

How the type of sports-related endorser influences consumers' purchase intentions

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Abstract

Purpose – As the superiority of sports celebrities' endorsements has been questioned, the purpose of this study is to identify various types of endorsers' direct and indirect effects on consumers' purchase intentions.

Design/methodology/approach – Empirical data were collected from 240 useful responses to an online experiment, and research hypotheses were tested using (moderated) serial mediation analyses.

Findings – The study's findings indicate that an endorser has a positive influence on consumers' purchase intentions through their perceptions of the advertisement and the endorsed brand. A moderated serial mediation analysis finds differences in the four types of endorsers analyzed. A sports celebrity is the most effective type of endorser in increasing consumers' purchase intentions, whereas endorsements by company managers and peer consumers, while also positive, are less effective in influencing advertising outcomes. An expert's endorsement is comparable to that of a manager but not significant.

Research limitations/implications – The generalizability of the study's findings is limited because of a restricted data sample, the use of fictitious endorsers and the limited number of product categories and brands analyzed.

Originality/value – The study systematically analyzes the behavioral influence of four types of endorsers on consumers' purchase intentions, mediated by their perceptions of the advertisements and the endorsed brand. The results of this analysis extend the current state of endorsement research, indicating that endorsements should be integrated into companies' marketing strategies and provide marketing professionals practical guidance on which type of endorser is most effective in influencing advertising outcomes.

Keywords Purchase intention, Sports marketing, Product endorsements, Sports celebrity endorsements

Paper type Research paper

Introduction

The popularity of sports celebrities' endorsements continues to increase (Bergkvist and Zhou, 2016; Kim *et al.*, 2017), and companies frequently use product endorsements as part of their marketing strategy. Studies have shown that sports celebrities' endorsements are an effective way to increase brand equity (Spry *et al.*, 2011), product sales (McCormick, 2018; Wang and Scheinbaum, 2018) and a company's market value (Derdenger *et al.*, 2018; Elberse and Verleun, 2012). However, the superiority of sports celebrities' endorsements over endorsements by other types of endorsers is in question. Atkin and Block (1983) and Kamins and Gupta (1994) argued that celebrity endorsers are not always convincing and believable. More recently, Koernig and Boyd (2009) and Taylor (2016) questioned whether sports celebrity endorsers are the most effective type of endorser in influencing consumers' behavior. Moreover, Munnukka *et al.* (2016) stated that a typical peer consumer has



significant credibility as a source and is more effective in determining advertising outcomes than other types of endorsers are. Therefore, the present study seeks to determine systematically the direct and indirect influences of different types of sports-related endorsers on consumers' purchase intentions.

A conceptual framework with consumers' purchase intentions as the dependent variable was constructed based on the attitudinal concepts of attitude toward the endorser and attitude toward the endorsed brand. Two hundred forty useful responses were collected from an experiment conducted online and analyzed using (moderated) serial mediation analyses. In combining mediation and moderation analyses and determining the influence of different types of endorsers on consumers' purchase intentions, this study enhances the current endorsement research: It applies a more comprehensive research approach than that of [Friedman and Friedman \(1979\)](#) and extends [Roy and Mishra \(2018\)](#) by incorporating indirect effects to explain endorsers' influence on consumers' purchase intentions. Moreover, this study extends [Munnukka et al. \(2016\)](#) by analyzing the influence of four types of sports-related endorsers in the same conceptual framework.

The study presented here finds an overall positive influence of a product endorsement on consumers' purchase intentions for all four types of endorsers analyzed. The direct influence of attitude toward an endorser on consumers' purchase intentions is not significant for any of the four types of endorsers, indicating that an endorser's effectiveness largely depends on attitudinal concepts that mediate his or her influence on advertising outcomes. Accordingly, the study shows that consumers' perceptions of the advertisement and the endorsed brand mediate endorsers' influence on consumers' purchase intentions. A moderated serial mediation analysis indicates the main differences of the four types of endorsers. A sports celebrity is the most effective type of endorser in determining consumers' purchase intentions. Company managers' and peer consumers' endorsements also have an overall positive influence on consumers' purchase intentions, whereas external experts' endorsements turned out to be not significant. However, the influence of a company manager's and a peer consumer's endorsement on consumers' purchase intentions is less marked than that of a celebrity's endorsement. Accordingly, it can be concluded that sports celebrities have distinctive traits as endorsers that consumers perceive and convert into increased purchase intentions.

Literature review

Product endorsements

Product endorsements are embedded in the theory of classical conditioning ([Till et al., 2008](#)), which states that consumers create a connection between a conditioned stimulus (an endorser) and an unconditioned stimulus (the endorsed product) ([Shimp et al., 1991](#); [Till et al., 2008](#)). When a company uses a product endorsement, it leverages an endorser's positive characteristics, so an endorsement's effectiveness largely depends on the endorser's individual set of meanings ([Choi and Rifon, 2012](#); [McCracken, 1989](#)). One way to determine a product endorsement's effectiveness is to measure the endorser's influence on consumers' purchase behavior. As real purchase behavior is difficult to measure in an empirical context, surveying consumers' purchase intentions has been deemed a satisfactory proxy ([Mehta, 1994](#)). According to the theory of planned behavior ([Ajzen, 1991](#)), intention is an adequate predictor of real behavior as long as consumers are in full control of their behavior and are not influenced by social pressure ([Knoll and Matthes, 2017](#)).

Attitudinal factors

Attitudes are latent behavioral factors that determine a person's evaluation of a subject or an object ([Mitchell and Olson, 1981](#); [Petty et al., 1983](#)). In the context of a product endorsement,

attitude toward the endorser and attitude toward the endorsed brand are the main determinants of an endorsement's effectiveness. In an early study, [Berlo et al. \(1969/1970\)](#) found that endorsers' effectiveness increased with certain source characteristics, a view confirmed by [Amos et al.'s \(2008\)](#) meta-analysis and more recently by [Ilicic et al. \(2018\)](#). Consumers' attitude toward an endorser is reflected by their perceptions of the endorser's credibility and physical attractiveness ([MacKenzie and Lutz, 1989](#); [Ohanian, 1990](#)).

The source credibility concept, which evolves from social psychology, suggests that a message's effectiveness depends on receivers' perceptions of the sender's expertise and trustworthiness ([Erdogan, 1999](#); [Hovland and Weiss, 1951/1952](#)). [McGinnies and Ward \(2016\)](#) showed that a credible source is more effective in influencing advertising outcomes than a non-credible source, as it can lead to a more substantial change in consumers' opinions. Source expertise is described as the "extent to which a communicator is perceived to be a source of valid assertions and refers to the knowledge, experience or skills possessed by an endorser" ([Hovland et al., 1953](#), p. 59). Relatedly, source trustworthiness is defined by "the degree of confidence in the communicator's intent to communicate the assertions he [or she] considers most valid" ([Hovland et al., 1953](#), p. 21). Thus, trustworthiness refers to an endorser's honesty, integrity and believability and the audience's acceptance of those traits ([Erdogan, 1999](#)). As message-recipients perceive an advertising message from a trustworthy endorser as highly believable, they are more likely to accept it than the message of a less trustworthy endorser ([Till and Busler, 2000](#)). Consequently, a product endorsed by a trustworthy endorser is more effective in influencing consumer behavior than an endorsement by a less trustworthy endorser is ([Wang and Scheinbaum, 2018](#)).

An endorser's physical attractiveness is also expected to determine consumers' perceptions of the endorser and the endorsement ([Joseph, 1982](#); [McCormick, 2016](#)). Through their appearance alone and without supporting arguments, highly attractive endorsers can positively influence advertising outcomes like consumers' purchase intentions ([Liang and Lin, 2018](#); [Norman, 1976](#)). The positive influence of a highly attractive endorser has been shown by, among others, [Baker and Churchill \(1977\)](#) for perfume and [Erdogan et al. \(2001\)](#) for jeans. However, source attractiveness is still a controversial factor in any endorsement campaign, as it is highly subjective ([Fraser et al., 2016](#); [Ilicic et al., 2018](#)) and difficult to validate with any consistency ([Bower and Landreth, 2001](#); [Felix and Borges, 2014](#)). In addition, research findings have indicated that the influence of physical attractiveness on advertising outcomes is limited if an endorser is perceived to be an expert ([Fink et al., 2004](#); [Premeaux, 2009](#)).

Another essential attitudinal concept that determines an endorsement's effectiveness is consumers' attitude toward the endorsed brand, characterized by their perceptions of the brand's expertise and trustworthiness ([Newell, 1993](#)). [Newell and Goldsmith \(2001\)](#) defined attitude toward a brand as "the extent to which consumers feel that [. . . the] firm has the knowledge or ability to fulfill its claims and whether the firm can be trusted to tell the truth" (p. 235). Accordingly, a brand's characteristics determine consumers' evaluation of the brand and, thus, indirectly the outcome of an endorsement ([Spry et al., 2011](#)). [Goldsmith et al. \(2000\)](#) and [Newell and Goldsmith \(2001\)](#) found that corporate trustworthiness and expertise positively influence consumers' purchase intentions, and [Lafferty and Goldsmith \(1999\)](#) indicated that both factors were more important in determining advertising outcomes than source credibility factors were.

Endorsement by a sports celebrity

A sports celebrity's endorsement is a product endorsement in which a sports celebrity promotes a company's product or service. Sports celebrities are characterized by their superior athletic performance, the recognition of this performance and the use of this

recognition to market a product or service (Darnell and Sparks, 2007). Brooks and Harris (1998) and McCormick (2018) argued that sports celebrities are highly effective endorsers, as they combine outstanding athletic performance with pronounced media competency. Moreover, consumers' defense mechanisms against sports celebrities' endorsements are lower than they are against other marketing instruments (Alexandris *et al.*, 2012). Studies have shown that credible (Fink *et al.*, 2004; Pornpitakpan, 2004) and physically attractive sports celebrities (Amos *et al.*, 2008; McCracken, 1989) have a positive influence on advertising outcomes. However, Koernig and Boyd (2009) and Taylor (2016) indicated that sports celebrities have not always been convincing endorsers and that other sports-related types of endorsers were more effective in influencing advertising outcomes. Therefore, a more detailed comparison of different sports-related types of endorsers is needed to extend the current state of endorsement research, determine the most effective types of endorsers and enhance practical implications for marketing professionals.

Research approach

Conceptual framework

The purpose of this study is to determine the influence of different sports-related types of endorsers on consumers' purchase intentions. Therefore, the conceptual framework (Figure 1), with an anticipated positive influence of attitude toward the endorser on attitude toward the advertisement and, from there, on attitude toward the endorsed brand, was derived (Felix and Borges, 2014; MacKenzie and Lutz, 1989). Attitude toward the endorser is determined by consumers' perceptions of an endorser's expertise, trustworthiness and attractiveness, whereas attitude toward the advertisement is characterized by the "predisposition to respond [...] to a particular advertisement stimulus during a particular exposure occasion" (Lutz, 1985, p. 49). Thus, attitude toward the advertisement mediates endorsers' influence on consumers' brand perceptions (Lee *et al.*, 2017; Mehta, 2000). A positive influence of consumers' attitude toward the endorsed brand on purchase intentions was expected (Newell and Goldsmith, 2001) and a direct influence of their attitude toward the endorser on attitude toward the endorsed brand (Pradhan *et al.*, 2014) and on purchase intentions completed the conceptual framework (Amos *et al.*, 2008; Berlo *et al.*, 1969/1970). As a "one fits all [advertisement strategy . . .] is probably too simplistic" (Fraser *et al.*, 2016, p. 136), the influence of four sports-related types of endorsers – a sports celebrity, a sports-related peer consumer, a sports company manager and a sports-related external expert – on consumers' purchase intentions was integrated as a moderating variable into the research model.

Research hypotheses

Research has shown that product endorsements are effective marketing instruments for strengthening a company's brand image (Charbonneau and Garland, 2005) and increasing consumers' purchase intentions (Fink *et al.*, 2012; Till and Busler, 2000). A sports-related product endorsement is expected to have both a positive direct influence and a positive indirect influence on consumers' purchase intentions, leading to the following initial research hypotheses:

- H1. Consumers' attitudes toward a sports-related endorser have a positive direct influence on their purchase intentions.
- H2. The influence of consumers' attitudes toward a sports-related endorser on their purchase intentions is mediated by their attitudes toward the advertisement and the endorsed brand.

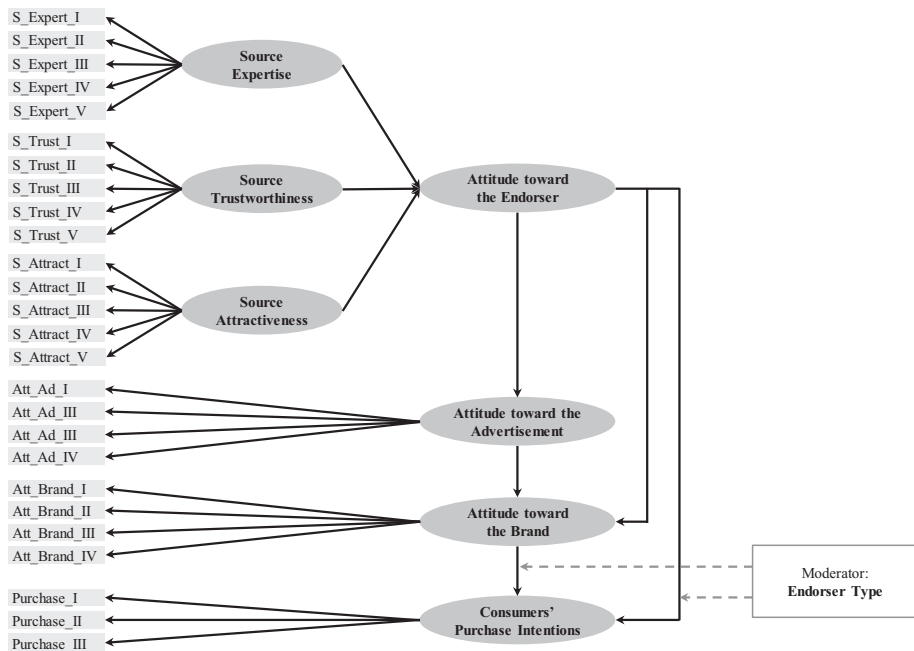


Figure 1. Conceptual framework

However, differences in these influences based on the type of endorser are expected, as each type of endorser affects a targeted consumer audience in a different way (Leung *et al.*, 2018). For example, a celebrity endorser, an “individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement” (McCracken, 1989, p. 310), can enhance a company’s brand image and increase its product sales by combining celebrity status traits with general media competencies (Driessens, 2013; McCormick, 2018). Sports celebrities have a link to sports through their profession as athletes, which indicates relevant product experience and expertise. Koernig and Boyd (2009) highlighted that consumers’ knowledge and attitude toward sports celebrities derive more from how they behave and perform in their primary profession as athletes than from seeing them in off-the-field situations like product endorsements. Thus, Erfgen *et al.* (2016) stated that consumers are likely to recognize sports celebrities, which then can have a positive influence on consumers’ purchase intentions, leading to the following research hypothesis:

H3a. The direct (I) and the indirect influence (II) of consumers’ attitudes toward the endorser on their purchase intentions are moderated by a sports celebrity endorser.

Companies frequently engage peer consumers to endorse their products and services (Kahle and Homer, 1985; Karasiewicz and Kowalczyk, 2014). A peer consumer endorser is a noncelebrity customer “who endorses or demonstrates a product or service and acts as a source of information [. . . thus increasing] the acceptability of the message [. . . as a] result of his or her perceived credibility and similarity” (Munnukka *et al.*, 2016, p. 182) with the target audience. Sports-related peer consumers are linked to sports by using the sports-related product themselves. Bower and Landreth (2001) saw peer consumers as effective endorsers primarily because of their high level of perceived source credibility, resulting in increased

acceptability and believability of the advertising message and consumers' increased commitment in terms of purchase intentions. Therefore, the following research hypothesis was derived:

H3b. The direct (I) and the indirect influence (II) of consumers' attitudes toward the endorser on their purchase intentions are moderated by a sports-related peer consumer endorser.

A manager is in a leading position in a company and so is expected to have an elevated level of product expertise in respect to the company's products. Thus, a manager of a sports-related company is linked to the sports with which the company's products are associated. As research that has addressed the effectiveness of a company manager's endorsement is limited (Schimmelpfennig, 2018), practical implications for marketing professionals are also restricted. Reidenbach and Pitts (1986) pointed out that not all high-level managers are appropriate endorsers for their firms' products, as they are not necessarily well-known to a broader consumer audience and do not have pronounced source credibility or attractiveness traits. For their part, Stephens and Faranda (1993) found that company managers, although they may be associated with a high level of source expertise because of the leading role they play in their companies, "evoked the highest proportion of [...] negative thoughts about the spokesperson, the advertisement or the company" (p. 40). However, examples like Steve Jobs, Apple's late CEO, show that managers' endorsements can have an overall positive influence on a company's sales. Accordingly, a company manager's endorsement is expected to have a positive influence on consumers' purchase intentions:

H3c. The direct (I) and the indirect influence (II) of consumers' attitudes toward the endorser on their purchase intentions are moderated by a company manager endorser.

Companies have also engaged external experts from independent organizations as product endorsers. Friedman and Friedman (1979) defined an external expert as "a recognized authority on the product class endorsed whose expertise, the result of special knowledge or training, is superior to that acquired by ordinary people" (p. 22). A close link to sports is given for experts who work in sports-related product segments. Maddux and Rogers (1980) and Norman (1976) argued that external experts can enhance an advertising message's believability primarily because of their pronounced credibility. Accordingly, a sports-related external expert's endorsement is expected to have a positive influence on consumers' purchase intentions, leading to the following research hypothesis:

H3d. The direct (I) and the indirect influence (II) of consumers' attitudes toward the endorser on their purchase intentions are moderated by a sports-related external expert endorser.

Although an overall positive influence of an endorsement on consumers' purchase intentions is hypothesized for all four types of endorsers, differences based on the type of endorser are expected. Friedman and Friedman (1979) and Kamins *et al.* (1989) indicated that external experts are particularly effective in endorsing products that are associated with any kind of financial, performance or physical risk. More recently, Biswas *et al.* (2006) showed that an external expert endorser of a technology-related product is more effective than a celebrity endorser in influencing consumers' purchase intentions. While peer consumers are expected to have an elevated level of product experience and trustworthiness as a source of information because of their similarity to consumers, expert endorsers and celebrity endorsers are expected to be more effective in influencing consumers' purchase intentions, as they are associated with extraordinary credibility traits. Moreover, consumers perceive external experts, celebrities and peer consumers as more credible than company managers,

thus having a greater influence on consumers' purchase intentions (Friedman *et al.*, 1976; Seno and Lukas, 2007). Accordingly, the following research hypothesis is derived:

- H4. A sports-related external expert's endorsement has a greater influence on consumers' purchase intentions than a sports celebrity's endorsement, a sports-related peer consumer's endorsement and a sports company manager's endorsement.

Pre-study

Prior to the main experiment, a pre-study with 112 participants, 54.5 (45.5)% of whom were women (men), with all participants averaging 33.1 years of age, was conducted to identify appropriate durable consumer goods product categories and brands. As Kim *et al.* (2017) and Liang and Lin (2018) indicated that both congruent and incongruent endorser-product combinations have a positive effect on consumers' purchase intentions, a sports-related product (sports shoes) and a nonsports-related product (laundry powder) were selected for the main experiment based on participants' familiarity ratings. Both product categories have been used in previous research by Liu *et al.* (2007), Pieters *et al.* (1999), Pradhan *et al.* (2014) and Rossiter and Smidts (2012), among others. Product category was also tested as a control variable in the regression models. Only well-known, real brands were selected (Bower and Landreth, 2001; Roy and Mishra, 2018) to ensure an adequate level of brand association by the participants and to avoid potential overestimation effects (Lohneiss and Hill, 2014; Miller and Allen, 2012). Participants rated their level of familiarity with these brands with a single item on a seven-point scale, from unfamiliar to highly familiar.

Survey structure and measurement scales

The main experiment was administered via Questback, an online survey tool. Participants were randomly assigned to one of four endorsement conditions (celebrity endorser, peer consumer endorser, company manager endorser or external expert endorser) or to the control group (no endorser). The advertising stimulus was a print advertisement that displayed the image of a fictitious endorser, a short description of the endorser (subject to the type of endorser) and the branded product (Pieters *et al.*, 2002). Lear *et al.* (2009) pointed out that, even in the age of online marketing, classic print advertisements are widely used in marketing practice, so they are also frequently used in consumer research studies, such as those of Escalas and Bettman (2017) and Rossiter and Smidts (2012). The present study uses a fictitious endorser for all endorsement conditions to eliminate the effect of participants' existing knowledge about the endorser (Fink *et al.*, 2012; Sato *et al.*, 2016). Descriptions of the four types of endorsers were provided and were approximately equal in length and structure. An image of the same person was used for each type of endorser to avoid dilution effects (Winterich *et al.*, 2018). The advertisement stimuli were all tested and adjusted, if necessary, before being used in the main experiment. A plain print advertisement with no endorser was used for the control condition. Participants were exposed to and surveyed about only a single endorsement condition to avoid anchoring and distortion effects.

The main experiment started with a brief introduction to the survey that included information about the European Data Protection Regulation. Then the advertisement stimulus was presented and respondents of the endorsement conditions answered survey questions about their perceptions of the endorser's expertise, trustworthiness and attractiveness. Subsequently, they rated their attitudes toward the advertisement and the endorsed brand, followed by rating the dependent variable of consumers' purchase intentions and answering selected control questions (Newell and Goldsmith, 2001; Yi, 1990). Finally, participants' provided information about their basic sociodemographics. To encourage

participation in the experiment, a voucher lottery was offered to participants at the end of the survey. All measures and scales were widely tested and statistically validated in previous research (Table 1). Because participants were all German, the main experiment was conducted in German, with all factors and items translated from English to German; wording was tested with a group of nonparticipants and edited if necessary (Yoo and Donthu, 2001). The endorsers' expertise, trustworthiness and attractiveness were recorded with five items each (Kim and Na, 2007; Ohanian, 1990) on a seven-point differential scale. Consumers' attitudes toward the advertisement and the endorsed brand were both surveyed with four items (Mitchell and Olson, 1981) on a five-point differential scale. The dependent variable of consumers' purchase intentions was measured with three items (Koernig and Boyd, 2009; Till and Busler, 2000; Yi, 1990) on a seven-point differential scale. Participants responded to these constructs separately and could not return to any set of items after rating them (Lohneiss and Hill, 2014). Cronbach's alpha values were calculated for each construct to ensure internal scale consistency (Hair *et al.*, 2006).

Data preparation

Data were cleaned before being analyzed, and responses that indicated logical inconsistencies provided a false answer to any control question or indicated that the respondent had taken too little time to answer the survey were removed from the final data sample. Data-cleaning eliminated fifteen responses (5.9%) from the initial data sample, resulting in a final sample of 240 useful responses, which were analyzed using the statistical software SPSS Statistics including Hayes's PROCESS extension tool and SPSS Amos Graphics. A Kaiser-Meyer-Olkin value of 0.95 and a significant Bartlett's test of sphericity ($p < 0.01$) indicated that the underlying data sample was sufficient to be used in further factor analyses (Kaiser and Rice, 1974). A power analysis was conducted and a post-hoc test (*F*-Test) indicated with an observed power of above 0.95 (alpha = 0.05) an adequate statistical power (Cohen, 1988; Faul *et al.*, 2009). Main descriptive statistics were derived and a second-order confirmatory factor analysis (CFA) was performed to identify and eliminate items with insufficient factor loadings (Morata-Ramírez and Holgado-Tello, 2012). Subsequently, items were parceled for each research construct using unweighted averages to account for the study's limited sample size (Matsunaga, 2008). Next, (moderated) serial mediation analyses were conducted using Hayes's SPSS extension PROCESS tool (Hayes, 2018), to determine the endorsers' direct and indirect influences on consumers' purchase intentions and the main differences among the four types of endorsers analyzed (Figure 2). Correlation coefficients and variance inflation factors (VIFs) were below recommended thresholds, indicating that multicollinearity was unlikely to distort the study's findings (Hair *et al.*, 2006).

Method

Sample statistics

Data for the main experiment were gathered using a survey administered online, with participants approached through the network of a major German university. Their sociodemographic factors indicated adequate diversity in the sample and a high likelihood of a representative customer sample. The final data sample for the main experiment consisted of a slightly higher number of female respondents ($n = 130$, 54.2%) than male respondents ($n = 110$, 45.8%). Therewith, the gender distribution of participants in the main experiment was comparable to the gender distribution of the pre-study's participants. Participants' average age was 34.6 years, and most participants held an academic or equivalent degree (82.5%). Their monthly net income, voluntarily reported by 80.0% of the participants, had a median of 2,501–3,000 Euro/month. Additional sample statistics can be found in the Appendix in Table A1.

Table 1.
Research constructs
and Cronbach's alpha
values

| Construct | Source | Items | Scale | Source | Cronbach's alpha |
|-----------------------------------|-----------------------------------|------------------------------------|--------------------------------|--|------------------|
| Attitude toward the endorser | Source expertise | Expert ↔ Not an expert | Seven-point differential scale | Kim and Na (2007), Ohanian (1990) | $\alpha = 0.99$ |
| | | Experienced ↔ Inexperienced | | | |
| | | Knowledgeable ↔ Unknowledgeable | | | |
| Source trustworthiness | Source trustworthiness | Qualified ↔ Unqualified | Seven-point differential scale | Kim and Na (2007), Ohanian (1990) | $\alpha = 0.99$ |
| | | Skilled ↔ Unskilled | | | |
| | | Dependable ↔ Undependable | | | |
| Source Attractiveness | Source Attractiveness | Honest ↔ Dishonest | Seven-point differential scale | Kim and Na (2007), Ohanian (1990) | $\alpha = 0.98$ |
| | | Reliable ↔ Unreliable | | | |
| | | Sincere ↔ Insincere | | | |
| Attitude toward the advertisement | Attitude toward the advertisement | Trustworthy ↔ Untrustworthy | Seven-point differential scale | Kim and Na (2007), Ohanian (1990) | $\alpha = 0.98$ |
| | | Attractive ↔ Unattractive | | | |
| | | Classy ↔ Not classy | | | |
| Attitude toward the brand | Attitude toward the brand | Beautiful ↔ Ugly | Five-point differential scale | Mitchell and Olson (1981) | $\alpha = 0.89$ |
| | | Elegant ↔ Plain | | | |
| | | Sexy ↔ Not sexy | | | |
| Consumers' purchase intentions | Consumers' purchase intentions | Bad ↔ Good | Seven-point differential scale | Koernig and Boyd (2009), Till and Busler (2000), Yi (1990) | $\alpha = 0.99$ |
| | | Irritating ↔ Not irritating | | | |
| | | Dislike ↔ Like | | | |
| Attitude toward the brand | Attitude toward the brand | Uninteresting ↔ Interesting | Five-point differential scale | Mitchell and Olson (1981) | $\alpha = 0.89$ |
| | | Bad ↔ Good | | | |
| | | Poor quality ↔ High quality | | | |
| Consumers' purchase intentions | Consumers' purchase intentions | Dislike very much ↔ Like very much | Seven-point differential scale | Koernig and Boyd (2009), Till and Busler (2000), Yi (1990) | $\alpha = 0.99$ |
| | | Unpleasant ↔ Pleasant | | | |
| | | Unlikely ↔ Likely | | | |
| Consumers' purchase intentions | Consumers' purchase intentions | Impossible ↔ Possible | Seven-point differential scale | Koernig and Boyd (2009), Till and Busler (2000), Yi (1990) | $\alpha = 0.99$ |
| | | Improbable ↔ Probable | | | |

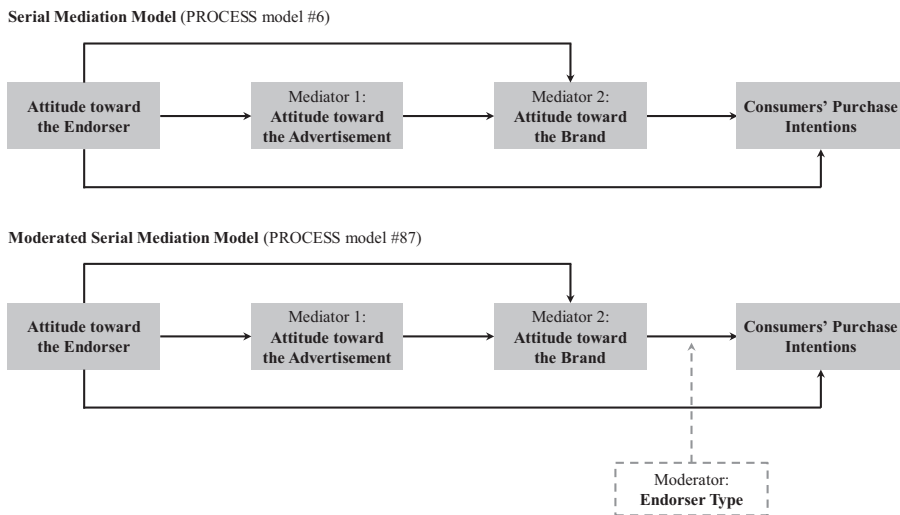


Figure 2.
(Moderated) serial
mediation analyses

Confirmatory factor analysis

A second-order CFA tested whether the measures applied represented the theoretical constructs adequately (Morata-Ramírez; Holgado-Tello, 2012). A CFA also reduces the underlying level of complexity by explaining the correlations between a larger number of variables and a smaller number of latent constructs (Luo, 2011). After a single construct item (Att_Ad_IV) was eliminated, standardized regression coefficients for all remaining items were above 0.70 ($p < 0.01$), and standardized correlation coefficients between constructs were below recommended thresholds (Hair *et al.*, 2006) (Figure 3). Convergent and discriminant validity were established (Table 2), and the model fit indices applied indicated an adequate model fit (CMIN/df = 2.05, RMSEA = 0.07, GFI = 0.95, CFI = 0.97). An invariance test showed that the factor structure was equivalent across the four types of endorsers.

As the main experiment had a self-reported, single-sourced research design, controlling for common method bias accounted for the potential that method-specific variance would distort analyses findings (Podsakoff *et al.*, 2003; Schaller *et al.*, 2015). Harman's single factor test showed that a single factor explained less than 50% of the dependent variable's variance (Chang *et al.*, 2010; Harman, 1976), and the Marker variable test also indicated a low likelihood of a common method bias (Lindell and Whitney, 2001).

Regression analyses

Regression analyses were conducted to determine endorsers' influence on consumers' purchase intentions. A serial mediation model was used to analyze the endorsers' direct influence on consumers' purchase intentions and their indirect influence via attitudes toward the advertisement and the endorsed brand (Hayes, 2018, model #6). The type of endorser was then incorporated as a moderating factor on attitude toward the brand's influence on consumers' purchase intentions to determine differences for the four types of endorsers (Hayes, 2018, model #87). Its moderating effect on consumers' attitude toward an endorser's influence on purchase intention was not further analyzed, as initial findings indicated that an endorser's direct influence on consumers' purchase intentions was not significant. Group sample sizes for the four types of endorsers analyzed varied, ranging from 46 to 54 participants, as participants were randomly assigned to endorsement conditions and as careful data cleaning removed selected responses from the initial data sample.

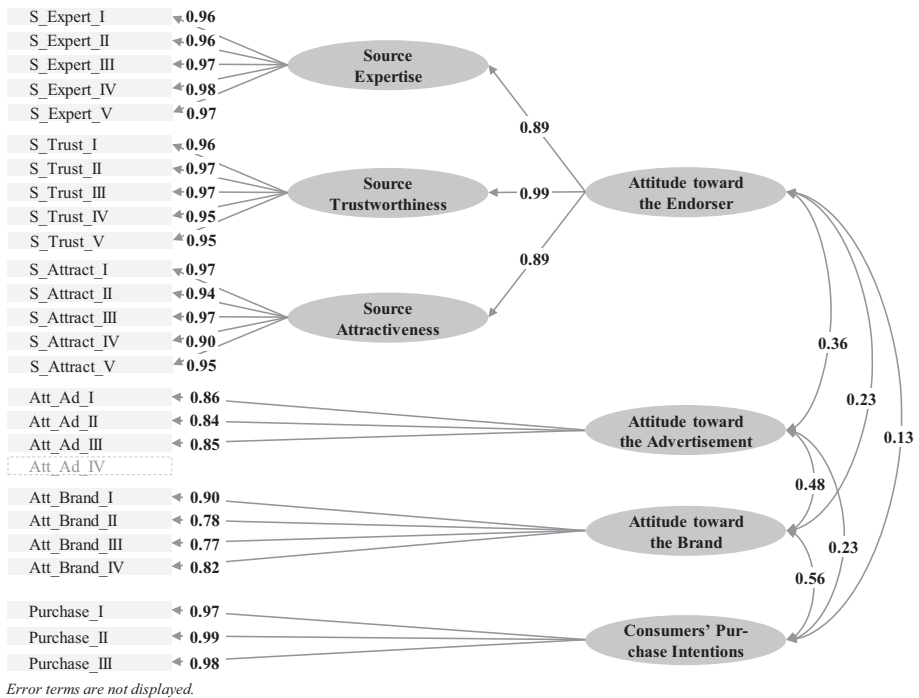


Figure 3.
Second-order
confirmatory factor
analysis

Results

Endorsers' influence on consumers' purchase intentions was examined using a serial mediation analysis, with consumers' attitudes toward the advertisement and the endorsed brand as mediating factors. The direct influence of attitude toward the endorser on consumers' purchase intentions is not significant, so H1 is rejected. Accordingly, research hypotheses H3a–d(I) in the moderated serial mediation analysis, which propose a moderating effect of the type of endorser on the direct influence of consumers' attitude toward the endorser and their purchase intentions, are also rejected. A bias-corrected bootstrapped confidence interval (CI) for the indirect effect based on 5,000 bootstrapped samples results in a 95% CI above zero (indirect effect = 0.16, standard error (SE) = 0.07, 95% CI = [0.04, 0.30]), indicating full mediation of the endorsers' influence on consumers' purchase intentions. The serial mediation explains 32% of the variance in consumers' purchase intentions ($R^2 = 0.32$), so H2 is confirmed. The direct influence of consumers' attitude toward the endorser on their perceptions of the endorsed brand is significant ($b = 0.21, p < 0.01$), indicating partial mediation. Moreover, attitude toward the endorser positively affects consumers' perceptions of the advertisement ($b = 0.64, p < 0.01$), resulting in a total explained variance of 50% ($R^2 = 0.50$). The influence of attitude toward the advertisement on consumers' attitude toward the endorsed brand is also positive and significant ($b = 0.18, p < 0.01$), with an explained variance of 22% ($R^2 = 0.22$). Finally, attitude toward the endorsed brand positively influences the dependent variable of consumers' purchase intentions ($b = 1.47, p < 0.01$).

More detailed analyses are needed to determine the differences among the four types of endorsers. A moderated serial mediation analysis based on 5,000 bootstrapped samples results in a 95% CI above zero for three of the four types of endorsers: sports celebrity (indirect effect = 0.25, SE = 0.10, 95% CI = [0.05, 0.47]), sports-related peer consumer

| | Mean | SD | AVE | CR | Factor correlations | | | |
|--------------------|------|------|------|------|---------------------|-----------------|---------|--------------------|
| | | | | | A_Endorser | A_Advertisement | A_Brand | Purchase intention |
| A_Endorser | 3.59 | 2.07 | 0.89 | 0.94 | 1.00 | | | |
| A_Advertisement | 2.73 | 0.99 | 0.72 | 0.89 | 0.36 | 1.00 | | |
| A_Brand | 3.71 | 0.78 | 0.67 | 0.89 | 0.23 | 0.48 | 1.00 | |
| Purchase intention | 4.09 | 2.12 | 0.96 | 0.99 | 0.13 | 0.23 | 0.56 | 1.00 |

Note(s): A = Attitude; SD = Standard deviation; AVE = Average variance extracted; CR = Composite reliability

Table 2.
Descriptive statistics and correlation of variables

(indirect effect = 0.12, SE = 0.06, 95% CI = [0.02, 0.25]) and sports company manager (indirect effect = 0.13, SE = 0.08, 95% CI = [0.03, 0.34]). Moderated mediation indices for these three types of endorsers are also different from zero, and a significant F-test confirms group-specific differences, supporting H3aII, H3bII, and H3cII, whereas H3dII is rejected, as the 95% CI and the moderated mediation index contain zero. The R^2 for consumers' purchase intentions is 0.36, indicating an explained variance of 36%, which is slightly higher than the R^2 for the simple serial mediation analysis. As a result, the moderating effect of the type of endorser on the influence of attitude toward the endorsed brand on consumers' purchase intentions is significant for a sports celebrity (reference type of endorser), a sports-related peer consumer ($b = -1.12$, SE = 0.47, $p < 0.01$, 95% CI = [-2.05, -0.20]) and a sports company manager ($b = -1.01$, SE = 0.50, $p < 0.01$, 95% CI = [-2.00, -0.02]), but not significant for a sports-related external expert (Figure 4). Thus, the study's findings indicate that the influence of sports celebrities' endorsements is limited if consumers' attitude toward the endorsed brand is low, whereas consumers' purchase intentions significantly increase as their brand perceptions rise. For sports company managers' endorsements and sports-related peer consumers' endorsements, low levels of consumers' attitude toward the endorsed brand are associated with a higher intention to purchase the endorsed product than is the case for sports celebrities' endorsements. However, compared with a sports celebrity endorser, both of these types of endorsers are less effective in determining consumers' purchase intentions when consumers' brand attitudes increase. Accordingly, the effectiveness of the four types of endorsers varies with consumers' perceptions of the endorsed brand, so H4 is not supported.

Discussion

The present study sought to determine whether sports-related endorsers have a direct and an indirect influence on consumers' purchase intentions and how these effects vary based on the type of endorser. The study's findings indicate an overall positive influence of sports-related endorsements on consumers' purchase intentions, independent of the type of endorser. Moreover, the study shows that endorsers' influences on consumers' purchase intentions is mediated by their attitudes toward the advertisement and the endorsed brand. Therewith, it supports the theory of classical conditioning (Lee et al., 2017; Till et al., 2008), according to which endorsers' characteristics are transferred through consumers' perceptions of the endorsement and the endorsed brand to the sphere of consumers and increase their intentions to purchase the endorsed product (Erdogan and Baker, 2000; McCracken, 1989). Endorsers' indirect influence on consumers' purchase intentions supports Lafferty and Goldsmith's (1999) argument that attitude toward the endorsed brand plays an important role in determining an endorsement's effectiveness.

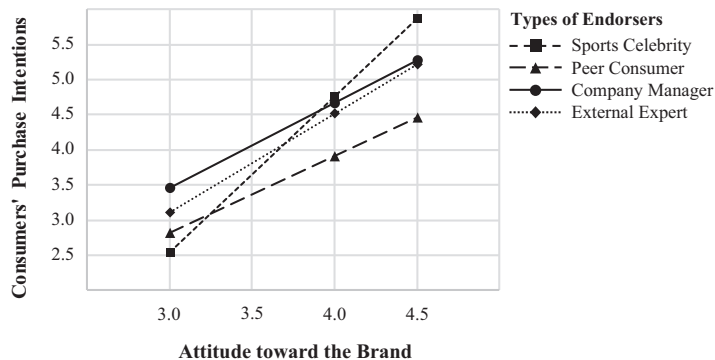


Figure 4.
The moderating influence of different types of endorsers

The moderated serial mediation analysis determined the main differences in the types of endorsers' influence on consumers' purchase intentions, indicating that an endorsement's effectiveness largely depends on the type of endorser. Accordingly, marketing professionals who seek to increase consumers' purchase intentions of their products should consider these differences when they choose an endorser for a planned product endorsement. The study's findings show that the influence of consumers' attitude toward the endorsed brand on their purchase intentions is moderated by the endorsements of sports celebrities, sports-related peer consumers and sports company managers, whereas the moderating influence of sports-related experts' endorsements is not significant. The indirect influence of a sports celebrity on consumers' purchase intentions has, compared with a sports company manager and a sports-related peer consumer, the steepest slope and therewith the greatest change on consumers' purchase intentions for an increasing level of their attitude toward the endorsed brand. The slopes of endorsers' moderating influence on consumers' purchase intentions are similar for company managers and peer consumers, whereas the effect size is greater for company managers' endorsements than it is for peer consumers' endorsements. Thus, the study's findings indicate that sports celebrities are overall more effective in influencing consumers' purchase intentions than sports company managers are, and that company managers have a greater influence on advertising outcomes than peer consumers do. The findings also indicate that sports celebrities' endorsements are especially effective if consumers' attitude toward the endorsed brand is already positive, as celebrities themselves are perceived as strong human brands that can complement consumers' existing attitudes toward a strong product brand (Arai *et al.*, 2014). Sports celebrities are also expected to be effective endorsers for long lasting endorsements, as they can increase consumers' attitude toward endorsed brands over time with product endorsements embedded in companies' superordinate brand strategies. However, (sports) celebrities are an expensive type of endorser, as they expect to be generously compensated for their celebrity status and the ability to reach a large consumer audience (Carrillat and Ilicic, 2019).

In contrast to sports celebrities' endorsements, company managers' endorsements are highly effective if consumers' brand perceptions are low, whereas their influence on consumers' intentions to purchase the endorsed products is lower for very positive brand attitudes. Company managers' endorsements are also less expensive than celebrities' endorsements, as managers are already employed by the endorsing companies and are usually available at no additional cost. However, the influence of company managers' endorsements on consumers' purchase intentions is still higher than the influence of peer consumers' endorsements. The lower effectiveness of peer consumers' endorsements can be explained by a greater consumer-endorser congruence, indicating that peer consumers lack distinctive endorser traits such as pronounced attractiveness or increased product expertise (Karasiewicz and Kowalczyk, 2014).

In short, the study's findings indicate that product endorsements cannot replace overall brand-building measures, as consumers' brand perceptions mediate endorsers' influence on consumers' purchase intentions. Accordingly, product endorsements should be embedded in a company's overall marketing strategy, and endorsers should be selected based on consumers' existing attitude toward the endorsed brand. Endorsing companies should also consider the length of the endorsement campaign and their own financial resources when they choose an endorser for a planned product endorsement to ensure not only an effective but also a financially efficient product endorsement.

Limitations and directions for future research

Like all empirical research, this study has several limitations. First, the findings' generalizability is limited because of a restricted data sample, the use of fictitious endorsers

and the limited number of product categories and brands used. To increase the findings' generalizability, future research could analyze additional product categories, brands and types of endorsers. A broader research sample, including participants with differing social, educational and cultural backgrounds, would also increase the generalizability of the study's findings. The restricted data sample also limits the validity of the study's findings, a limitation that could be addressed by conducting additional empirical studies using this study's research design. Second, analyzing other kinds of endorsements, such as television commercials, online advertisements (Lee *et al.*, 2017) and social media advertisements (Cunningham and Bright, 2012; McCormick, 2018), may help to clarify the differences among types of endorsers. Third, external validity was restricted, as data were gathered in an experimental context and consumers' purchase intentions were surveyed as a proxy for real purchase behavior. Research in a more realistic environment with real purchase behavior, as dependent variable could help to confirm the study's findings.

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Appendix

| | | |
|--------------------|--------------------------------|-----------------|
| Basic descriptives | Sample size (<i>n</i>) | 240 |
| | Female participants (in %) | 130 (54.2%) |
| | Male participants (in %) | 110 (45.8%) |
| Age | Average | 34.6 years |
| | Standard deviation | 9.8 years |
| | Low | 18 years |
| | High | 79 years |
| Education | No graduation | 0.8% |
| | High-school diploma | 4.2% |
| | A level | 12.5% |
| | Bachelor degree and equivalent | 25.4% |
| | Master degree and equivalent | 49.6% |
| | Ph.D. degree | 7.5% |
| Net income | Median | 2,501–3,000 EUR |
| | Not stated | 20.0% |
| | <1,000 EUR | 8.8% |
| | 1,001–1,500 EUR | 7.9% |
| | 1,501–2,000 EUR | 6.3% |
| | 2,001–2,500 EUR | 6.7% |
| | 2,501–3,000 EUR | 13.8% |
| | 3,001–3,500 EUR | 9.6% |
| | 3,501–4,000 EUR | 7.1% |
| | 4,001–4,500 EUR | 5.4% |
| | 4,501–5,000 EUR | 2.1% |
| | >5,000 EUR | 12.5% |

Table A1.
Major sample statistics

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