention of the follower mediated by the strength of the PSR between a follower and an influencer. Secondly, to find out if the naïve theory of followers moderates this effect and if a negative naïve theory will influence the purchase intention of a follower.

The research design of this study is quantitative and based on primary data. The data is collected via a survey and respondents have been recruited via a combination of convenience sampling and a snowball sampling method.

The outcomes of this study indicate that the entertaining value of the content of an influencer positively affects the strength of the PSR between the follower and the influencer. Subsequently, the informative value of the content and the strength of the PSR are positively related to the purchase intention of the follower. Furthermore, there is no difference between followers with a negative or positive naïve theory in establishing a PSR between a follower and an influencer or the follower's purchase intention.

This research adds to the existing knowledge on how to use user-generated content of influencers effectively and the knowledge that content with both an informative and entertainment value as perceived by the follower leads to a higher purchase intention of the follower is essential for brands to market their products.

Keywords: influencer marketing, value of content, PSR, purchase intention, naïve theory.

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1. Introduction

Recently, a transition has been made in the corporate communication of brands. Individuals and communities take over the communication about the brand from the brand's marketing department. Brands are not the only one anymore who communicate about their products and company values. The marketing department experiences a greater dependence on individuals who communicate about the brand online. This dependency is expected to only increase more in the further. The communication power lies within the individuals who create, share, and consume online communication in different formats, like blogs, posts, movies, and photos (Kietzmann *et al.,* 2011). The use of social media provides brands the opportunity to facilitate besides interactivity and co-creation between consumers and the brand, also the creation and distribution of user-generated content (Kaplan & Haenlein, 2010; Filo *et al.*, 2015). Online content is no longer only brand-generated content but more and more user-generated content. User-generated content is created by users of a product/brand to share information and opinions about the product/brand with other people (Tang *et al.,* 2014).

Brands use social media more and increasingly collaborate with social media influencers to promote and test products and to reach out to their customers (Evans *et al.*, 2017). The social media influencers become product ambassadors, who endorse the brand via friendly sharing their opinion (Rasmussen, 2018). Examples of critical social media influencers in the Netherlands are Anna Nooshin (922.000 followers on Instagram) and Monica Geuze (1.1 million followers on Instagram) (DeMedia, 2019). Those social media influencers collaborate with brands like iDeal Of Sweden and NA-KD fashion. The most influential social media influencer is Kylie Jenner (167 million followers on Instagram). Different marketing agencies relate the success of her billion-dollar empire Kylie Cosmetics to her influencer marketing strategy (Forbes, 2019).

Due to the increase in the use of influencer marketing and social media by brands, the research regarding this topic also increased. Prior research uses different definitions of influencer marketing, a combination of corresponding elements leads to the following definition of influencer marketing; *social media influencers who have a large number of followers sharing sponsored brand messages via their social media account using user-generated content* (Sammis *et al.*, 2015; Brown & Hayes, 2008). Nowadays, there is an increase in influencers with a strong social online network of followers who get paid to generate

attention for brands (Müller *et al*., 2018). Those endorsements of a brand can be interpreted as a form of a paid advertisement. The difference with a paid advertisement is that the viewer is aware of the fact that it is an advertisement instead of a genuine opinion of someone (Gürkaynak *et al.*, 2018). Recent legislation makes it impossible for influencers to persuade people via social media unconsciously. The legislations force influencers to enclose a disclaimer like #ad or #sponsored in the post to make followers aware that the content is a paid endorsement (Müller *et al*., 2018; Evans *et al.*, 2017).

With the rise of influencer marketing, a new form of word-of-mouth arrived. An online version of word-of-mouth focusing on tools like the internet, Instagram, Facebook, and YouTube (Woods, 2016). Electronic word-of-mouth (eWOM) is online consumer to consumer interaction (Yadav & Pavlou, 2014). The online communication between consumers (potential and current consumers) plays an important role in consumers' decision-making process (Cheung & Lee, 2012). Hence, it is not a surprise that large companies and brands focus their marketing strategies on eWOM to influence their relationship with customers.

The new form of eWOM, influencer marketing, is not only beneficial for brands but also benefits the followers of social media influencers in establishing a parasocial relationship (PSR) between the follower and the influencer. This PSR refers to the interpersonal relationship between the follower and the influencer, in which the social media influencer is not anymore only a traditional media personality, athlete or celebrity, but can also be someone with a large number of online followers on a social media channel (Yuan, 2016). The PSR is based on social attraction, perceived similarity, and repeated media exposure (Bond, 2018), the influencer can be seen as a friend in the inner social circle of the follower's life (Ballantine, 2005). The intimate virtual social relationship can be seen as a pseudo-friendship (Hwang & Zhang, 2018), and is based on a long-term, enduring, but asymmetrical relationship (Horton & Wohl, 1956; Ballantine, 2005). It is essential to elaborate that the follower perceives the relationship and interaction as mutual. Contradictory to the influencer, who perceives the relationship as one-sided. The difference in how the influencer and the follower perceive the relationship in a different way shows the asymmetrical element of the PSR (Hartmann & Goldhoorn, 2011). The possibility of commenting on an influencer's posts allows the establishment of a less non-reciprocal relationship because the influencer and the follower can interact with each other (Tsai & Men, 2013).

The PSR between a follower and an influencer can be influenced by (1) the expertise, trustworthiness, attractiveness, and similarity of the influencer, (2) the active and restrictive mediation of the parents of the follower and (3) the informative and entertaining value of the content provided by the influencer (Lou & Kim, 2019). For this study, only the value of the content will be taken into account. The other antecedents, source influence and parental influence are assumed to be constant. In the research of Lou and Kim (2019), the informative value of the content has no significant effect on the PSR. However, the research of Lou and Yuan (2019) validates the influence of the informative value of content. The informative value of the content of an influencer has a positive effect on the trustworthiness of the follower in the content the influencer distributes online. Hence, both the information and entertainment value of content are taken into account for this study. Assuming both have a positive effect on the PSR between a follower and an influencer.

A positive PSR can lead to a higher purchase intention (Lou & Kim, 2019; Hwang & Zhang, 2018), an increase in brand awareness ((Lou & Yuan, 2019), and the intention to engage in eWOM (Hwang & Zhang, 2018). In this study, the focus lies on the effect of the PSR on the purchase intention of the follower. Elaborating upon previous research, the positive relationship between PSR and purchase intention (Lou & Kim, 2019; Hwang & Zhang, 2018) suggests that a follower is more likely to purchase products endorsed by an influencer. Hence, this study suggests that a positive PSR between a follower and an influencer leads to a higher purchase intention of the follower.

It is questionable whether everybody has the same thoughts about being persuaded via advertisements in general. People have different perceptions about the meaning of advertisements. There is a distinction between positive (advertisements seen as informative and entertaining) and negative associations (advertisements seen as manipulative and annoying) (Coulter *et al.*, 2001). The distinction in the perceived meaning of persuasive messages, as either positive or negative, can be defined as the naïve theory about persuasion. The attitude someone holds over persuasion influences the effectiveness of the advertisement, based on the message elaboration and the quality of the provided argumentation (Briñol *et al.*, 2015). In this study, it is analysed whether the naïve theory of the follower can moderate the relationship between the informative value of the content on the PSR. Expected is that for followers with a negative naïve theory, the advertisement's information value is more critical than the entertaining value. Followers with a negative naïve theory attach more value to strong

argumentation rather than being entertained with fun content. Besides the relationship between the value of the content on the PSR, the follower's naïve theory can also influence the purchase intention (Soontae *et al.,* 2018; Hwang & Zhang, 2018). For the follower, it is essential that the influencer acknowledges and makes it visible that the content is a form of a paid endorsement. Otherwise, followers feel manipulated by the influencer, which negatively influences the purchase intention of the follower (Soontae *et al*., 2018). There is an expectation that the followers with a negative naïve theory, who in general experience the feeling of manipulation sooner than those with a positive naïve theory, are less likely to purchase products endorsed by an influencer. Hence, this study takes into account the negative effect of a negative naïve theory of the follower on the purchase intention of this follower.

The objective of this thesis is to research (1) the effect of the value of the content of the influencer, an informative or entertainment value, on the purchase intention of the follower, mediated by the PSR between the follower and the influencer. Additionally, (2) the effect of the naïve theory the follower hold over persuasion in general, which can be either positive or negative, moderating the relationship between the informative value of the content and the PSR. Finally, (3) the effect of a possible negative naïve theory of the follower on this follower's purchase intention.

Resulting in the following research question: *What is the effect of the informative and entertaining value of the online content of an influencer on the purchase intention of a follower, mediated by the PSR between the follower and the influencer and moderated by the naïve theory of the follower?*

Although there is substantial research about the establishment of a PSR regarding traditional marketing, there is a lack of research concerning PSR in influencer marketing. Because an influencer is perceived as a close friend and the PSR as an intimate friendship (Ballantine, 2005), it is interesting to analyse the effects and strength of a PSR in influencer marketing on the purchase intention of followers. Based on previous research, it is expected that because of a stronger perceived PSR, this person's purchase intention also increases (Colliander & Dahlen, 2011; Tsai & Men, 2013). The insights of this study contribute to the knowledge about the effects of online influencer marketing and the purchase intention of followers.

Because of the enormous increase in money brands spend on influencer marketing (Evans *et al.*, 2017), it is crucial to further research on this subject. Insights in which value of content (informative or entertaining) leads to a higher purchase intention, mediated by PSR, is useful for brands when formulating marketing strategies. These insights can be further analysed in more concrete tools to structure the collaboration with social media influencers.

Besides the introduction of the topic and the research question, the following is included in this thesis: chapter 2 presents the theoretical background providing an overview of the relevant perspectives and theories regarding the topic of interest. Chapter 3 covers the methodology. The data will be collected through a survey. Chapter 4 contains an overview of the findings of this study, and chapters 5 and 6 will cover the discussion and conclusion of this study.

2. Theoretical background

This chapter explains the most important concepts to provide a well-defined theoretical framework for the research question. First of all, the concept of PSR is explained. Then, the value of the content which can be entertaining and informative is discussed. Consequently, the mediation effect of the value of the content via PSR on the purchase intention of the follower is explained. Finally, the moderation effect of the naïve theory of the follower is elaborated on.

2.1 Social media use in the Netherlands

As aforementioned, brands use social media more and increasingly collaborate with social media influencers to promote and test products and to reach out to their customers (Evans *et al.*, 2017). Nevertheless, brands are not the only ones who increase their use of social media. Also, the Dutch population increases their daily social media use. The Dutch National Social Media Research (2019) demonstrates that the use of social media channels has grown over the years, to an internet penetration rate of 96%. Almost everyone in the Dutch population uses the internet daily. In 2019, 2.7 million people above the age of 15 years used Instagram daily, and this is a growth of 26% in comparison to 2018. Together with YouTube (2.4 million daily users in 2019) is Instagram the most popular social media platform among the Dutch population. Most of the users of Instagram are between 15 and 39 years old, and the dominant group of users is between 15 and 19 years old. The use of Facebook has declined over the years (Newcom.nl, 2019), hence only the channels Instagram and YouTube are taken into account.

2.2 Parasocial interaction (PSI) and parasocial relationship (PSR)

The use of social media enables people to get connected with others. It facilitates people in establishing relationships and it creates interaction. There are two main concepts in the literature regarding interaction and relationships; parasocial interaction (PSI) and parasocial relationship (PSR). There is a distinction between PSI and PSR in the duration of the relationship. PSI is related to short-term interaction, and PSR is focused on long-term relationships (Lou & Kim, 2019).

Parasocial interaction (PSI)

The parasocial interaction (PSI) someone can establish with a media persona can be defined as the illusory of the follower, where social experiences create the feeling of interpersonal involvement with a media personae (Horton & Wohl, 1956; Tsai & Men, 2013).

Someone can generate steady PSI with a media personae by evaluating the personal life of the media personae (Colliander & Dahlen, 2011). It is about creating an illusion of intimacy at a distance (Horton & Wohl, 1956). In most studies about the concept of PSI concerning marketing, the media persona is a celebrity such as actors, athletics, and singers (Russell *et al.*, 2006). Due to the increase in social media influencers (Rihl & Wegener, 2019), more recent research about PSI also focusses on social media influencers as media personae (Colliander & Dahlen, 2011; Tsai & Men, 2013)

Although social media platforms allow followers to interact with the influencer, it is essential to elaborate that the interaction between a follower and an influencer is asymmetrical. It is the illusory of the follower, who perceives the interaction as mutual in contrast to the influencer who perceived the interaction as one-sided (Hartmann & Goldhoorn, 2011). The ability to react to the influencer's content makes the interaction as perceived by the follower less non-reciprocal. The ability to interact does no influence the perceived one-sidedness of interaction by the influencer. Nevertheless, the interaction via social media does results in a stronger PSI between the follower and the influencer as perceived by the follower (Tsai & Men, 2013).

Parasocial relationship (PSR)

As aforementioned, the difference between PSI and PSR is the reciprocity of the interaction. The PSR between the follower and the influencer is based on a long-term relationship. A PSR occurs when a follower feels connected to the influencer, which results in a continuing relationship between the follower and an influencer (Lou & Kim, 2019).

PSR's are a crucial part of the followers' social life. Although PSR's are less intense and salient than offline social relationships with close friends, they are perceived as constant and central relationships (Ballantine, 2005). A PSR can potentially substitute for interpersonal friendships because both relationships are based on social attraction, provide companionship, and contain a personal focus and are voluntary (Perse and Rubin, 1989). The first research about the concept of PSR implicated that PSR is a substitute for interpersonal relationships (Cohen, 1977; Rubin *et al*. 1985). Rubin *et al.* (1985) stated that there is no significant relationship between the intensity of the PSR and perceived loneliness, and assumed that the PSR oppositely might facilitate interpersonal relationships rather than compensate for the lack of those relationships. Contradictory, Sood and Rogers (2000) assumed that PSR is a form of

dysfunctional behaviour. PSR is a result of factors such as isolation, fear, and loneliness. The not significant relationship between loneliness and PSR is endorsed by a multitude of more recent studies related to the context of social media (Rosaen & Dibble, 2016; Eyal & Cohen, 2006). However, research also implies that for the vulnerable population that struggles to establish interpersonal relationships with others, PSR supplants the real-life social relationships instead of complementing them (Stever, 2017; Bond, 2018). The main life goal for adolescents is to be socially accepted. To compensate for social isolation or to seek out belongingness, adolescents use social media to develop PSR's with others (Hwang & Zhang, 2018). Especially with influencers who are perceived by followers as influential and popular (Berndt, 1996).

Based on the article of Lou & Kim (2019), three antecedents influence the perceived PSR followers have with influencers via social media; the content, the source (the influencer), and the parents of the follower. The parental influence does not affect the perceived PSR. Both an active nor restrictive mediation from the parent in the establishment of the relationship between the follower and an influencer does affect the PSR. Contradictory, the expertise, trustworthiness, attractiveness of the influencer, and perceived similarity with the influencer are positively related to the PSR (Lou & Kim,2019). Other research also elaborates on the importance of perceived similarity with the influencer, and also states that repeated media exposure and attraction to the influencer are positively related to the strength of the PSR (Bond, 2018).

2.3 The value of the content

The importance for brands to use social media and collaborate with influencers to reach out to their customers has already been pointed out. Besides using the available tools it is also crucial to take into account the content that is distributed online. As mentioned before, there is a shift from brand-generated content to user-generated content due to the collaborations with influencers (Tang *et al.,* 2014).

The user-generated content that an influencer distributes online on behalf of a brand can be seen as advertisements. The objective of advertising can be seen as helping consumers learn about specific products and brands, bring value to the consumers, and make sure they can make informed purchase decisions based on the provided information in the advertisement. It is about exchanging information and establishing relationships between the advertiser (influencer) and the consumer (follower) (Ducoffe & Curlo, 2000). The follower forms a subjective evaluation

of the relative worth and utility of the advertisement, which can be defined as the advertising value (Ducoffe, 1995). This advertising value can be perceived as negative or positive. Negative advertising value appears when the follower experiences no added value after seeing the advertisement, and this can lead to a lack of relationship-building between the sender and the receiver of the advertisement, inattention of the receiver, and a negative advertisement evaluation. Negative advertisement value can lead to advertisement irritation. Contradictory, if the advertisement indeed does add value to the follower, this leads to a positive evaluation of the advertisement and relationship building. Positive advertisement value consists of advertisement informativeness and advertisement entertainment (Ducoffe & Curlo, 2000). Hence, to measure the appeal of the influencer's user-generated content concerning the purchase intention of the follower only the two positive aspects of advertisements, informativeness and entertainment, are taken into account for this study. Advertising informativeness can be defined as: 'the value of advertising in facilitating informed decisions and subsequent purchase satisfaction' and advertisement entertainment can be interpreted as: 'the potential of the advertisement to entertain and to amuse consumers' (Lou & Kim, 2019 p.3).

The value of advertisements has previously been studied concerning brand loyalty (Lou & Yuan, 2019), brand awareness (Dehghani *et al.,* 2016), and purchase intentions (Van-Tien Dao *et al.,* 2014; Lou & Kim, 2019). In the research of Lou & Kim (2019), only the entertainment value of the content has a positive effect on the PSR. For the informative value there was no significant effect. Contradictory, the informative value of influencer-generated content does positively affect followers' trust in the content of the influencer (Lou & Yuan, 2019). The results of the research of Van-Tien Dao *et al*. (2014) also underline the value of the advertisement informativeness on the purchase intention. Both advertisement informativeness and entertainment, combined with the advertising credibility, show a positive effect on online purchase intention. This study also states that there is a difference in the perceived value of the advertisement informativeness and entertainment by the follower, based on the use of different social media platforms. For social networking apps like Facebook is the effect of advertisement informativeness and entertainment weaker in comparison to content community apps like Instagram and YouTube (Van-Tien Dao *et al.,* 2014). Followers attach more value to the advertisement informativeness and entertainment of the content than when they use social media platforms like YouTube and Instagram. These platforms are not primarily intended to develop and maintain a network with friends but are developed so users can organize and share content with others.

Based on the different outcomes of previous research, it is assumed that both the entertainment and informative value of the advertisement will have a positive effect on the establishment of a relationship between the follower and the influencer and the purchase intention of the follower. Hence the following hypotheses are proposed:

H1a – content with an entertaining value has a positive impact on the PSR between a follower and an influencer.
H1b – content with an informative value has a positive impact on the PSR between a follower and an influencer.

H2a – content with an entertaining value has a positive impact on the purchase intention of a follower.
H2b – content with an informative value has a positive impact on the purchase intention of a follower.

2.4 Purchase intention

The engagement of followers to an influencer can be linked to the social relationship concept referent power. The effect of a PSR between an influencer and a follower on the purchase intention of the follower can be explained as follow: *'after these friendships are formed, adolescents continue to use the friends as referent others. That is, adolescents take their friends' behaviour as a guide for behaviour. ... When friends have referent power, adolescents accept their suggestions without any need for coercion.'* (Berndt, 1996, p. 74). Hence, a follower who perceived the relationship with an influencer as a friendship is more likely to accept the suggestion for specific products to buy when an influencer endorses that product online. The positive effect between the strength of PSR and purchase intention has also been outlined in the study of Lou and Kim (2019). Based on that research, it is expected that there is a positive relationship between the PSR between a follower and an influencer and the purchase intention of the follower. A positive PSR is assumed to lead to a higher level of purchase intention. Hence, the following hypothesis is proposed:

H3 – A positive PSR between a follower and an influencer has a positive impact on the purchase intention of the follower.

2.5 Moderation of naïve theory

As previously mentioned, there is an increase in the use of social media influencers by brands to promote their products (Rihl & Wegener, 2019). Some of the content a social media influencer posts online is an advertisement and can in cooperate a persuasive message (Evans *et al.*, 2017). People have different perceptions about the meaning of persuasion. There is a distinction between positive (advertisements seen as informative and entertaining) and negative

associations (advertisements seen as manipulative and annoying) regarding persuasive content like advertisements (Coulter *et al.*, 2001). The distinction in the perceived meaning of persuasive advertisements, as something either positive or negative, can be defined as the naïve theory about persuasion (Briñol *et al.*, 2015). In the context of this study, the concept of naïve theory can be defined as the difference in the perception about persuasion. Some followers may perceive advertisements as something that adds value, informs and entertains them and there are also followers who perceive advertisements as something that annoys them. Followers with a positive naïve theory are expected to react to the call-to-action of the advertisement and followers with a negative naïve theory are expected to show resistance after seeing the advertisement.

The attitude someone holds over persuasion influences the advertisement's effectiveness and is based on the amount of message elaboration the consumer is engaged in (Briñol *et al.*, 2015). Whether a follower scrutinizes the post of the influencer and the quality of the arguments provided are both factors that influence the effectiveness of the advertisement. *"Those who were induced to have negative associations with persuasion scrutinized the information presented more carefully. ..., those induced to have more positive associations with persuasion appeared to show no reliable differentiation of strong and weak arguments"* (Briñol *et al.*, 2015, p. 95). Besides, the impact of a negative naïve theory only holds for weak argumentation in the advertisement and is contradictory for strong arguments (Briñol *et al.*, 2015). Even though a follower holds a negative naïve theory about persuasion, if the content of the post of an influencer contains strong arguments and a high informative value, the effectiveness of the advertisement can still be ensured.

The findings stated above suggest that the not significant relationship of the information value of the content on the PSR between a follower and an influencer (Lou & Kim, 2019), could be influenced by the concept of naïve theory. Therefore, the following hypotheses are proposed:

H4 – A followers' naïve theory will moderate the relationship between the informative value of the content and the PSR between the follower and the influencer.

Followers recognizing the influencer's content as an advertisement, without the influencer making the follower aware, results in the follower feeling manipulated by the influencer (Soontae *et al*., 2018). Which results in a follower who is less engaged with the

message the influencer is posting, has a less positive attitude towards the brand for which the influencer is advertising, has a lower purchase intention and finally is less likely to share the brand with others (Soontae *et al*., 2018). The knowledge of persuasion negatively affects the purchase intention of the follower (Hwang & Zhang, 2018). Hence, the following hypothesis is proposed:

H5 – A followers' negative naïve theory will influence the purchase intention of the follower to buy a product recommended by an influencer.

All hypotheses, as discussed above, are visualized in a conceptual model. The conceptual model is proposed in figure 1 below.

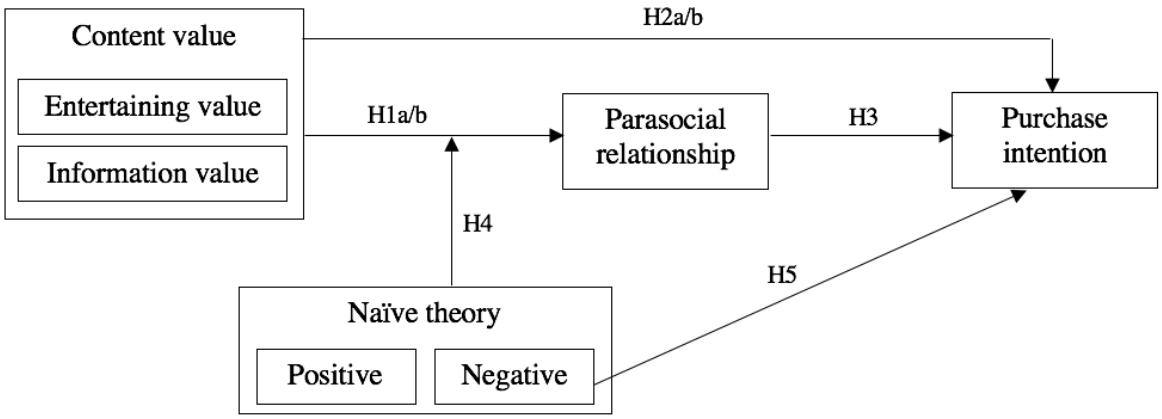

Fig. 1 – conceptual model

3. Methodology

In this section, the data collection procedure, the sample, and the measurement of the variables are discussed. Firstly, the procedure is explained. Second, the sample is discussed and finally, the measurement of all main variables is clarified.

3.1 Data collection procedure

This study aimed to gain insights into the relationship between followers and influencers and the purchase intention of the follower after seeing the influencer promoting a product online. The research design of this study is quantitative and based on primary data. The data has been collected via a survey, which has been designed in the online tool Qualtrics, using the format provided by the Radboud University. After gathering the data, the statistical software program SPSS has been used to analyse the data.

At the beginning of the survey, respondents are asked to fill in the name of their favourite influencer. This name is inserted in the rest of the items of the survey. The name needed to be inserted in the […]. The entire survey can be found in *Appendix A – Survey*.

Respondents are recruited via a combination of a convenience sampling and a snowball sampling method. The survey is distributed among the network of the researcher via social media platforms like; WhatsApp, Instagram, LinkedIn, and Facebook. To create a snowball effect, respondents are asked to forward the survey link to other possible respondents. Due to the snowball sampling, respondents who otherwise would be out of the scope of the network of the researcher are included in the study as well. See *Appendix B – Invitation survey*, for the invitation/social media post that was used to spread out the survey. Besides, to increase the number of potential responses and the readability of the survey, the survey is translated into the native language of the respondents: Dutch.

3.2 Sample

To generalize the results of this study across the population of social media followers in general, a diversity of respondents is necessary. There were no major restrictions for the selection of the respondents. Only one screening question is used to ensure that the respondents were applicable to this study. The respondents are assessed at the beginning of the survey via the question if they follow an influencer via social media. Respondents who did

not follow an influencer via social media are excluded from the analysis because they did not meet the conditions and those respondents cannot be indicated as social media followers.

In total, 178 respondents filled out the survey from which 117 respondents followed a social media influencer online and 61 respondents did not follow an influencer. Focusing on the respondents who followed an influencer, 76.9% is female (90 females, 27 males) and the majority is in the age group of 18-25 (59.8%). Followed by age groups 26-35 (22.2%) and <18 (12.8%). Most likely, this is the result of the convenience sampling method via the network of the researcher that consists of mostly women at the age of 18-30. Furthermore, the respondents who had a favourite influencer spend between 1 and 2 hours (50.5%) or more than 2 hours (33.3%) a day on the social media platforms Instagram and YouTube. Besides, most of the active followers of influencers followed 1-5 influencers (37.6%).

Respondents who did not follow an influencer are mostly male (32 male 29 female). However, the difference in proportion is not the same as for respondents who do follow an influencer. The respondents are mainly aged between 46-55 (27.9%), followed by respondents in the age group of 18-25 (24.6%) and 26-35 (18%). Again, the ratio of age among the respondents is most likely due to the usage of the network of the researcher. Besides, for the respondents who do not follow an influencer, they are also less active on social media. The majority spends less than 1 hour a day on social media (65.6%).

Some apparent differences can be distinguished between the two different groups within the sample. Respondents that do follow an influencer are mostly female in comparison to those who do not follow an influencer who are mostly male. The respondents that do not follow an influencer are in contrast to those that do follow an influencer mostly older and spend less time on social media daily.

Overall, the focus of this study lies on the respondents who follow an influencer (65.7%). Most of them are female (76.9%) and between 18 and 25 (59.8%). Respondents mainly spend one to two hours online (50.5%) and follow one to five influencers (37.6%). A complete overview of the sample's demographic distribution can be found in *Appendix C – Demographic distribution sample*.

The four main variables, the *content value*, *PSR*, *purchase intention*, and *naïve theory* are measured via validated scales, in *Appendix D – Scales* an overview of the measurement scales and corresponding items are included. Below, a short description of the measurement of all main variables is provided.

3.2.1 Value of the content

The variable *value of the content* indicates the level of informativeness and entertaining value of the content of the influencer as perceived by the follower. The respondents are asked to think about their favourite influencer. Respondents had 20 seconds to think about the content of their favourite influencer on social media when this influencer endorses a particular product or brand. Following, the respondent is asked to rank the content of his/her favourite influencer via a 7-point semantic differential scale (Lou & Kim, 2019). The respondents needed to indicate whether they find the content 'unhelpful' or more 'helpful', 'dull' or more 'exciting' and 'unenjoyable' or more 'enjoyable'.

3.2.2 Parasocial relationship (PSR)

The variable *PSR* measures the strength of the relationship between a follower and their favourite influencer. The 13-item scale of Hartmann *et al.* (2008) is used to measure the variable of PSR. However, the items are adjusted to the concept of influencer marketing. Respondents are asked to answer the items via a 7-point Likert scale. For example, 'I feel that I know […] very well', '[…] makes me feel as comfortable as when I am with friends', and 'I look forward to receiving new content of […]'.

3.2.3 Purchase intention

The variable *purchase intention* measures the likelihood that a follower will buy products recommended by an influencer. The four items (Kim *et al*., 2015) are measured via a 7-point Likert scale. For example, 'I am interested in buying products that […] showed through his/her social media channel' and 'I would like to buy products similar to […]'s products on his/her social media channel'.

3.2.4 Naïve theory

The variable, *naïve theory*, indicates the effect of a positive or negative naïve theory a respondent has about persuasion in general on the relationship between the variables *content*

value and *PSR*. This moderating variable is measured via the items used in the research of Briñol *et al*. *(*2015). The items are adjusted to the context of this study. Respondents are asked to react on statements about their attitude towards persuasion in general, four items that the respondents answered via a 7-point Likert scale. Examples of items are 'attitude change is brainwashing' and 'persuasion always involves manipulation or lying to people'.

3.2.5 Control variables

To create an understanding of the sample, the following statement is used as a screening question: 'I follow an influencer on social media.', the respondents could answer this statement with a yes or no. This question made sure that the respondents in the sample have the right experience and knowledge to answer the survey. The respondents who do not follow an influencer are directed to the end of the survey.

Besides the screening questions, there are also control variables included in the survey. These control variables are expected to have an influence on the dependent variables in the study and also to have a relationship with the independent variables in the study. The control variables corresponded to the demographic and situational factors as discussed below.

Demographic factors

The demographic factors gender and age are incorporated into the survey. The gender factor is measured via a categorical question, which includes three categories: male, female, and other. Secondly, the respondents are asked about their age via an open question.

Situational factors

The number of influencers a follower follows via the social media platforms YouTube and Instagram, and the number of hours a follower spends on the social media platforms YouTube and Instagram daily are included as control variables, which have been measured via categorical scales. Both variables are expected to influence the relationship between the other variables. Including these variables resulted in the opportunity to isolate the effect of the content value on the purchase intention of the follower, mediated by the PSR between the follower and the influencer.

3.4 Research ethics

To make sure that the respondents are protected during the research, the principles of research ethics have always been taken into account. During the study, the researcher always tried to minimize the risk of harm for the respondents and made sure any deceptive practices were not included in the study. At the beginning of the survey, the respondents are asked if they wholeheartedly agreed with their cooperation in this study. The respondents had the possibility and the right to withdraw from the survey at all times. The information provided by the respondents has been kept confidential and analysed with full anonymity (Oliver, 2010).

4 Results

In this chapter, the results of this study are discussed. First of all, the dataset is prepared for analysing. After that, a principal components analysis is conducted to reduce the amount of data in order to proceed with further analysis of the data. Finally, the hypotheses as elaborated on previously are tested.

4.1 Preparation of the dataset

First of all, all non-completed responses have been deleted from the data set. In total 204 respondents filled out the survey. However, 25 respondents did not finish the survey, so these 25 responses were deleted. Also, one response is deleted because the online survey program Qualtrics indicated the response as spam. After this, the data set is assessed and two responses were deleted since their scores for every item in the survey were 1. The duration for filling in the survey of those two respondents indicated that the respondents filled in the survey without reading the questions. Therefore those two responses have been excluded from the dataset. Finally, one response is deleted since the respondent filled in an invalid answer, a question mark, for the question indicating the favourite influencer of the respondents. Due to the risk that this respondent did not fully understand the questions in the survey, it is decided to exclude this response as well. In total, 29 responses were deleted to prepare the dataset for analysing.

4.2 Principal components analysis

A principal components analysis (PCA) is conducted to reduce the number of items of the constructs; *value of content, PSR, purchase intention,* and *naïve theory* to a smaller set of items. The suitability of PCA was assessed prior to the analysis and the data meets all assumptions. The correlation matrix shows that for all variables at least one correlation coefficient has a greater value than .3. The overall Kaiser-Meyer-Olkin (KMO) measure was .785. Not all individual KMO measures were greater than .5 (Kaiser, 1974). Hence the items '*attitude change is brainwashing'* and '*persuasion always involves manipulation or lying to people'* corresponding to the construct *naïve theory* were excluded from the analysis (see table 1). The deletion of the two items resulted in an increase of the KMO measure into a value of .806, indicating that there is adequacy of sampling. Besides, the statistically significant Bartlett's Test of Sphericity indicates that the data is likely factorizable.

The PCA indicates, based on the eigenvalues greater than one, six components. The components explain respectively 27.1%, 15.2%, 8.7%, 6.5%, 5.4% and 4.8% of the total variance. Secondly, the scree plot also revealed six components (Cattell, 1966). Hence, six components are taken into account for the PCA. The six components together explain 67.6% of the total variance.

The varimax orthogonal rotation was conducted to increase the interpretability of the PCA (Hair, 2014). Three PSR items were deleted from the PCA (see table 1) because they loaded on more than one component or the factor loading was below .55, the critical value for factor loadings concerning the sample size of 114 respondents according to Hair (2014, p.115). The rotated component matrix can be found in *Appendix E – PCA*.

Table 1 *Deleted items after PCA*

Construct	Number of factors	Items deleted
Content value (10 items)	2	-
PSR (13 items)	2	I think about […] when I don't see content of him/her on my social media channels. I miss […] if I do not see him/her on my social media channels for a long time. I try to imagine what […] thinks about the content he/she posts online.
Purchase intention (4 items)	1	-
Naïve theory (4 items)	1	A change in someone's opinion regarding a certain product is because that person has been brainwashed after seeing an advertisement. Persuasion of people to buy a certain product always involves manipulation or lying to people

Based on the PCA, six components are created corresponding to in total twenty-six items. The construct *content value* is divided into one variable indicating the informative value of the content and another variable representing the entertaining value of the content. The construct *PSR* loaded on two components. It would be possible to divide the construct PSR into two variables, both indicating the strength of the PSR between the follower and the influencer. However, the items corresponding to the construct of PSR do not load on any of the other constructs. Hence all items corresponding to the construct of PSR are combined into one variable PSR. The new variables are created via a summated scale based on the mean of the

scores and are used for the hypotheses testing. An overview of the corresponding items to the four constructs *content value, PSR, purchase intention,* and *naïve theory* can be found in Appendix E – PCA. The description of the variables can be found below in table 2.

Table 2 *Description new variables after PCA*

Variable name	Description
CV_I	The informative value of the content of the influencer perceived by the follower.
CV_E	The entertaining value of the content of the influencer perceived by the follower.
PSR	The strength of the para-social relationship between the follower and the influencer
PI	The intention of the follower to buy products that the influencer endorses online.
NT	The naïve theory a follower is holding again persuasion in general.

After the PCA, the reliability of the scale is assessed. The internal consistency of the scale is checked via the value of Cronbach's alpha. For all six variables corresponding to the four constructs, the Cronbach's alpha is above .80, indicating that there is a high internal consistency in the scale (table 3) (Hair, 2014). For the variables 'CV_I' and 'CV_E' the deletion of an item within this scale would lead to a higher value of Cronbach's alpha (.875 and .899, respectively). The values of the *squared multiple correlation*s of .306 and .341, respectively, indicate that the items might not measure the same latent construct as the rest of the items of the scale. However, the items will not be deleted due to the high value of the Cronbach's alpha and the sufficient values of the *corrected item-total correlation* (.547 and .562, respectively).

Table 3 *Reliability scales*

Construct	Variable name	**Cronbach's alpha**
Content value	CV_I	**.870**
	CV_E	**.888**
PSR	PSR_1	**.850**
Purchase intention	PI	**.879**
Naïve theory	NT	**.628**

A new correlation matrix was conducted after the PCA, including the new components (see table 4). All four constructs correlate with each other. For the control variables, only the variables indicating the follower's gender and age and the number of influencers a follower follows correlate with the constructs. Hence, the control variable indicating the hours of social media use of the follower is excluded from further analysis.

Table 4 *Correlation matrix*

Variables	M	SD	1	2	3	4	5	6	7	8
1. Content - informative	4.34	1.19								
2. Content - entertainment	5.00	1.38	.565**							
3. PSR	4.73	.89	.214*	.228*						
4. Purchase intention	3.11	.90	.274**	.219*	.341**					
5. Naïve theory	3.91	1.33	.091	.002	.240**	.259**				
6. Gender	1.78	.42	.124	-.112	-.080	.171	.238*			
7. Age	24.20	7.77	-.121	-.190*	-.074	.153	-.045	.008		
8. Social media use	2.16	.69	.105	.114	.090	-.005	.145	.008	-.286**	
9. Number of influencers	3.59	1.57	.043	-.028	.234*	.029	.068	.178	-.215*	.281**

**. Correlation is significant at the 0,01 level (2-tailed)

*. Correlation is significant at the 0,05 level (2-tailed)

4.2 Hypotheses testing

In order to test the hypotheses, multiple linear regression analyses are conducted. After that, the program PROCESS is used to test the mediation and moderation effects. For all linear regression analyses the assumptions are met. The assumption of linearity is checked via a scatterplot, indicating a linear relationship between the two variables. The Durbin-Watson statistic assessed the independence of residuals. The scatterplot and the casewise diagnostics are used as an indication that there are no outliers in the data. A visual inspection of a plot of standardized residuals versus standardized predicted values is used to check for the assumption of homoscedasticity. Finally, the assumption of the normal distribution of residuals is assessed by the visual inspection of a normal probability plot. An overview of the results of the assumptions can be found in *Appendix F – Regression analysis.*

A linear regression analysis is conducted to examine the effect of the content value on the strength of the PSR. H1 hypothesizes that both the entertaining value (a) and the informative value (b) of the content are positively related to the PSR between the follower and influencer. The results indicated that there is a positive relationship between the entertaining value (a) of the content ($F(1,114) = 6.225$, $p < .05$) and the informative value (b) of content ($F(1,114) = 5.496$, $p < .05$) on the PSR between the follower and influencer. Therefore the results support hypotheses 1a and 1b. Nevertheless, the entertaining value (a) of content has a bigger effect on PSR, $\beta = .228$; $t\ (114) = 2.495$; $p < .05$, than the informative value (b) of content on PSR, $\beta = .214$; $t\ (114) = 2.344$; $p < .05$.

Secondly, the effect of the content value for both an informative and entertaining value on purchase intention is assessed via a linear regression analysis. H2 posits that an online endorsement of an influencer containing content with an entertaining value (a) and informative value (b) positively influences the purchase intention of the follower. The results expose the positive relationship of content with an entertaining value (a), $F(1,114) = 5.769$, $p < .05$, as well as for content with an informative value (b), $F(1,114) = 9.246$, $p < .01$, on the purchase intention of the follower. Hence, hypothesis 2a and 2b can both be accepted. The content value does not only have a positive effect on the strength of the PSR but also has a positive effect on the intention of the follower to purchase products. The effect is bigger for the informative value of content ($\beta = .274$; $t\ (114) = 3.041$; $p < .01$), than it is for the entertaining value of content ($\beta = .219$; $t\ (114) = 2.402$; $p < .05$). Hence, hypothesis 2a and 2b can both be accepted.

Furthermore, the relationship between the strength of the PSR and the intention of the follower to purchase products the influencer endorses online is conducted via a linear regression analysis. H3 predicts a positive relationship between the strength of the PSR and the purchase intention of the follower. In support of H3, the results indicate a positive effect between PSR and purchase intention, $F(1, 114) = 14.984$, $p < .001$. The strength of the PSR between a follower and an influencer as perceived by the follower predicts the purchase intention of the follower to buy products the influencers endorses online ($\beta = .341$; $t\ (114) = 3.871$; $p < .001$), and has a positive impact. Hence, hypothesis 3 can be supported.

H5 hypothesises on the effect of a followers' negative naïve theory on the purchase intention of that follower to buy a product an influencer endorses online. First, a regression analysis is conducted to determine if the follower's naïve theory influences the follower's purchase intention. There is a significant effect of naïve theory on purchase intention, $F(1, 114) = 8.17$, $p < .05$. The naïve theory of the follower positively influences the purchase intention, ($\beta = .259$; $t\ (114) = 2.858$; $p < .05$).

A one-way ANOVA is conducted to determine if there is a difference in the purchase intention of the follower regarding the naïve theory of the follower. The six assumptions which need to be met before the analysis are all met. The dependent variable is measured at a continuous level. The independent variable is changed from a continuous level to a categorical level. The variable regarding naïve theory is measured according to a 7-point Likert scale. This

variable has been recoded into a new variable consisting out of three independent groups low, medium, and high, respectively followers with a positive, neutral, and negative naïve theory. Observations are independent because of the between-subjects design. There are no significant outliers in the data as assessed by the visual inspection of the boxplot. The assumption concerning normal distribution is checked via the Shapiro-Wilk's test. According to the Shapiro-Wilk's values, the data is normally distributed for the group of followers with a positive naïve theory ($p > .05$) and a negative naïve theory ($p > .05$). For the followers with a neutral naïve theory the Shapiro-Wilk's test was not significant ($p = .015$). However, after the QQ Plot inspection for this group and since the one-way ANOVA test can be considered robust to non-normality (Maxwell & Delaney, 2004), the data is assessed as if it is normally distributed. Finally, there is homogeneity of variance ($p = .478$).

The followers' purchase intention is significantly different for the different levels of naïve theory, $F(2,113) = 3.812$, $p < .05$. Analysis showed that the purchase intention of followers increased from a positive naïve theory ($n = 23$, $M = 2.66$, $SD = .94$), to followers with a neutral naïve theory ($n = 75$, $M = 3.21$, $SD = .83$) to followers with a negative naïve theory ($n = 18$, $M = 3.29$, $SD = 1.00$). However, the difference in the purchase intention between the levels of naïve theory is only significant for the group of followers with a positive and neutral naïve theory ($p < .05$). There is no significant difference between the followers with a negative naïve theory and the followers with a positive naïve theory ($p = .064$) and followers with a neutral naïve theory ($p = .928$). Hence, the hypothesis (H5) that the follower's negative naïve theory will negatively influence the purchase intention of the follower cannot be supported.

Analysis of the mediation effect

The tool PROCESS is used to test the mediation effect of PSR between the content value and the purchase intention of the follower. In *Appendix G – Mediation effect,* an overview of the relevant output can be found.

The indirect effect of informative content value on purchase intention, mediated by the strength of the PSR, on the purchase intention is significant, (effect = .057; LLCI = .003; ULCI = .124). The direct effect between the informative value of content and the purchase intention of the follower is significant as well, ($\beta = .155$; $t(111) = 2.343$; $p < .05$). Hence, the relation between informative content value and purchase intention is partially mediated by the strength of the PSR.

The strength of the PSR also mediates the indirect effect of the entertainment value of the content on the purchase intention of the follower (effect = .051; LLCI = .008; ULCI = .119). There is also a significant direct effect between the entertaining content value and the purchase intention, (β = .135; t (111) = 2.336; $p < .05$). Therefore, the relation between the entertaining value of the content and the purchase intention of the follower is partially mediated by the strength of the PSR.

Table 5 *Mediation model*

Mediation model		Dependent variable: purchase intention Bootstrapped CI [95%]			
		Effect	SE	LLCI	ULCI
Direct effect	CV_I - PI	.155	.066	.024	.285
Indirect effect	CV_I - PSR - PI	.057	.031	.003	.124
Direct effect	CV_E - PI	.135	.058	.020	.249
Indirect effect	CV_E - PSR - PI	.050	.029	.008	.112

Analysis of the moderation effect

The tool PROCESS is used to test the moderation effect of the naïve theory on the relationship between the informative value of the content and the strength of the PSR. In Appendix H –Moderation effect, an overview of the relevant output can be found.

First, the potential moderation of naïve theory on the significant positive effect between the informative value of the content and PSR is assessed via the R^2 change. There is an indication (R^2 = .049) that naïve theory may moderate the relationship.

H4 predicts the moderation of the naïve theory of the follower on the relationship between the informative value of the content and the PSR. There is no significant moderation of the naïve theory a follower on the positive effect of the informative value of the content on the strength of the PSR, p = .4095. Hence, hypothesis 4 cannot be supported.

5 Discussion

The use of social media increased among followers, social media influencers, and brands using the platform to promote their products. Social media influencers are an essential part of the social life of their followers. The current literature clarifies the appeal of social media influencers among followers. Nevertheless, the knowledge about this topic is sparse despite the high frequency with which followers are exposed to advertisements of influencers online. This study advances the existing literature by identifying the entertaining and informative value of the online endorsement and the PSR between the influencer and the follower as essential factors for explaining the effect of the online endorsements of influencers on the purchase intention of the followers. The outcomes of this study indicate that the entertaining value of the content of an influencer positively affects the strength of the PSR between the follower and the influencer. Subsequently, the informative value of the content and the strength of the PSR are positively related to the purchase intention of the follower. The findings of this study are discussed below.

As hypothesized, both the content with an entraining and an informative value have a positive effect on the strength of the PSR between the follower and influencer and the purchase intention of the follower. A distinction can be made in the importance of the value of the content and the strength of the effect on the PSR and the purchase intention. When it comes to establishing a strong PSR the follower attaches more value to the entertainment value of content. This result is corresponding to the study of Lou & Kim (2019). Thus, it can be explained that the content of an influencer which is perceived as entertaining by the follower has a greater impact on the strength of the PSR than content which is perceived as informative. This could be clarified by the idea that when the content of the influencer entertains the follower, the follower forms an illusory social relationship with the influencer. Because the follower genuinely likes the content the influencer is posting online, feels connected, and establishes a virtual but one-sided friendship with the influencer.

Focusing on the effect of the online endorsement on the follower's purchase intention, the results show different importance of content value. Again, both the entertainment and informative content's value has a positive effect on the purchase intention of the follower to buy products an influencer endorses online. Prior research revealed that on the one hand there is no significant relationship between the value of content (both entertainment and

informative) on the purchase intention (Lou & Kim, 2019) and on the other hand previous research suggests that the informative value of content has a positive effect on the purchase intention (Van-Tien Dao et al., 2014). Nevertheless, this study suggests that when it comes to buying products the follower attaches more value to the informativeness of the content than on the entertainment value. It could be speculated that the online endorsement of the influencers needs to facilitate the follower to make an informed decision to buy a particular product. The extent to which the follower perceives to be able to make an informed decision will subsequently lead to a higher purchase intention.

Moreover, the informative value of influencer-generated content positively affects followers' trust in the content of the influencer (Lou & Yuan, 2019). It could be speculated that a high level of trust in the content of the influencer due to the level of informativeness could lead to a higher purchase intention. The informative value of the content is essential since the follower trusts the influencer's sponsored endorsement because the follower has the feeling of being well-informed and is more likely to react to the call-to-action to buy the product the influencer endorses online.

Taken in to account the mediation effect of the PSR on the effect of the value of the content on the purchase intention of the follower, the results are contrasting to the findings of earlier studies. Although Lou & Kim (2019) mentioned that there is only a mediated effect of PSR between the entertaining value of content and purchase intention, the findings of this study show that the PSR partially mediates the effect of both the entertainment and informative value of content on the purchase intention. Thus it can be explained that besides the direct effect of the value of content there is also an indirect effect via PSR on purchase intention for endorsements with both an informative and entertaining character. The stronger the follower perceives the PSR the more likely the follower will purchase the product the influencer endorses. To establish a strong PSR, the follower attaches more value to being entertained by the influencer's content than being informed, as indicated by the results of this study and previous research (Lou & Kim, 2019).

Additionally, the findings of this study pointed to the positive effect of a strong PSR between the follower and an influencer as perceived by the follower on the purchase intention of the follower. The finding of this study indicating the linear relationship between the strength of the PSR and the purchase intention adds to the existent literature on the PSR as an

antecedent of purchase intention (Lou & Kim, 2019; Hwang & Zhang, 2018). As expected, when the follower perceives a strong relationship with an influencer, this follower is more likely to buy products the influencer endorses online (Colliander & Dahlen, 2011; Tsai & Men, 2013).

Previous research suggests that followers with a negative naïve theory attach more value to content which informs them than content that entertains them. The need for informative content in the process of establishing and strengthening the PSR for followers with a negative naïve theory can be related to the message elaboration (Briñol et al., 2015). It was speculated that followers with a negative naïve theory, who attach more value to informative content, scrutinize the informative more carefully and attach more value to strong argumentation rather than being entertained with fun content. Contradictory, the results of the moderation effect of the naïve theory of the follower on the effect of the informative value of the content on the PSR do not provide initial evidence that naïve theories about the meaning of persuasion can play a crucial role in the process of establishing a relationship between the follower and an influencer and subsequently the purchase intention of the follower.

Furthermore, the existing literature on purchase intention supports the relation between naïve theory and purchase intention (Soontae et al., 2018). The feeling of manipulation and being persuaded to buy a product negatively affects the follower's purchase intention (Hwang & Zhang, 2018; Soontae et al., 2018). Hence, the expectation that the followers with a negative naïve theory, who in general experience the feeling of manipulation sooner than those with a positive naïve theory, are less likely to purchase products endorsed by an influencer. Unfortunately, this expectation is not significantly supported by the results of this study. There is no significant difference between the followers with a negative naïve theory and followers with a positive of neutral naïve theory.

The findings that there is no moderation effect of the naïve theory of the follower on the effect between the informative value of content and PSR or no linear effect on purchase intention could be clarified by the speculation that the follower made his/her own choice to follow a particular influencer. The likelihood that the follower will experience the feeling of manipulation after viewing an online endorsement is lower for followers than for non-followers of the influencer, due to the social relationship between the follower and influencer.

Limitations

The study comes with several limitations. Firstly, the respondents of the survey are collected through convenience sampling. The use of the network of the researcher in gathering the respondents, even though there was a snowball effect where participants would send the survey to their network, limits the generalizability of the results because of the non-random sampling method. The use of another sampling method is recommended for future research to generate a more representative sample.

Secondly, there was no attention-check incorporated in the survey. This would have made sure that the survey is not just clicked through. However, the data of two respondents is deleted from the dataset since the respondents filled in the same answer for the whole survey. An attention-check would have made it possible to get a more complete dataset.

Finally, the respondents are asked to indicate their favourite influencer and the questions in the survey questions are based on the favourite influencers of every respondent. Because the data is not based on one influencer in particular, the data could be biased and susceptive for every respondent.

6 Conclusion

Previous studies examined the effect of the value of content on the PSR and purchase intention of adolescents. However, previous research shows contradicting results on this relationship between the value of content on purchase intention. The goal of the present study was to examine if there is a difference in content with an informative value and content with an entertainment value in influencing a follower to purchase products an influencer endorses online. Therefore, this study aimed first to assess the effect of informative and entertaining content on the purchase intention mediated by the strength of the PSR. Secondly, to find out how the naïve theory of followers moderates this effect. According to the research question "*What is the effect of the informative or entertaining value of the online content of an influencer on the purchase intention of a follower, mediated by the PSR between the follower and the influencer and moderated by the naïve theory of the follower?",* the expectation was that the informative value of the content would directly lead to a higher purchase intention and that the entertainment value of the content would indirectly, via the PSR, lead to a higher purchase intention. Secondly, the expectation was that the followers with a negative naïve theory would less likely purchase products endorsed. The results showed partially proof of the expectations.

In conclusion, to make sure the follower reacts to the call-to-action in the online endorsement of the influencer to buy a particular product it is crucial that the influencer-generated content entertains and informs the follower. The entertainment of the follower due to fun content leads to a strong PSR, which subsequently leads to a higher purchase intention. Furthermore, the informativeness of the content due to useful content leads also to a higher purchase intention. When a social media influencer wants to encourage followers to buy products this influencer endorses online via a sponsored post, the informative value of the content of the post is crucial to increase the purchase intention of the follower. Whereas followers place more emphasis on the entertaining value of the content when establishing social relationships with the social media influencer, which subsequently also leads to a higher purchase intention.

Additionally, it can be concluded based on the findings of this study that there is no difference between followers with a negative or positive naïve theory in the establishment of a PSR between a follower and influencer or the purchase intention of the follower.

Managerial implications

This research adds to the existing knowledge on how to use user-generated content of influencers effectively. How can the content influencers create to endorse a brand or product lead to a higher purchase intention of the follower? Due to the increase of collaborations between brands and social media influencers, the knowledge that content with both an informative and entertainment value as perceived by the follower leads to a higher purchase intention of the follower is essential for brands to market their products. This knowledge can be used in the marketing strategies of brands and especially for the collaborations with influencers to increase the purchase rate among the followers of an influencer after an online product endorsement.

Theoretical implications

Although there is a lot of research about the establishment of PSR regarding traditional marketing and media personae, there is a lack of research concerning PSR in influencer marketing. Social media influencers are an important part of the social life of followers. The impact of the social persuasion of followers by influencers is expected to increase over time and illustrates the urge for research regarding this topic. This study contributes to the spare knowledge regarding the effectiveness of online product endorsements of influencers on the purchase intention of followers via the strength of the PSR between the follower and influencer.

Further research

After all, this study aimed to create a starting point for research into the role of influencer marketing on the purchase intention of the followers of influencers, a promising field with many opportunities for the marketing strategies of brands. Given the critical role of influencers in the daily lives of their followers, it is suggested to expand the research regarding the role of the PSR between the follower and the influencer on purchase intention but also for other outcomes. Further research could also investigate the relationship of the PSR on more psychological factors, for example, focusing on the follower's self-esteem.

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8 Appendices

Appendix A - Survey

BLOCK 1 – Introduction

Dear participant,
Thank you for participating in this survey. Your responses will help us with the research about the effect of influencer marketing.

Participation in this survey is voluntary and you have the possibility to withdraw from the survey at any moment. The survey takes approximately 7 minutes. Concerning your privacy, the information will be treated anonymously and confidentially.

In case you have any questions or remarks related to the survey, please do not hesitate to contact me at eva.vanderheijden@student.ru.nl.

Thank you in advance for your time and participation in this research!
Eva van der Heijden

BLOCK 2 – Questions

Q1

Below you can find an explanation of a social media influencer.
A social media influencer has a large number of followers via social media channels such as YouTube and Instagram and regularly shares content online.

You can follow an influencer via a subscription to the channel of the influencer (YouTube) or following the account of the influencer (Instagram). Following an influencer can also be done when you do not officially subscribe to an account but are exposed to the content of the influencer on a regular basis.

To start the survey, please answer the following question.
Do you follow an influencer via the social media channels YouTube and / or Instagram?

- Yes
- No

Q2

You just indicated that you do follow an influencer via social media. Who is your favourite influencer?

- […]

Q3

Please take 20 seconds to think about the content you have seen from […] on your social media when he/she endorses a certain product or brand. Try to visualize this content and keep this content in mind when answering the following questions.

Rate the content you have seen from […] online when he/she is promoting a certain product or brand. What do you think about this content?

- *'Ineffective' – 'Effective'*
- *'Unhelpful' – 'Helpful'*

- *'Not functional' – 'Functional'*
- *'Unnecessary' – 'Necessary'*
- '*Impractical' – 'Practical'*
- *'Not fun' – 'Fun'*
- *'Dull' – 'Exciting'*
- *'Not delightful' – 'Delightful'*
- *'Not thrilling' – 'Thrilling'*
- *'Unenjoyable' – 'Enjoyable'*

→ Respondents could rate the post via a 7-point semantic differential scale.

Q4

The following thirteen statements are about the relationship you have with […]. Please indicate to what extent you agree with the following statements.

- I think […] is like an old friend.
- […] makes me feel as comfortable as when I am with friends.
- I think about […] when I don't see content of him/her on my social media channels.
- I miss […] if I do not see him/her on my social media channels for a long time.
- I feel that I know […] very well.
- I try to imagine what […] thinks about the content he/she posts online.
- The social media account of […] shows me what he/she is like.
- I find […] to be likable.
- I mostly agree with the actions of […].
- If there were a story about […] in a newspaper or on TV, I would read or watch it.
- I would like to meet […] in person.
- I admire […] for his/her achievements.
- I look forward to receiving new content of […].

→ Respondents could answer this question via a 7-point Likert scale: 'strongly disagree' – 'disagree' – 'somewhat disagree' – 'neither agree nor disagree' – 'somewhat agree' - 'agree' – 'strongly agree'.

Q5

The next four questions are about your intention to buy products […] endorses via social media.

Please indicate to what extent you can identify yourself with the following statements:

- I am interested in buying products that […] showed through his/her social media channel.
- I expected to buy products similar to […]'s products on his/her social media channel.
- I plan to buy products similar to products that […] showed through his/her social media channel.
- I would like to buy products similar to […]'s products on his/her social media channel.

→ Respondents could answer this question via a 5-point Likert scale: 'extremely unlikely' – 'slightly unlikely' – 'neither likely nor unlikely' – 'slightly likely' – 'extremely likely'.

Q6

Someone can be persuaded to buy a certain product after seeing an advertisement of this product. The next questions are going about what you think about persuasion via advertisements.

Please rate the following four statements. To what extent do you agree:

- A change in someone's opinion regarding a certain product is because that person has been brainwashed after seeing an advertisement.
- Most persuasion of people to buy a certain product is propaganda.
- People should be suspicious when others try to persuade them to buy a certain product.
- Persuasion of people to buy a certain product always involves manipulation or lying to people

→ Respondents could answer this question via a 7-point Likert scale: 'strongly disagree' – 'disagree' – 'somewhat disagree' – 'neither agree nor disagree' – 'somewhat agree' - 'agree' – 'strongly agree'.

Q7

The last questions are about your personal information. Please fill in the next four questions:

Gender:

- Male
- Female
- Other

Q8

Age:

- Text box

Q9

How many hours do you spend on the social media channels Instagram and YouTube on a daily basis?

- Less than 1 hour
- Between 1 and 2 hours
- More than 2 hours

Q10

How many influencers do you follow via the social media channels Instagram and YouTube?

- 0
- 1 – 5
- 6 – 10
- 11 – 15

- 16 – 20
- >21

BLOCK 3 – End

You are at the end of the survey.

Again, thank you for your time and participation in this research! If you have any questions or feedback after completing the survey, please do not hesitate to contact me at eva.vanderheijden@student.ru.nl.

Hi! Also curious about the effect of influencer marketing? **Do all those posts on Instagram really work?** To answer this question, I need your help! Fill in the survey (7 minutes) and help me finish my master thesis. Sharing this message with your friends and family will be appreciated! Eva,-

[link to the survey]

Table 7 *Descriptives sample*

		Frequency	*Percentage*	*Cum. Percentage*
Gender	Male	117	65.7	65.7
	Female	61	34.3	100
	Other	-	-	-
	Total	178	100	
Age	< 18	16	9.0	9.0
	18 - 25	85	47.8	56.8
	26 - 35	37	20.8	77.6
	36 - 45	9	5.1	82.7
	46 - 55	19	10.6	93.3
	56 - 65	8	4.5	97.8
	> 66	4	2.2	100
	Total	178	100	
	Average age	29		

Table 8 *Descriptives respondents* ***following*** *an influencer*

		Frequency	*Percentage*	*Cum. Percentage*
Gender	Male	27	23.1	23.1
	Female	90	76.9	100
	Other	-	-	
	Total	117	100	
Age	< 18	15	12.8	12.8
	18 - 25	70	59.8	72.6
	26 - 35	26	22.2	94.8
	36 - 45	1	.9	95.7
	46 - 55	2	1.7	97.4
	56 - 65	2	1.7	99.1
	> 66	1	.9	100
	Total	117	100	
	Average age	25		
Hours social media	< 1 hour a day	19	16.2	16.2
	1 - 2 hours a day	59	50.5	66.7
	> 2 hours a day	39	33.3	100
	Total	117	100	
Number of influencers	0	-	-	-
	1 - 5	44	37.6	37.6
	6 - 10	18	15.4	53
	11 - 15	20	17.1	70.1
	16 - 20	9	7.7	77.8
	> 20	26	22.2	100
	Total	117	100	

Table 9 *Descriptives respondents* ***not following*** *an influencer*

		Frequency	*Percentage*	*Cum. Percentage*
Gender	Male	32	52.5	52.5
	Female	29	47.5	100
	Other	-	-	-
	Total	61	100	
Age	< 18	1	1.6	1.6
	18 - 25	15	24.6	26.2
	26 - 35	11	18	44.2
	36 - 45	8	13.1	57.3
	46 - 55	17	27.9	85.2
	56 - 65	6	9.9	95.1
	> 66	3	4.9	100
	Total	61	100	
	Average age	39		
Hours social media	< 1 hour a day	40	65.6	65.6
	1 - 2 hours a day	16	26.2	91.8
	> 2 hours a day	5	8.2	100
	Total	61	100	

Variable: **content value**

Scale: 7-point semantic differential scale

Items: 10

Source: Lou & Kim (2019).

1. ‘Ineffective’ – ‘Effective’
2. ‘Unhelpful’ – ‘Helpful’
3. ‘Not functional’ – ‘Functional’
4. ‘Unnecessary’ – ‘Necessary’
5. ‘Impractical’ – ‘Practical’
6. ‘Not fun’ – ‘Fun’
7. ‘Dull’ – ‘Exciting’
8. ‘Not delightful’ – ‘Delightful’
9. ‘Not thrilling’ – ‘Thrilling’
10. ‘Unenjoyable’ – ‘Enjoyable’

Variable: **parasocial relationship (PSR)**

Scale: 7-point Likert scale

‘strongly disagree’ – ‘disagree’ – ‘somewhat disagree’ – ‘neither agree nor disagree’ – ‘somewhat agree’ - ‘agree’ – ‘strongly agree’

Items: 13

Source: Hartmann *et al*. (2008)

1. I think […] is like an old friend.
2. […] makes me feel as comfortable as when I am with friends.
3. I think about […] when I don’t see content of him/her on my social media channels.
4. I miss […] if I do not see him/her on my social media channels for a long time.
5. I feel that I know my […] very well.
6. I try to imagine what […] thinks about the content he/she posts online.
7. The social media account of […] shows me what he/she is like.

8. I find […] to be likable.
9. I mostly agree with the actions of […].
10. If there were a story about […] in a newspaper or on TV, I would read or watch it.
11. I would like to meet […] in person.
12. I admire […] for his/her achievements.
13. I look forward to receiving new content of […].

Variable: **purchase intention**
Scale: 5-point Likert scale
'extremely unlikely' – 'slightly unlikely' – 'neither likely nor unlikely' – 'slightly likely' – 'extremely likely'
Items: 4
Source: Kim *et al.* (2015).

1. I am interested in buying products that […] showed through his/her social media channel.
2. I expected to buy products similar to […]'s products on his/her social media channel.
3. I plan to buy products similar to products that […] showed through his/her social media channel.
4. I would like to buy products similar to […]'s products on his/her social media channel.

Variable: **naïve theory**
Scale: 7-point Likert scale
'strongly disagree' – 'disagree' – 'somewhat disagree' – 'neither agree nor disagree' – 'somewhat agree' - 'agree' – 'strongly agree'
Items: 4
Source: Briñol *et al.* (2015)

1. A change in someone's opinion regarding a certain product is because that person has been brainwashed after seeing an advertisement.

2. Most persuasion of people to buy a certain product is propaganda.
3. People should be suspicious when others try to persuade them to buy a certain product.
4. Persuasion of other to buy a certain product always involves manipulation or lying to people.

Table 10 *Rotated Component Matrix PCA*

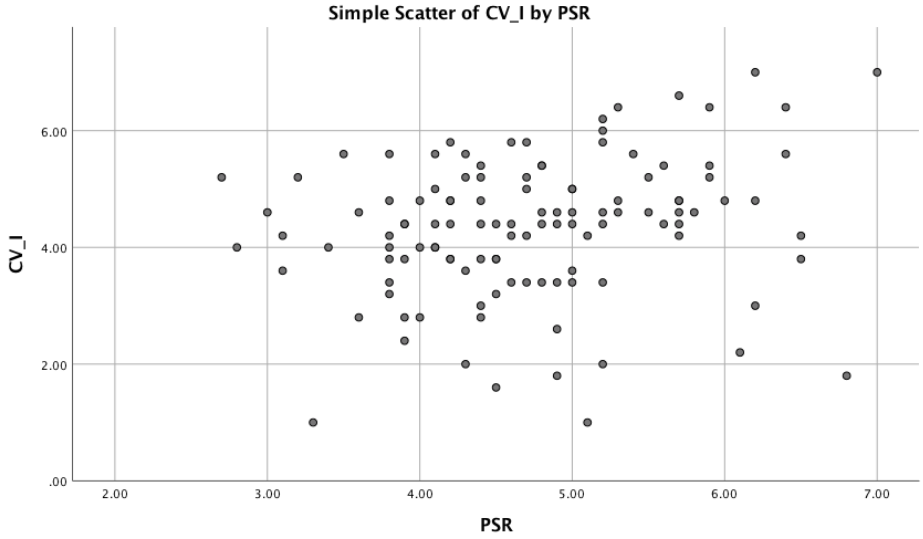
Construct	Item	Component					
		1	2	3	4	5	6
Content value	Q1		.443	.622			
	Q2			.836			
	Q3			.836			
	Q4			.666			
	Q5			.799			
	Q6		.878				
	Q7		.813				
	Q8		.774	.302			
	Q9		.683				
	Q10		.815				
PSR	Q1					.826	
	Q2	.326				.762	
	Q5	.361				.617	
	Q7	.576				.340	
	Q8	.791					
	Q9	.662				.311	
	Q10	.710					
	Q11	.698					
	Q12	.692					
	Q13	.695					
PI	Q1				.796		
	Q2				.833		
	Q3				.855		
	Q4				.779		
NT	Q2						.802
	Q3						.810

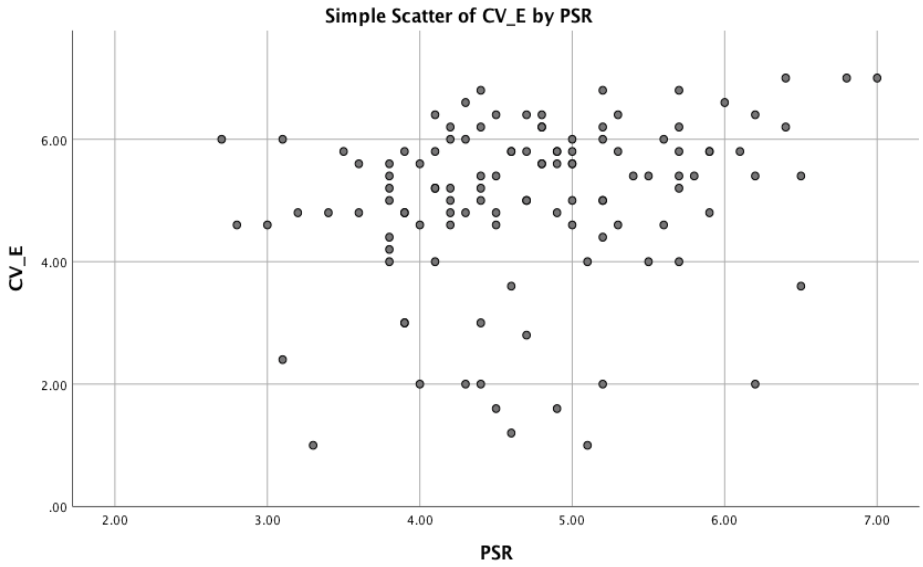
Table 11 *Descriptives of the measurements*

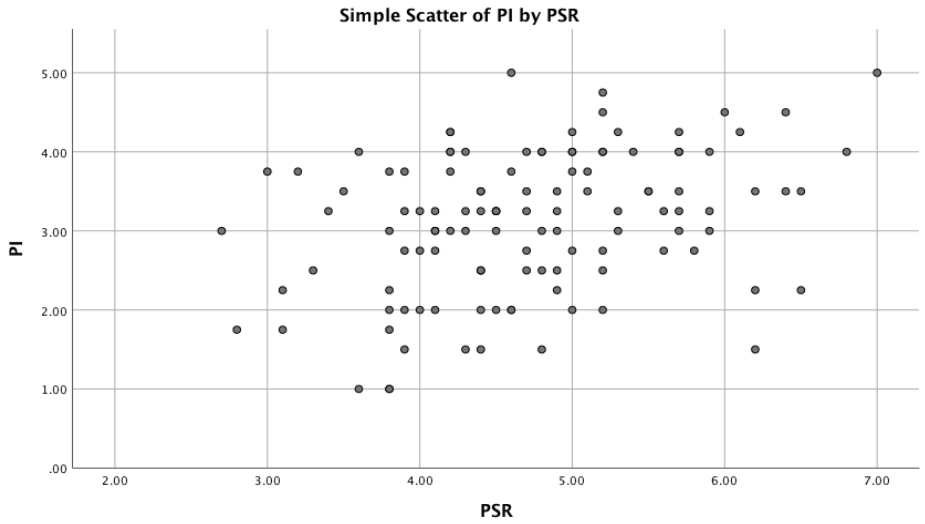
Construct	M, SD	Variable name	Number of items	Items	Means	SD
Content value	4.34, 1.19	CV_I	5	'Ineffective' – 'Effective'	4.72	1.55
				'Unhelpful' – 'Helpful'	4.46	1.54
				'Not functional' – 'Functional'	4.40	1.24
				'Unnecessary' – 'Necessary'	3.68	1.43
				'Impractical' – 'Practical'	4.48	1.72
Content value	5.00, 1.38	CV_E	5	'Not fun' – 'Fun'	5.63	1.72
				'Dull' – 'Exciting'	4.46	1.59
				'Not delightful' – 'Delightful'	5.23	1.64
				'Not thrilling' – 'Thrilling'	4.43	1.48
				'Unenjoyable' – 'Enjoyable'	5.36	1.78
PSR	4.73, .89	PSR	10	I think […] is like an old friend.	3.11	1.55
				[…] makes me feel as comfortable as when I am with friends.	3.53	1.75
				I feel that I know my […] very well.	3.79	1.63
				The social media account of […] shows me what he/she is like.	5.13	1.29
				I find […] to be likable.	5.96	.84
				I mostly agree with the actions of […].	5.19	1.12
				If there were a story about […] in a newspaper or on TV, I would read or watch it.	5.69	1.11
				I would like to meet […] in person.	4.54	1.86
				I admire […] for his/her achievements.	5.38	1.42
				I look forward to receiving new content of […].	5.03	1.44
Puchase intention	3.11, .90	PI	4	I am interested in buying products that […] showed through his/her social media channel.	3.18	1.07
				I expected to buy products similar to […]'s products on his/her social media channel.	3.06	1.03
				I plan to buy products similar to products that […] showed through his/her social media channel.	3.11	1.04
				I would like to buy products similar to […]'s products on his/her social media channel.	3.17	1.06
Naïve theory	3.91, 1.33	NT	2	Most persuasion of people to buy a certain product is propaganda.	3.82	1.59
				People should be suspicious when others try to persuade them to buy a certain product.	4.05	1.53

Table 4 *Assumptions regression analysis*

Variable X	Variable Y	Linearity	Independence observations	No outliers	Homoscedasticity	Normal distribution residuals
		Scatterplot	Durbin-Watson		Scatterplot	Normal P-P plot
CV_I	PSR	✓	1.647	✓	✓	✓
CV_E	PSR	✓	1.572	✓	✓	✓
PSR	PI	✓	1.932	✓	✓	✓
CV_I	PI	✓	2.010	✓	✓	✓
CV_E	PI	✓	1.972	✓	✓	✓
NT	PI	✓	2.017	✓	✓	✓






Simple Scatter of PI by PSR
PI
PSR
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4.00
3.00
2.00
1.00
.00
2.00
3.00
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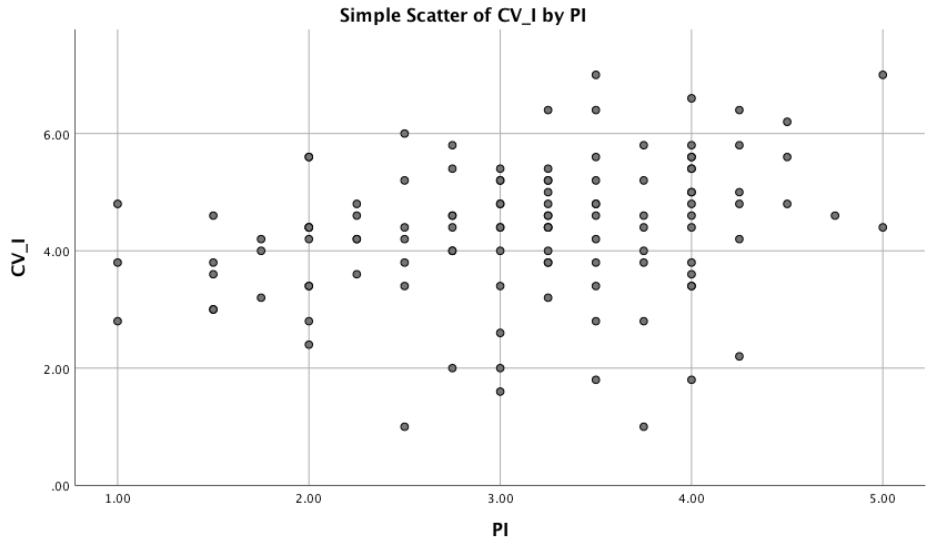
5.00
6.00
7.00


Simple Scatter of CV_I by PI
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PI
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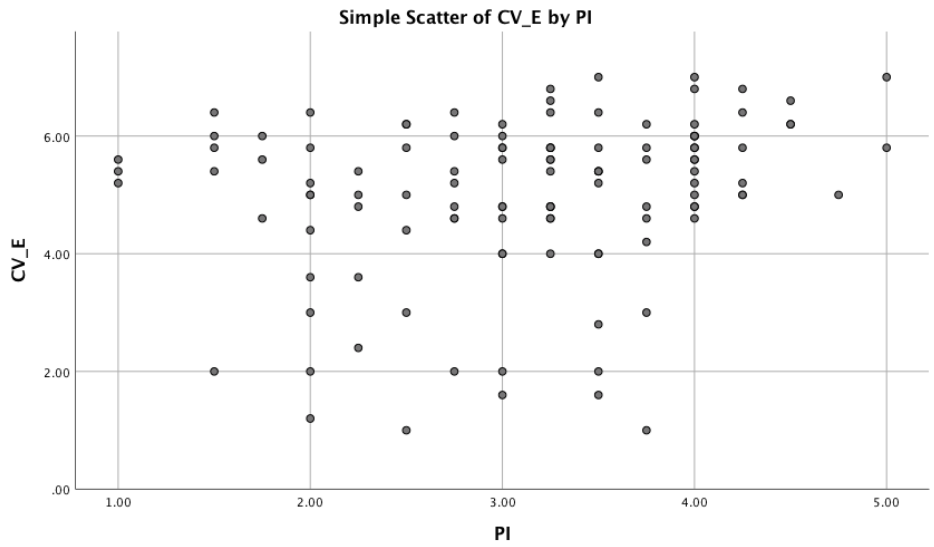
Simple Scatter of CV_E by PI
CV_E
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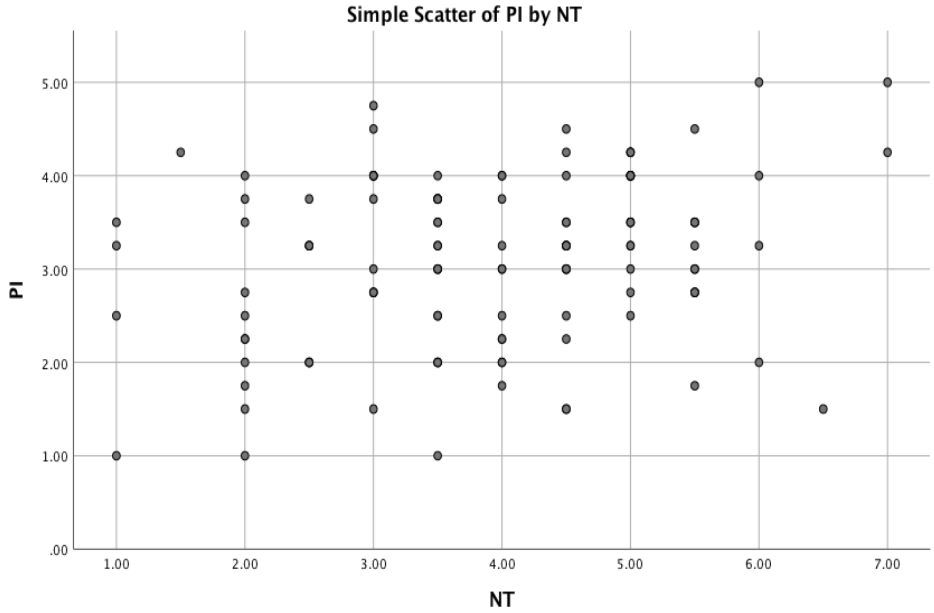
Simple Scatter of PI by NT
PI
NT
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4.00
3.00
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1.00
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1.00
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4.00
5.00
6.00
7.00

Mediation model 4: CV_I → PSR → PI

```
Run MATRIX procedure:

************ PROCESS Procedure for SPSS Version 3.5 ***************

       Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : PI
    X  : CV_I
    M  : PSR

Covariates:
 Age      Gender   Nu_Infl

Sample
Size:  116

**************************************************************************
OUTCOME VARIABLE:
 PSR

Model Summary
 R       R-sq        MSE         F         df1         df2          p
.3444    .1186      .7279     3.7351    4.0000   111.0000      .0069

Model
           coeff      se          t       p       LLCI       ULCI
constant  4.0369    .5420     7.4486    .0000     2.9630     5.1109
CV_I       .1675    .0678     2.4700    .0150     .0331      .3018
Age        .0010    .0106     .0920     .9269    -.0200      .0219
Gender    -.3262    .1948    -1.6746    .0968     -.7122     .0598
Nu_Infl    .1437    .0527     2.7241    .0075     .0392      .2482

Standardized coefficients
            coeff
CV_I         .2235
Age          .0085
Gender      -.1530
Nu_Infl      .2529

**************************************************************************
OUTCOME VARIABLE:
 PI

Model Summary
R       R-sq        MSE          F         df1         df2          p
.4788   .2293      .6528     6.5446     5.0000   110.0000      .0000
```

```
Model
           coeff       se         t          p       LLCI       ULCI
constant  -.2831    .6285     -.4505     .6533    -1.5288      .9625
CV_I       .1545    .0659     2.3429     .0209      .0238      .2852
PSR        .3398    .0899     3.7804     .0003      .1617      .5179
Age        .0221    .0100     2.2020     .0298      .0022      .0419
Gender     .3865     .1868    2.0693     .0409      .0163      .7567
Nu_Infl   -.0283     .0516    -.5477     .5850     -.1305      .0740

Standardized coefficients
            coeff
CV_I         .2046
PSR          .3371
Age          .1904
Gender       .1798
Nu_Infl     -.0493

******************** TOTAL EFFECT MODEL ****************************
OUTCOME VARIABLE:
 PI

Model Summary
 R       R-sq        MSE      F         df1         df2          p
.3594    .1291      .7310   4.1152     4.0000   111.0000      .0038

Model
          coeff      se          t          p       LLCI       ULCI
constant  1.0886     .5431     2.0044      .0475    .0124     2.1647
CV_I       .2114     .0679     3.1117      .0024    .0768      .3460
Age        .0224     .0106     2.1122      .0369    .0014      .0434
Gender     .2757     .1952     1.4122      .1607   -.1111      .6625
Nu_Infl    .0206     .0529      .3891      .6979   -.0842      .125

Standardized coefficients
            coeff
CV_I         .2799
Age          .1932
Gender       .1283
Nu_Infl      .0359

********** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y ***********

Total effect of X on Y
Effect    se      t       p       LLCI    ULCI      c_ps      c_cs
.2114    .0679    3.1117  .0024  .0768    .3460     .2349      .2799

Direct effect of X on Y
Effect    se      t       p       LLCI    ULCI      c'_ps      c'_cs
.1545    .0659    2.3429  .0209  .0238    .2852     .1716      .2046

Indirect effect(s) of X on Y:
        Effect     BootSE   BootLLCI   BootULCI
PSR      .0569      .0313      .0033      .1251

Partially standardized indirect effect(s) of X on Y:
        Effect     BootSE   BootLLCI   BootULCI
```

```
PSR      .0632      .0338      .0038      .1358

Completely standardized indirect effect(s) of X on Y:
        Effect     BootSE   BootLLCI   BootULCI
PSR      .0753      .0402      .0043      .1626

*************** ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence
intervals:
  5000

------ END MATRIX -----
```

Mediation model 4: CV_E → PSR → PI

```
Run MATRIX procedure:

************ PROCESS Procedure for SPSS Version 3.5 *************

      Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : PI
    X  : CV_E
    M  : PSR

Covariates:
 Age      Gender   Nu_Infl

Sample
Size:  116

**************************************************************************
OUTCOME VARIABLE:
 PSR

Model Summary
R       R-sq      MSE       F         df1      df2            p
.3462   .1198     .7270     3.7780    4.0000   111.0000      .0064

Model
           coeff      se        t          p       LLCI       ULCI
constant   3.7583     .6051     6.2111    .0000    2.5592     4.9573
CV_E        .1479     .0591     2.5021    .0138    .0308       .2650
Age         .0031     .0107      .2863    .7752   -.181        .0243
Gender     -.2170     .1941    -1.1178    .2661   -.6017       .1677
Nu_Infl     .1499     .0528     2.8402    .0054    .0453       .2545

Standardized coefficients
            coeff
CV_E         .2287
Age          .0267
Gender      -.1018
Nu_Infl      .2638

**************************************************************************
OUTCOME VARIABLE:
 PI

Model Summary
R        R-sq       MSE       F         df1        df2          p
.4786    .2291      .6530     6.5362    5.0000   110.0000      .0000

Model
          coeff      se         t         p       LLCI       ULCI
constant  -.5250    .6657     -.7886     .4320    -1.8443      .7943
```

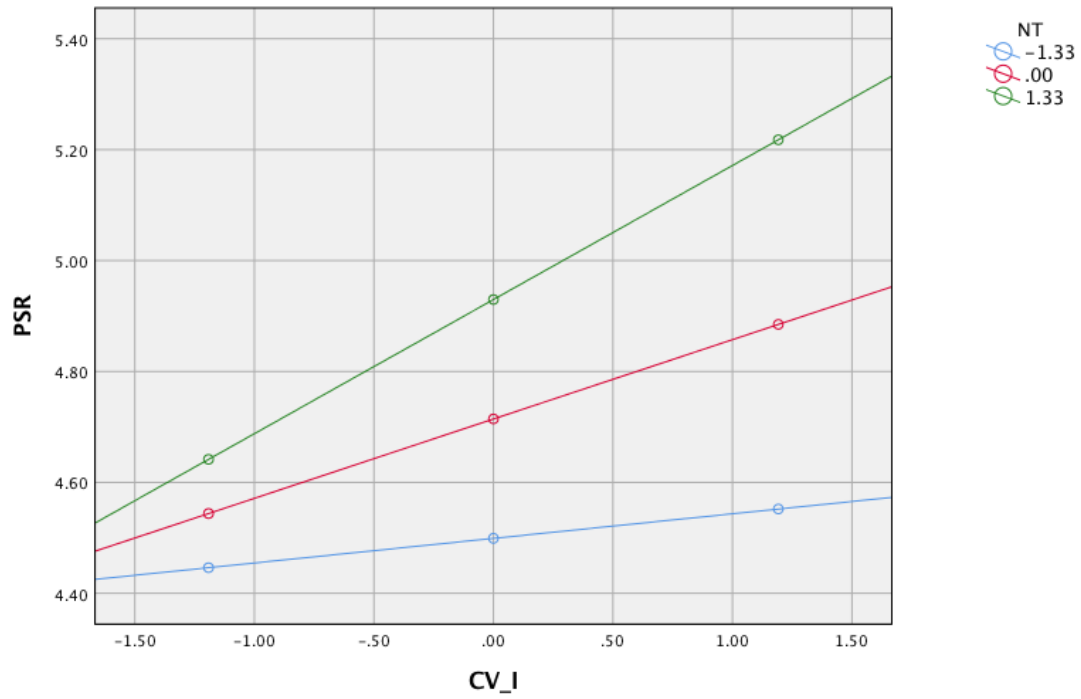
```
CV_E       .1345    .0576     2.3357     .0213      .0204      .2485
PSR        .3393    .0900     3.7719     .0003      .1610      .5176
Age        .0239    .0101     2.3572     .0202      .0038      .0440
Gender      .4865      .1850   2.6292     .0098     .1198      .8531
Nu_Infl    -.0225      .0518   -.4349     .6645    -.1252      .0801

Standardized coefficients
           coeff
CV_E        .2063
PSR         .3366
Age         .2064
Gender      .2264
Nu_Infl    -.0393

****************** TOTAL EFFECT MODEL ****************************
OUTCOME VARIABLE:
 PI

Model Summary
R        R-sq        MSE       F         df1        df2          p
.3596    .1293      .7308     4.1223    4.0000   111.0000      .0038

Model
          coeff       se          t      p       LLCI       ULCI
constant  .7502      .6067     1.2366    .2189   -.4520     1.9524
CV_E      .1846      .0593     3.1160    .0023    .0672      .3020
Age       .0250      .0107     2.3259    .0218    .0037      .0462
Gender    .4128      .1946     2.1210    .0362    .0271      .7985
Nu_Infl   .0283      .0529      .5354    .5934   -.0765      .1332

Standardized coefficients
           coeff
CV_E        .2833
Age         .2154
Gender      .1921
Nu_Infl     .0495

********** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **********

Total effect of X on Y
Effect    se       t         p     LLCI     ULCI     c_ps       c_cs
.1846    .0593     3.1160  .0023  .0672    .3020    .2051      .2833

Direct effect of X on Y
Effect    se       t         p     LLCI     ULCI    c'_ps      c'_cs
.1345    .0576     2.3357  .0213  .0204    .2485    .1494      .2063

Indirect effect(s) of X on Y:
        Effect     BootSE   BootLLCI   BootULCI
PSR      .0502      .0286      .0067      .1186

Partially standardized indirect effect(s) of X on Y:
        Effect     BootSE   BootLLCI   BootULCI
PSR      .0557      .0310      .0077      .1274
```

```
Completely standardized indirect effect(s) of X on Y:
        Effect     BootSE   BootLLCI   BootULCI
PSR      .0770      .0415      .0102      .1726

**************** ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence
intervals:
  5000

------ END MATRIX -----
```

Moderation model 1: NT → on CV_I → PSR

```
Run MATRIX procedure:

************* PROCESS Procedure for SPSS Version 3.5 *************

       Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
 Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 1
    Y  : PSR
    X  : CV_I
    W  : NT

Covariates:
 Gender   Age      Nu_Infl

Sample
Size:  116

**************************************************************************
OUTCOME VARIABLE:
 PSR

Model Summary
R       R-sq     MSE     F(HC4)     df1        df2          p
.4444   .1975    .6750   3.4291     6.0000   109.0000      .0039

Model
           coeff    se(HC4)     t       p       LLCI       ULCI
constant   4.8648   .5002     9.7256    .0000   3.8734     5.8562
CV_I        .1431   .0951     1.5051    .1352   -.0453      .3315
NT          .1618   .0797     2.0290    .0449    .0037      .3198
Int_1       .0742   .0896      .8280    .4095   -.1034      .2518
Gender     -.4160   .2142    -1.9415    .0548   -.8406      .0087
Age         .0034   .0139      .2463    .8059   -.0241      .0309
Nu_Infl     .1407   .0503     2.7944    .0061    .0409      .2404

Product terms key:
 Int_1    :        CV_I     x        NT

Test(s) of highest order unconditional interaction(s):
       R2-chng     F(HC4)        df1        df2          p
X*W      .0176      .6856     1.0000   109.0000      .4095
----------
    Focal predict: CV_I     (X)
          Mod var: NT       (W)

Conditional effects of the focal predictor at values of the
moderator(s):

NT        Effect    se(HC4)     t          p       LLCI       ULCI
```

```
-1.3307  .0443    .1846      .2403      .8106     -.3215      .4101
.0000    .1431    .0951     1.5051      .1352     -.0453      .3315
1.3307    .2418    .1115     2.1677      .0324      .0207      .4629
Moderator value(s) defining Johnson-Neyman significance region(s):
      Value    % below    % above
     1.7021    93.9655     6.0345
      .3391    56.0345    43.9655

Conditional effect of focal predictor at values of the moderator:
NT         Effect    se(HC4)   t          p       LLCI       ULCI
-2.9138     -.0731   .3176     -.2302   .8184     -.7026       .5564
-2.6138     -.0508   .2918     -.1743   .8620     -.6291       .5274
-2.3138     -.0286   .2661     -.1074   .9146     -.5560       .4988
-2.0138     -.0063   .2407     -.0263   .9791     -.4835       .4708
-1.7138      .0159   .2157      .0738   .9413     -.4116       .4435
-1.4138      .0382   .1912      .1997   .8421     -.3408       .4172
-1.1138      .0604   .1675      .3609   .7189     -.2715       .3923
-.8138       .0827   .1448      .5712   .5691     -.2043       .3697
-.5138       .1050   .1238      .8477   .3985     -.1404       .3503
-.2138       .1272   .1055     1.2053   .2307     -.0820       .3364
 .0862       .1495   .0916     1.6313    .1057     -.0321      .3311
 .3391       .1682   .0849     1.9820    .0500      .0000      .3365
 .3862       .1717   .0842     2.0386    .0439      .0048      .3387
 .6862       .1940   .0851     2.2795    .0246      .0253      .3626
 .9862       .2162   .0940     2.3008    .0233      .0300      .4025
1.2862       .2385   .1089     2.1891    .0307      .0226      .4544
1.5862       .2608   .1279     2.0392    .0438      .0073      .5142
1.7021       .2694   .1359     1.9820    .0500      .0000      .5387
1.8862       .2830   .1493     1.8961    .0606     -.0128      .5788
2.1862       .3053   .1722     1.7729    .0790     -.0360      .6465
2.4862       .3275   .1961     1.6700    .0978     -.0612      .7162
2.7862       .3498   .2207     1.5846    .1160     -.0877      .7873
3.0862       .3720   .2458     1.5134    .1331     -.1152      .8593

***************** ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

W values in conditional tables are the mean and +/- SD from the
mean.

NOTE: A heteroscedasticity consistent standard error and covariance
matrix estimator was used.

NOTE: The following variables were mean centered prior to analysis:
          NT       CV_I

------ END MATRIX -----
```


NT
-1.33
.00
1.33
PSR
5.40
5.20
5.00
4.80
4.60
4.40
-1.50
-1.00
-.50
.00
.50
1.00
1.50
CV_I