Similar despite all differences?

A Case Study Exploring the Correlation of the Similarity and Differentiation Perceptions with Consumers' Emotions and Product Success.

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Contents

Abstract

This research deals with consumers' simultaneous demands for similarity and different for new products and its correlation with negative and positive emotions as well as perceived product success. An automated content analysis using newspaper articles (N = 1.109) was conducted using the LIWC2015 default and a custom dictionary. A case study about the combat sports organization "Ultimate Fighting Championship" (UFC) was administered to examine its rise to mainstream popularity despite its relative novelty. Therefore, three time frames were compared ranging from 1993 to 2018. The results indicate that both perceived similarity and differentiation correlate positively with a new product's success. This supports the institutional theory which indicates that a) there is an evolution of the similarity and differentiation perceptions and b) both influence a new product's success. Moreover, it confirms research that indicated that new products cause emotional responses in consumers. However, consumers' emotions were uncorrelated with similarity, differentiation and a new product's success. Thus, it was concluded that to ensure a new product's chances for success similarity and differentiation must be satisfied, with similarity being the more important factor throughout time.

Introduction & Problem Statement

When a new product is entering the market, the consumer first tries to categorize it which means similarities and differences with existing products are assessed (Gutman, 1982; Ozanne et al., 1992; Porac et al., 2011). However, if the product is either too similar or too different, it might get rejected. So, there is a constant tension between similarity and differentiation requirements (Deephouse, 1999; Zimmerman & Zeitz, 2002). An example for that is the gambling industry in the US which succeeded despite mixed emotions especially in the beginning. It finally established itself as "normal" entertainment but also kept its distinctiveness. Thus, the gambling industry managed to get perceived as similar enough to get accepted but prevented getting uninteresting for consumers subsequently (Humphreys, 2010).

There is a multitude of accounts of what similarity is, but it is singled out as a major issue for the establishment of a new product, even if the market is already existent (Deephouse, 1999; Porac et al., 2011). To be perceived as similar, a firm must establish the perception that it and its product are legitimate (Deephouse, 1999; Humphreys, 2010). One often used definition states that legitimacy

"[…] is a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p. 5).

Hence, it refers to the conforming to perceived authority e.g. lawmakers (Humphreys, 2010). Since insufficient similarity leads to being perceived as illegitimate by stakeholders (Suchman, 1995), businesses try to conform because illegitimacy has severe effects like limited access to vital resources and worse long-term contracts with suppliers and retailers, less acquisition of top personnel, and ultimately a higher likelihood of business failure (Suchman, 1995; Deephouse, 1999, Zimmerman & Zeitz, 2002; Deephouse & Carter, 2005). Furthermore, these resources are not just important for short-term survival but also for long-term survival and growth (Zimmerman & Zeitz, 2002; Winn et al., 2008). So, it is no surprise that consumers' similarity perception is already a top managerial issue (Holmström, 2005). However, there is no consensus yet, as to whether similarity perception is really affecting business performance (Cattani et al., 2017) or what emotions get evoked by it (Pornpitakpan & Yuan, 2015). Moreover, the literatures examining the relationship between emotions and similarity is very sparse (Humphreys, 2010; Rosenthal & Cardoso, 2016).

However, since the 50's researchers point out that for being competitive a business must differentiate to not become a substitute and lose profitability (Smith, 1956; Levitt, 1980). For example if consumers regard product A to be the same as product B then it will not stand out to them and hence will not be purchased more times than product B. So, differentiation is one the most important factors for a new category's market success (Cooper, 1994). To attain differentiation, a new product category must be in "an unexploited or underexploited niche [and] stake out a distinct position from its rivals" (Deephouse, 1999, p. 5) to be perceived as different from competitors. This leads to value creation for consumers through so called "product differentiation" (Smith 1956; Kroeber-Riel, 1984; Porac et al., 1989; Ehrenberg et al., 1997). Therefore, differentiation became a generic strategy to gain a competitive edge (Porter, 1996) through value beyond the functionality of a product. This in turn ensures the short- and long-term survival of the product (Winn et al., 2008). This added value can be of emotional nature (Kroeber-Riel, 1984; Ehrenberg et al., 1997), but opposition or refusal to adopt a novel product is frequently linked to emotions like anxiety about its consequences (Wood & Moreau, 2006; Humphreys, 2010). In the example about gambling, the industry was feared because of its perceived and real links to crime (Humphreys, 2010). Aligning with that, some scholars even see the emotional added value as the most important dimension (de Chernatony et al., 2000). Finally, for differentiation there is also no verdict whether there is an effect on the product's success or whether it correlates to positive and negative emotions (Sashi & Stern, 1995; Strauss, 2015).

Summing up, a new product has both similarity and differentiation requirements with presumed links to consumers' emotions about a product and its success. The institutional theory proposes changes in both the similarity and differentiation perception over time (Scott, 2005, Beckert, 2010). This is

particularly interesting in the case of a new product since there is a lot of conforming in the beginning to get be perceived as similar which allows for being perceived as legitimate. It is assumed that after a new product overcomes consumers' hesitation it is increasingly forced to differentiate to stay competitive with similar products (Zuckerman, 1999; Cattani et al., 2001). Also, a new product might cause strong emotions in consumers upon introduction (Wood & Moreau, 2006; Choi et al., 2011). So, it is worth to examine the similarity/differentiation perception over time and how success and consumers' emotions correspond to that perception. Very few comparable researches have been done, particularly taking longer time frames into account (Deephouse, 1999; Humphreys, 2010, Porac et al., 2011), so more investigating this topic would enrich the literature.

Research Question

Thus, the according research question is:

> *How does the evolution of the similarity and differentiation perceptions of a new product correlate with consumers' emotions towards a product as well as its success?*

Accordingly, it was hypothesized that:

> *H1: The similarity and differentiation perceptions changed over time.*

> *H2: Both perceived similarity and differentiation correlate with a product's success positively.*

> *H3: The similarity and differentiation perceptions correlate with negative or positive consumers' emotions.*

Theoretical Background

To achieve being perceived as similar to competitors a firm has to conform to competitors which in turn leads to being perceived as legitimate. That allows for conducting business and helps avoiding rejection or even getting penalized by for example consumers or institutions (Zhao et al., 2017). This need for similarity is part of the "institutional theory" which postulates an evolution in the similarity perception over time (Scott, 2005; Beckert, 2010). That social change towards consumers' similarity perception is due to "institutionalization" (Scott, 2005, p. 3) which means that imitation behavior (isomorphism) is leading to legitimacy. If for example all competitors have an "organic" certificate, the pressure to imitate them and get that certificate as well is high. Through getting similar enough to be perceived as legitimate, value is added to the product due to existence and reliability of institutions (e.g. the ones that claim to independently test for the certificate) as well as common reality perception of stakeholders (e.g. everyone is eating organic) (Scott, 2005). According to institutional theory, businesses conform "symbolically" (Wæraas & Sataøen, 2015, p. 3) through

separating discernable features or processes from the core product. The core product will not be changed in that case but e.g. its label which is also a very visible change from a consumer perspective. This conforming behavior might be passive or active, in the later case it would be regarded as a long-term similarity strategy (Deephouse, 1999; Wæraas & Sataøen, 2015).

In older research about institutional theory, similarity is achieved through isomorphic (imitating) strategies aligning with the industry standard (DiMaggio & Powell, 1983; Scott, 1987; Zucker 1987; Porac et al., 1989). In turn this leads to "homogenization" (Beckert, 2010, p. 14) of the products. The products imitated are those that already established in the market and are perceived as similar e.g. through belonging to the same product class (Thomas, 2007; Wæraas & Sataøen, 2015). The homogeneity coming forth from that is needed to enhance the consumers similarity and hence legitimacy perception. Hereby, the perception gets inferred from the already established competitors, existing product categories and similar products. So, categorical expectations of consumers must be fulfilled. For example, a family car must have more than two seats, otherwise the product is perceived as too dissimilar to belong to the product category of family cars. These expectations are called "diagnostic attributes" (Porac et al., 2011, p. 11).

The benefits of similarity are of major importance for a new product. A high enough similarity perception helps avoid legal problems and consumers' resistance because the product will be perceived as legitimate (Deephouse, 1999). Additionally, a business which is perceived as similar, will also be perceived as meaningful, predictable and trustworthy whereas a too different business will be perceived as "negligent, irrational and unnecessary" (Suchman, 1995, p. 6) (Suchman, 1995, Delmar & Shane, 2004). It was argued that similarity sets the boundaries for decision making of an organization (Holmström, 2005). Those boundaries are defined by the consumers and other stakeholders like institutions (Zimmerman & Zeitz, 2002). Thus, it is important that a firm stays within a consensual "range of acceptability" (Deephouse, 1999, p. 6) i.e. through fulfilling accountability standards like guarantees on products (Deephouse, 1999, King & Whetten, 2008). Moreover, perceived similarity enables legalization through acceptance by regulatory institutions (Ashforth & Gibbs, 1990) like the lifted ban on gambling (Humphreys, 2010). Therefore, being "legal" i.e. moving within the boundaries of the law is an important part of similarity.

To build and maintain a similarity perception multiple stakeholders' acceptance and cooperation is needed (Delmar & Shane, 2004; Humphreys, 2010). Especially the (market) introduction phase of a product is viewed by some researchers as the most important time frame to enhance the similarity perception because later the change in the similarity perception might speed up because one event signaling similarity might incite the next one(s) (Zimmerman & Zeitz, 2002; Delmar & Shane, 2004). This might be the verdict of a judge allowing a practice or product which kickstarts its mainstreaming.

Also, since the similarity perception is not static and changes over time, continuous efforts necessary to maintain the similarity perception (Holmström, 2005). So, consumers might challenge the verdict and hope for a new one e.g. a ban of a product.

Regarding a possible correlation between perceived similarity and emotions, there is few literatures linking perceived similarity to positive or negative emotions. However, other researches confirm a connection between similarity perception and consumers' emotions (Bates, 2002; Pullig et al., 2006; Tan et al., 2009; Pornpitakpan & Yuan, 2015). Thus, this research might help to contribute to that.

Finally, a potential pitfall of too much similarity is to alienate potential exchange partners because they don't see the product's value as opposed to other very similar products. Another pitfall is that too high similarity leads to the new product not being distinct to a large enough number of consumers and hence is not profitable (Deephouse, 1999). Therefore, institutional theory includes (product) differentiation as well (Scott, 2005; Beckert, 2010). The objective of product differentiation is to gain a competitive edge through added value for the consumer (Porter, 1996; Porac et al., 2011). Thus, differentiation enables long-term survival and success (Deephouse, 1999; Zimmerman & Zeitz, 2002). Earlier, diagnostic attributes were mentioned determining e.g. a similar product category. It was proposed that a product can differ on non-diagnostic attributes which generates the added value. So, that first consumers check whether a product is similar enough and then differences providing added value are assessed (Cattani et al., 2017; Porac et al., 2011). In the case of a family car the non-diagnostic attribute could be leather seats which are perceived as an "extra" as opposed to a sports car.

So, differentiation is a go-to strategy. Generic differentiation strategies include segmentation, strategic advertisement and tactical promotion, distinct supplier(s) and resources as well as having a technically superior or more reliable product (Smith, 1956). Also, new attributes can be added, or company behaviors changed (Zuckerman & Philips, 2001) e.g. vegan certificates could be used. Differentiation also includes targeting niches which means having distinct resources and strategies to occupy "unique competitive positions, and gain competitive advantage" (Zhao et al., 2017, p. 3). To achieve that, being the first to occupy a market niche and fortifying that position against new market entrants is of major importance. Hence, if every other product has organic certificates already this would generate no added value in comparison to competitors but not having a certificate would still lead to having less product value. Regarding the niche, it must be distinguishable but also similar enough to be accepted (Deephouse, 1999).

Further, it can be concluded from the literature that a firm's differentiation efforts are positively affecting a product's success even though there is no consensus that this is indeed the case (Cooper, 1994; Sashi & Stern, 1995; Thomas, 2007; King & Whetten, 2008; Strauss, 2015; Wæraas & Sataøen,

2015). Regarding the success of a product, "emotional product differentiation", (Kroeber-Riel, 1984, p. 1) is one of the most effective ways to gain a competitive edge is through the added emotional value (Ehrenberg et al., 1997; de Chernatony et al., 2000; Sweeney & Soutar, 2001). To achieve that, the product is repeatedly linked to positive emotions like reciprocity through fair trade labels (Bhagwati, 1993) up to a point where the consumer associates this product with a certain emotion (Kroeber-Riel, 1984). Hence, this causes the added value to be of emotional nature (Desmet et al., 2015).

To understand the relationship between similarity and differentiation, it is important to understand how they are connected to each other. Some researchers would go as far as stating that those two types of requirements are "fundamentally antagonistic" (King & Whetten, 2008, p. 193) despite the broad range of comparable antecedents and consequences (Deephouse & Carter, 2005). This is due to for something to be in a similar category, categorical differences are being evaluated as well. For example, family and sports cars are in different subcategories but they are both cars (Sujan & Dekleva, 1987). Aligning with this, it was argued that differentiation and similarity are interdependent concepts (King & Whetten, 2008). Thus, it was proposed to take the coexistence of both needs into account and not just focus on the evolution of the similarity perception but also on the change in the differentiation perception (Porac et al., 1989; Deephouse, 1999; Beckert, 2010; Zhao et al., 2017). This is especially noteworthy since both similarity and differentiation were found to have a positive influence on business performance (Zimmerman & Zeitz, 2002; Deephouse & Carter, 2005).

Case

An interesting and relatively new market is the combat sport Mixed Martial Arts, abbreviated "MMA" (García & Malcolm, 2010, p. 1). It is a sport that merges amongst others Brazilian Jiu Jitsu, wrestling and kickboxing (Fraser, 2013). It is an interesting new product in the world of fighting sports because the sport of MMA has overcome significant hurdles in establishing itself over the last three decades. From being merely "human cock fighting" as it was labelled by Senator and 2008 Republican Presidential candidate McCain it established itself as a sport that one fourth of US Americans claim to be fans of (Szczerba, 2014; Maeser, 2017). The sport produced internationally known superstars like Ronda Rousey, Anderson Silva, George St-Pierre and most notably Conor McGregor. The biggest MMA organization – *Ultimate Fighting Championship* (*UFC*) – has seen surging interest in its events since it was founded in 1993 (Rosenberg, 1993; Dawson, 2014). The UFC as a novel product in the combat sport market will be the focus of this case study. The longest continuity

of MMA events in the US and by a wide margin the biggest MMA events worldwide are all sold under the name UFC (Rosenberg, 1993; Berg & Chalip, 2010; Flinn, 2016). This led to UFC often being used synonymously for MMA (Rosenberg, 1993; Fowlkes, 2008). It is also existed continuously since it was founded despite significant low points especially in the beginning (Clow & Baack, 2011).

However, the UFC has not always been doing that well and a key role for achieving todays position was the perception of it as an established, mainstream product (Clow & Baack, 2011; Szczerba, 2014). Throughout the years, a lot of steps have been taken by the UFC that can best be described as a similarity strategy. For example, the UFC strives for similarity to get their events legalized throughout the US which in turn makes them look legitimate (Berg & Chalip, 2010). For that, the UFC had an array of stakeholders to appease as was the case with similar controversial entertainment industries like gambling (cf. Humphreys, 2010). Amongst them is e.g. the medical community which would relate to regulative similarity perceptions directly. Medical concerns regarding the sport are especially focused on MMA's potential for brain trauma (Buse, 2006; Fraser, 2013). Some researchers pointed to that quite early and concluded – after a thorough review of matches in a 10-year frame – that "the proportion of matches stopped because of head impact was higher than […] in other full contact combat sports" (Buse, 2006, p.3). So, important steps towards similarity have revolved around conforming behaviors aiming at making the sport safer e.g. through implementing more rules (Clow & Baack, 2011). Those rules are then observed and trespassing them is penalized by institutions. Therefore, institutionalization is of immense importance for the UFC because it helps to detain too deviant elements of the sport (cf. Humphreys, 2010, detention of negative elements in gambling).

Still, it is not clear how different the consumers perceive the UFC in comparison to similar combat sport products like for example the more established boxing events. However, there are strong indicators for the UFC's mainstream breakthrough as was shown by the 2017 billion-dollar crossover promotion between Showtime boxing and the UFC (Flinn, 2016). The event grossed the second highest viewer numbers of a sport event in North American history with more than 4.3 million watching live (Critchfield, 2017). This promotional crossover is especially interesting since boxing is the biggest and longest established combat sport. Therein, the UFC was heavily involved promoting and managing their athlete which gained them more mainstream presence and hence heightening their similarity perception (Kidder, 2017). This comparison with boxing and other longer established combat sports led the UFC to be held to the same industry standards. Thus, the UFC events imitated boxing and other combat sport events through for example adding rounds (García & Malcom, 2010; Kim, 2010).

Opposing that, differentiation is at first glance threatening the establishment of MMA, especially due to the (perceived) lack of rules as was expressed by the early advertising term "No Holds Barred" (García & Malcolm, 2010, p. 3). This meant that there were no rules in place which is a severe lack of similarity to other combat sports (Clow & Baack, 2011). However, this way of being different from more institutionalized similar products like boxing events arguably helped raised its popularity. This can be concluded from the high number of viewers of even the first UFC events which were still attracting a large crowd despite their lack of rules, giving it a certain "edginess" (Rosenberg, 1993; Gottschall 2016). Still, seeking similarity with practices of comparable product categories such as boxing or wrestling proved to be important because of lawmakers' tendency to look for previous legislations (Berg & Chalip, 2010). Accordingly, the lack of similarity led to the early struggle of the UFC only being legal in three states in their first years. However, this distinctiveness might have helped the UFC to become one of the biggest sports products of today.

Nonetheless, its rise was also partially due to a new ruleset for MMA which was initiated by the UFC and later accepted by athletic commissions to appeal to a broader audience and get licenses allowing events to be held (Clow & Baack, 2011). Examples of techniques banned under the new ruleset include soccer kicks and stomps to a downed opponent. However, these rule changes might have decreased the excitement of watching something akin to a real fight (Szczerba 2014; Lueckenhoff et al., 2009; García & Malcolm, 2010). Also contributing to the differentiation perception is the mix of styles which was very important for the UFCs uniqueness when they were still the only US based MMA organization (García & Malcolm, 2010). Additionally, the fact that the UFC is the biggest and longest existing MMA company (in the US) is also part of its differentiation perception. Additionally, differentiation is achieved through emphasis on the "octagon" cage and their extensive branding including music made for the organization, branded merchandise and the reality TV format "The Ultimate Fighter" (García & Malcolm, 2010; Clow & Baack, 2011; Bissel, 2016). Besides that, the UFC purchased long-time rivals to solidify its predominant position in the MMA industry (Helwani, 2011). However, since there are new competitors in the sport of MMA ("MMA Promotions", 2018), it is important that the UFC emphasizes its distinctiveness. So, maintaining a raw, archaic image is still needed to distinguish it from other combat sport products which explains the early success of the first events which were comparatively unregulated (Rosenberg, 1993; García & Malcolm, 2010; Clow & Baack, 2011; Flinn, 2016).

A solution to oblige to both similarity and differentiation pressure was proposed by the institutional theory: To achieve the perception that one is conforming non-core activities and components get removed for the consumers to see (Wæraas & Sataøen, 2015). There have been hints that this might be the case for the UFC as well and was dubbed "'cosmetic changes'" (García & Malcolm, 2010, p. 1,

Cattani et al., 2017). This means not deviating too much from diagnostic attributes but rather non-diagnostic ones (Cattani et al., 2017). An example for that is the introducing of gloves even though they are smaller and lighter than in other combat sports leaving the fingers free allowing for grappling which is not possible with boxing gloves (Szczerba, 2014).

Since innovations might cause strong emotions in consumers (Wood & Moreau, 2006; Choi et al., 2011), it was expected that the UFC's introduction was accompanied by strong emotions like was the case with gambling (Humphreys, 2010). Accordingly, the UFC was met with strong responses, most notably negative ones. This in turn highly diminished the similarity perception of the UFC and caused it to be banned in all but three states (Bolelli, 2016). This was reflected by the UFC staying a niche sport before changing their ruleset and becoming state sanctioned (Lueckenhoff et al., 2009; Clow & Baack, 2011).

Furthermore, the emotions induced in the viewers of the UFC are mostly positive like adoration of the skill used or feelings of (national) pride. However, negative emotions get "vented" vicariously as well, such as anger, drama and violence (Kim et al., 2010; Cheever, 2009). However, viewers are not representative enough to infer their emotions to other consumers. Thus, this case will try to investigate consumer emotions towards the UFC and investigate their relationship with the UFC's success, similarity and differentiation perceptions. Additionally, this research will investigate how well the UFC preserved its differentiation perception while also examining the according similarity perception over time. Since the UFC turned out to sell a successful product, it is an enticing case to study and check whether in this case similarity and differentiation were linked to this success. Finally, this case is especially interesting since recently it seems as if the popularity of the UFC is declining or at least stabilizing (Tabuena, 2017; Wyman, 2018) which would give a good indication of becoming too mainstream and losing its "edge".

Method

To get sufficient data regarding the similarity, differentiation and success perceptions as well as the according emotions, an *automated content analysis* was conducted by using intelligent dictionaries to search through newspaper articles. The articles were obtained "newspapers with the largest circulation based on the interference that they will be most widely shared cultural artifacts" (Humphreys & Wang, 2017, p. 9). Aligning with this, quantitative data was obtained from some of the biggest newspaper outlets by circulation in the US which are *The New York Times*, *The Mercury News*, *The Washington Post*, *USA Today* and *The New York Post* (Olmstead et al., 2011; Lulofs, 2015; McIntrye, 2017; Misachi, 2017). Newspaper articles were chosen because they are both reflecting

and shaping consumers' perceptions and emotions (McCombs & Shaw, 1972; Blood & Philips, 1995; Dorms & Morin, 2004; Humphreys, 2010; McCombs, 2014) and are easy to sort by time frames. Moreover, "newspaper sentiment" (Uhl, 2011, p. 1) was found to predict consumer consumption changes (Uhl, 2011; Walker, 2014; Corbet et al., 2018). To get relevant data, the sport related search terms "Ultimate Fighting Championship" as well as its abbreviations "UFC" and "U.F.C." were used to filter out unwanted results and generate relevant ones. To ensure that, only articles containing the search terms in their headlines were chosen to prevent results unrelated to the case. This is due to a lot of "sport recaps" that e.g. summarize sport results of a weekend including UFC results, but don't deal with the UFC mainly. This turned out to lead to a lot of false positives which was prevented by the headline criteria. To assess these articles a database was needed, in this case LexisNexis which is one of the biggest archives available. The choice for this database was due to its availability and its extensive collection of newspaper articles.

Moreover, the articles from the newspaper were divided into three different time frames. This was done to compare emotion and similarity, differentiation and success perceptions over time and hence test hypothesis H1. Three time frames ranging from 1st of November 1993 to November 30th, 2000, 1st December 2000 to the 9th of July, 2016 and from the following day to July 2nd, 2018 were chosen and the total sample (N^{Total} = 1.109) was split ($N^{1993-2000}$ = 15; $N^{2000-2016}$ = 721; $N^{2016-2018}$ = 373). The starting point of the first time frame is the year 1993 because it was the year the "UFC 1" event took place. It was the first contest in the US that mixed traditional martial arts in a competitive manner. Thus, the term Mixed Martial Arts (MMA) was coined in a review of the first UFC event (Rosenberg, 1993). It was also chosen because it ranges from the turbulent beginnings in November 1993 to the first U.S. sanctioned event in the November of 2000. Additionally, the state sanctions that were applied to the UFC at that time due to its lose ruleset might have had an important impact on all perceptions as well as on consumers' emotions. However, for the first time frame the search terms ("Ultimate fighting championship", "UFC", "U.F.C.") were not reduced to articles that included them in the headline because the low number of articles ($N^{1993-2000}$ = 15) made it possible to check whether they related to the UFC manually. The second time frame was marked by continuous grow into a prominent sport (Rosenberg, 1993, Clow & Baack, 2011). Finally, the last time frame marks the point at which it was sold to another company for the highest sum ever paid for a sports league (de la Merced, 2016). This signified the arrival of the UFC in mainstream sports which might have taken a bit of the difference that made the UFC successful (Tabuena, 2017; Wyman, 2018).

Automated text analysis was chosen since it is a consistent and unbiased approach to text analysis. Additionally, it helps to capture changes over time and general patterns that otherwise might be overlooked (Humphreys & Wang, 2017). Further, automated text analysis enables to reveal

attention, processing and interpersonal dynamics of consumers or even opinion leaders that write newspaper articles (Singer, 1998; Chaney, 2001). The tool used for extracting public opinion is the "Linguistic Inquiry Word Count (LIWC) […] based on psychometrically tested scales" (Humphreys & Wang, 2017, p. 15) which can capture broad sentiments such as positive or negative emotions (Pennebaker et al., 2015; Humphreys & Wang, 2017; Appendix, figure 1 & 2). This means that positive emotions can be captured, ranging from slightly favorable to enthusiasm. The same range of emotion is covered by the negative emotions section. But additionally, LIWC2015 enables to check for three sub-concepts that make up negative emotion, namely, anxiety, anger and sadness. LIWC2015 applies word count as the indicator of emotions. What makes automated content analysis in general and LIWC2015 specifically useful for consumer research is that it enables to unveil the change of consumers' perceptions and emotions over time. Additionally, it allows to upload custom dictionaries (Humphreys, 2010; Pennebaker et al., 2015; Humphreys & Wang, 2017).

To assess the similarity, differentiation and success perceptions, a custom dictionary was created consisting of codes representing concepts (similarity, differentiation, success). Because the UFC doesn't publish annual reports (Nash, 2015), and there is no comprehensive archive of their viewership numbers, the success perception was coded and added to the custom dictionary as well. Since the concepts were known beforehand, a "top-down approach" (Humphreys & Wang, 2017, p. 11) was used which implies that the constructs didn't have to be explored. However, they had to be coded and for that analytic induction was used (Glaser, 1965; Jones, 2004). This coding technique proposes to code all words found in the newspaper articles that relate to the concepts. For example, the word "gloves" was included into the similarity perception concept (Appendix, table 1). Thus, this coding continues until all aspects of a phenomenon are covered (Jones, 2004). Additionally, the "semiotic square" (Humphreys & Wang, 2017, p. 16) was used meaning that antonyms were considered as well if they made sense such as legitimate and illegitimate (Humphreys & Wang, 2017). Then, the saturation procedure was employed to find a large enough number of words. This procedure starts with 10 of the articles and subsequent coding of new aspects contributing to the similarity, differentiation and success perception concepts. Subsequently, the next 10 articles are coded until the 10 articles delivered no new codes for the concepts. These rounds are called iterations (Weber, 2005; Francis et al., 2009; Humphreys & Wang, 2017). For this case, after the 7th iteration and a total of 80 articles being analyzed, no new codes were found. Through exporting the default dictionary (LWIC2015) into a PDF file (Appendix, figure 1& 2), unwanted overlap with the sentiment analysis was prevented by deleting words which were already in the affect section (positive & negative emotion) of LIWC2015. Exceptions were made for words like "popular" have value for determining the success perception, so they were left in despite them appearing in the default dictionary (Appendix, table 1).

To ensure the custom dictionary's validity, a preliminary test was executed with the same (saturation) procedure. The preliminary test included running the dictionary on 10 articles and checking whether the codes were able to capture the underlying concepts correctly. Whilst doing that, it was improved by changing the codes when they led to false positives and/or were not able to capture words that should belong to a concept. This was done through manual calculation delivering percentages of codes that correctly captured their concept (hits) as well as codes that failed to capture their assigned concept (false hits). For example, the code "charge*" for the differentiation perception was sometimes not capturing the legal troubles of being charged by lawmakers but rather athletes charging forward. Subsequently, the code was deleted from the concept (Appendix, table 2). Additionally, omissions were counted which are words that should have been captured because they belonged to one of the concepts and were thus iteratively added (Weber, 2005). The formula that was used to calculate the hit rate was hits divided by the sum of hits plus omissions ("actual occurrences", Porac et al., 1999, p. 14). Conversely, the false hit rate was calculated by dividing the false hits by the actual occurrences. The color-coding tool of LIWC2015 helped with the manual calculation since it displayed the counted words in bold red letters. The iteration were continued until the concepts had hit rates higher than 80% and false hit rates lower than 10% (Porac et al., 1999; Weber 2005; Humphreys & Wang, 2017). Finally, values for the categories after 4 iterations were as follows: 95% hit rate and 8% false hit rate for the similarity concept, 80% hit rate and 10% false hit rate for the differentiation concept, 85% hit rate and 9% false hit rate for the success concept (Appendix, table 2). The codes that were found with this qualitative approach were textualized and the resulting custom dictionary was uploaded into the LIWC2015 program. This does not mean that it became part of the default dictionary, but merely that it exploited the software behind the LIWC2015 to get word counts as well. Finally, both the default and custom dictionaries were employed for a quantitative analysis.

Regarding the dictionary, there are no uppercase letters because LIWC2015's output is not influenced by the case of the letters. Adding to that, asterisks were used to capture words based on their word stems, for example "judge*" could also capture the words judges or judge's/ judges'. Moreover, relevant synonyms were included with the help of the Thesaurus dictionary (thesaurus.com) to prevent losing relevant data, but only if they were deemed unambiguous. To illustrate, for example "loss" could mean that a fighter lost, or the company suffered a financial setback thus, it was excluded if the false hit rate was too high. Since the US market was analyzed, the US spelling of words was used as well as the processing option for US English was chosen in LIWC2015 (Pennebaker et al., 2015).

The word counts for the concepts were displayed in percentages of the text each concept makes up per newspaper and time frame (group). So, to get the raw word count per concept, the percentage per concept was multiplied with the total word count per group and then divided by 100.

Results

To begin with, it is noteworthy that the number of articles increased over time as can be seen by the numbers of articles in the according time frames which indicates a surge in general interest (Table 3).

Moreover, the following variables were used operationalized:

Table 3. Variables in the MANOVA.

Variable	Operationlization	Time frame 1	Time frame 2	Time frame 3
Time frame (independent variable)	Time frames (3) being set in LexisNexis	N = 15	N = 721	N = 373
Negative sentiment + sub-sentiments anxiety, anger & sadness (default dictionary LIWC2015)	Number of words that were captured by codes of the negative emotion concept (like "evil" and "pathetic") in the default dictionary categories in LIWC2015 (see figure 1 for full list of negative sentiment words)	9,292	11,686	185
Positive sentiment (default dictionary LIWC 2015)	Number of words that were captured by positive sentiment codes like "great" or "cool" (see figure 2 for full list of positive sentiment words)	8,626	11,343	135

Similarity (custom dictionary uploaded into LIWC2015)	Custom dictionary's concept of similarity perception codes like "sanctioned" and "mainstream" capture words enabling the word count (full list in Appendix, table 1)	126	10,285	8,457
Differentiation (custom dictionary)	Codes capture words like "the ultimate fighter" and "death sport" for the differentiation perception concept (full list in Appendix, table 1)	112	4,413	3,729
Success (custom dictionary)	Codes capture words like "fan base" and "prosper*" for the success perception concept (full list in Appendix, table 1)	29	2,439	1,697

It is noteworthy, that the number of articles per newspaper per time frame was converted to one observation with corresponding word counts. Hence, N^{SPSS} was equal to 15 (3 time frames * 5 newspapers).

So, a MANOVA procedure was chosen because it is most fitting for multiple dependent variables (positive, negative, differentiation, similarity and success) and an independent variable (time frame) with more than two levels. This method allows to test hypothesis 1 whether there has been an evolution of the similarity and differentiation perceptions over time because it enables group comparisons (Field, 2013).

To use a MANOVA analysis, assumptions must be fulfilled. One of them is the normality assumption meaning that the data is normally distributed. Since word counts are deemed not normally distributed (Kern et al., 2016; Humphreys & Wang, 2017), it was tested whether this was the case with the data obtained from the LIWC2015 default dictionary and the custom dictionary. To check for a normal distribution of the word count for the emotion data, skewness and kurtosis analysis as well

as Kolmogorov-Smirnov and Shapiro-Wilk tests were conducted (Appendix, table 4 & 5). The acceptable skewness values were ± 2 and ± 7 for kurtosis (Hair et al., 2010; Byrne, 2016). These values were not violated besides in one instance, but the Kolmogorov-Smirnov and Shapiro-Wilk tests had p-values below .05 which means the data had a non-normal distribution (Appendix, table 5). This was also concluded due to the significance tests being more indicative for normality than skewness and kurtosis (Field, 2013). Thus, to normalize the data, a Box-Cox transformation was executed which is better than a traditional log transformation due to its higher p-values and lower skewness and kurtosis and being more fitting when comparing data ordinally (Osborne, 2010, Humphreys & Wang, 2017). The results of skewness and kurtosis as well as the Kolmogorov-Smirnov and Shapiro-Wilks test indicate normality after transformation for the measures of positive and negative emotions including anxiety, anger and sadness (Appendix, tables 6-15, figures 3-7). For the similarity, differentiation and success perceptions word count it was also checked whether the data was normally distributed. The results indicate that while the kurtosis and skewness values were sufficient (Hair et al., 2010; Byrne, 2016), the p-values of the Kolmogorov-Smirnov and Shapiro-Wilk tests were below .05 (Appendix, tables 16 & 17). This meant that the word count was not normally distributed (Field, 2013). Again, a Box-Cox transformation was executed to obtain variables with lower skew, kurtosis and higher p-values of the Kolmogorov-Smirnov and Shapiro-Wilk tests (Appendix, tables 18-23, figures 8-10).

Furthermore, the sample size seemed insufficient because there are less cases per group (5) than dependent variables (8, emotions and perceptions) (Hair et al., 2010). The cases here represent each newspaper's sample per time frame which is the grouping variable. However, the cases per group are based upon numbers bigger than five ranging from 15 to 721. So, this issue will be considered in the discussion. Additionally, for a MANOVA the outcome variables should be continuous which was the case.

Linearity is another assumption that needed to be fulfilled for the MANOVA. With the help of a regression analysis, the linearity assumption was checked by assessing the Mahalanobis distance. The results show that the maximum value (10.366, Appendix, table 24) is below the critical value for $p < .01$ (29, 14) according to the chi-square distribution (Field, 2013). The generated Mahalanobis distance variable and its degrees of freedom enabled checking for outliers against a chi-square distribution which showed no p-values below .01 (Appendix, figure 11). Hence, the MANOVA assumption of having no multivariate outliers was fulfilled. Additionally, the assumption of homogeneity of covariance was accessed through Levene's test of equality of error variances showed that the homogeneity of variance assumption was fulfilled since all the p-values were higher than .05 (Appendix, table 25).

To check whether there were significant group differences the Hotelling's Trace and Pillai's Trace were appropriate due to the small sample size and equal group sizes (Field, 2013). The former delivered values of T = 19.646, F (16, 8) = 4.911, p < .05 and the latter delivered V = 1.603, F (16, 12) = 3.026, p < .05 with both being below the threshold of .05 for significance (Appendix, table 26). Thus, differences between time frames were assumed.

Moreover, the differences between groups were assessed in depth by the test-between subjects effects which indicated that the dependent variables all differed with regards to the grouping variable (time frame) because they had bonferroni corrected p-values below the .05 threshold without exceeding their critical F values of 99 for df= 2 (Field, 2013; Appendix, table 27). The p-values were bonferroni corrected because of the small sample size which could have weakened the statistical power when a standard p-value would have been taken (Field, 2013; Humphreys & Wang, 2017). Since there were no control variables, contrasts were not examined. Also, there was no danger of multicollinearity between the independent variables because only time frame was employed as an independent variable.

Another MANOVA assumption is independence of observations. The word counts were extracted from articles written by different authors but some of them are recurring. Hence, independence of observations was only partially fulfilled since there was a chance that the observations are interdependent. A stricter p-value of .01 was therefore assumed (Hair et al., 2010) which was satisfied by the follow-up ANOVAs. They were employed to control for whether the results of the MANOVA have been accurate (Field, 2013). For the multiple comparisons for each variable and the time frames the bonferroni correction was used again due to the small sample size (N^{SPSS} = 15). The follow-up ANOVAs showed the same results (group differences) and hence validated the MANOVA (Appendix, tables 28-43). Since the MANOVA (for p < .05) and follow up ANOVAs (p < .01) showed significant group differences, the mean changes of the dependent variables over time got interpretable. This led to an answer to hypothesis 1 in the following way:

The mean change from time frame 1 to 2 for positive emotions was not significantly different (p = 1.00 > .05). Thus, the increase from 9.76 to 10.89 over that time can be ignored. However, since there was a significant difference between time frame 1 and 3 (p = 0.002 < .05) as well as 2 and 3 (p = .00 < .05) (Appendix, table 44), it can be stated that with time the positive emotions dropped starkly (Figure 12). These mean values in the next and all following tables are the box-cox transformed values reflecting the raw word count data.
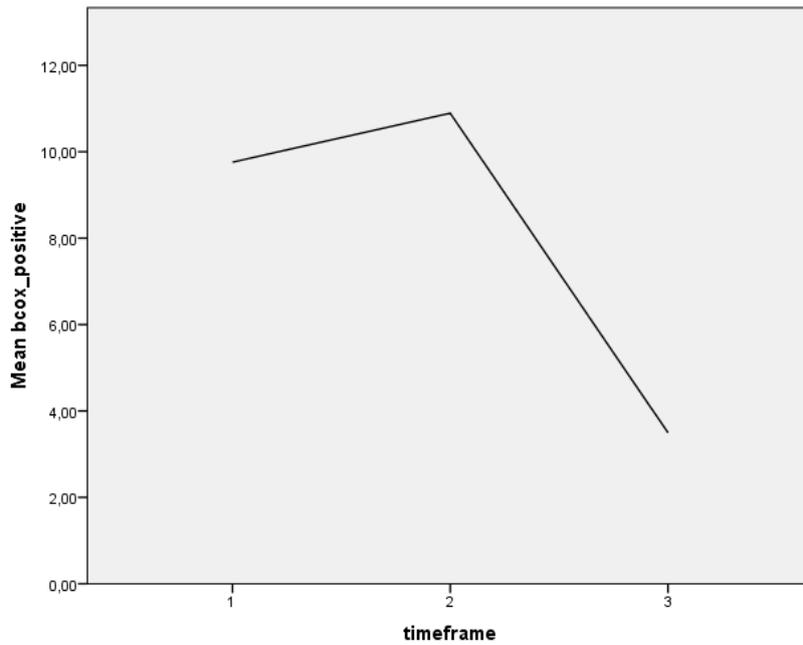
Figure 12. Mean changes of the positive sentiment.

Regarding positive emotions, the bonferroni corrected p-value for a group difference between time frame 1 and 2 for the negative emotions mean was 1.00 as well, the group means of time frame 1 and 2 were insignificant. Nonetheless, there was a significant decrease in negative emotions mean resembling that of the positive emotions mean when comparing the first two time frames with the third one ($p = .005 < .05$; $p = .001 < .05$) as can be seen in figure 13.
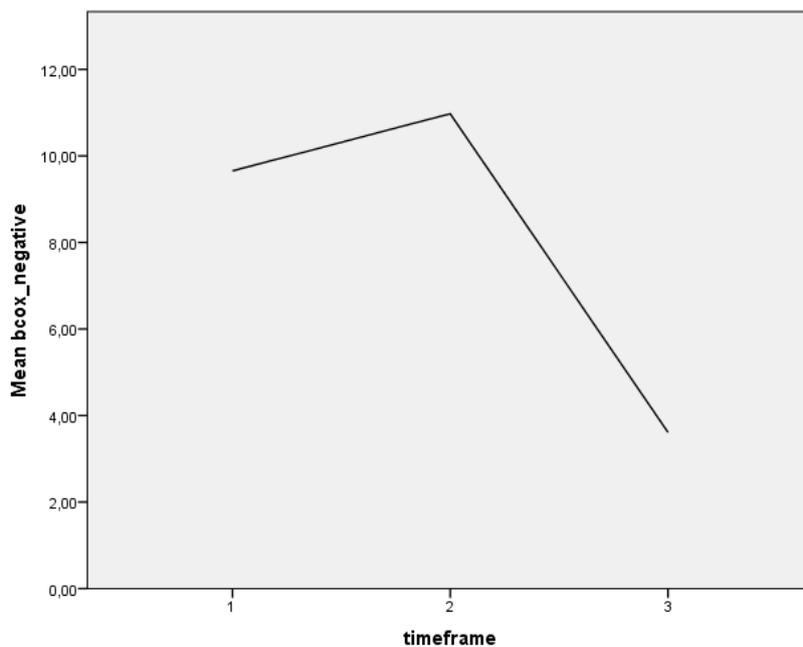

Figure 13. Mean changes of the negative sentiments.

Aligning with that, the three sub-emotions of the negative emotions concept showed similar decrease over time patterns (Appendix, table 44). Summing up, the means over time for the emotions showed that the public opinion about the UFC became less emotionally charged when compared to prior times.

A reverse pattern was found for the similarity perception which showed a strong increase over time. It started with an average of 3.42 and increased to 16.84 in the second time frame with a corrected significance of $p = .001 < .05$ (Appendix, table 44). This would indicate a strong increase in the similarity perception of the UFC. Finally, the third timeframe had a mean of 14.65 (figure 14) which is a strong increase from the first time frame ($p = .005 < .05$). However, the mean change from time frame 2 to 3 was not significant ($p = 1.00 > .05$). Nonetheless, both later time frames show a strong increase in perceived similarity, if compared with the first time frame.
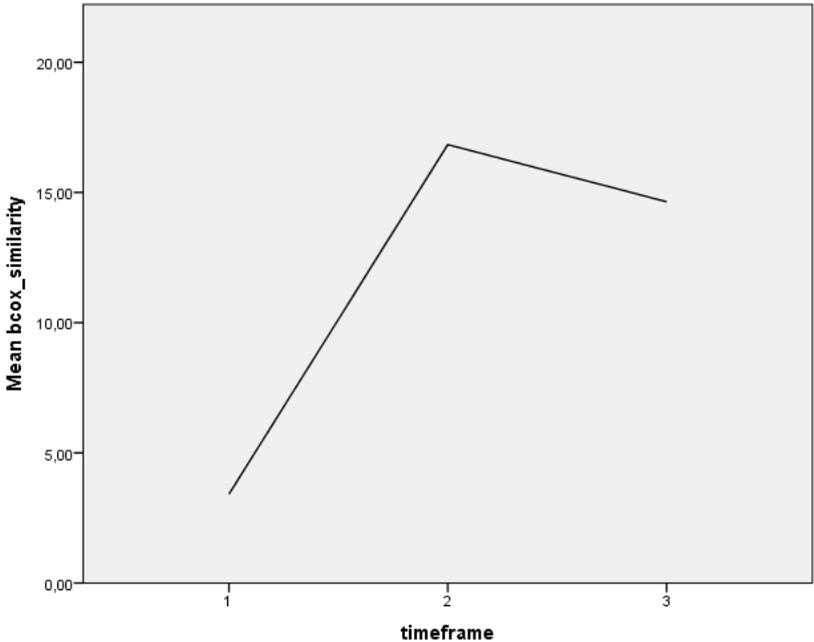

Figure 14. Mean changes of similarity.

Akin to the similarity perception, the mean of the differentiation perception started at 2.79, increased to 9.14 in time frame 2 and decreased to 7.71 in the final time frame (figure 15). But here as well, the mean difference between the second and third time frame was insignificant with a bonferroni corrected p-value of $1 > .05$ (Appendix, table 44). So, only the comparison of differences between the means of the later two time frames with the first one were possible. Both time frame 2 and 3 have a higher mean than time frame 1 thus there was an increase in the differentiation perception ($p = .003 < .05$; $p = .016 < .05$ [Appendix, table 44]). When comparing similarity and differentiation, similarity had the higher means for the comparable time frames (Appendix, table 44;

figures 14 & 15). Summing up, the means for the similarity and differentiation perception changed supporting hypothesis 1 (H1).
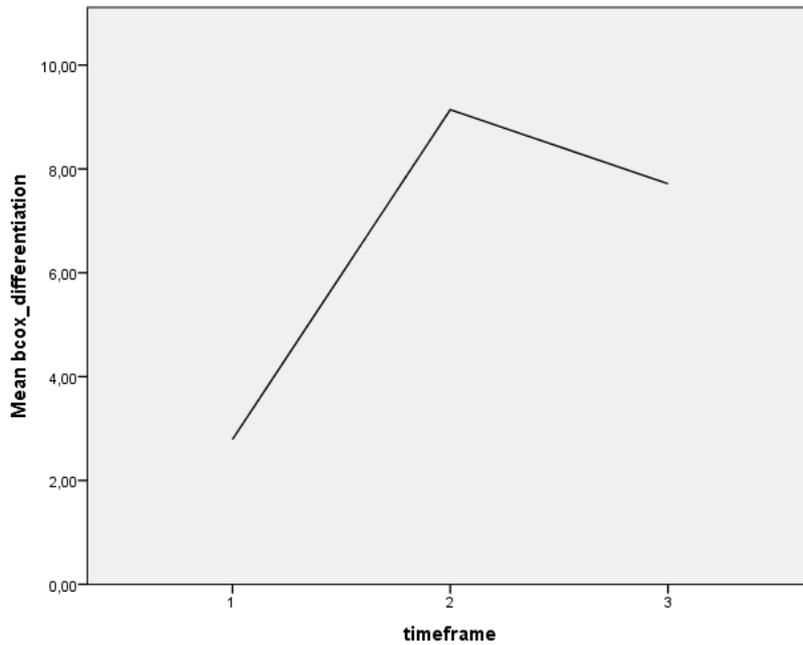

Figure 15. Mean changes of differentiation.

The most extreme trend was seen in the mean of the product success perception. The mean was 1.22 in time frame 1 and increased nearly tenfold to 11.42 in timeframe 2. Ultimately, time frame 3 showed a slight decrease to 9.20 (figure 16). However, the differences between the means of 2nd and 3rd time frame was insignificant (p = .907 < .05). Thus, there is no indication that there was a decrease in the success perception from the second to the third time frame because there was no significant difference. Still, the corrected p-value for the mean difference between time frame 1 and 2 was .001 < .05 making the changes in the means significant. The same was concluded for the mean difference between 1 and 3 (p = .007 < .05). So, the UFC was perceived as more successful over time when compared to the starting time frame.
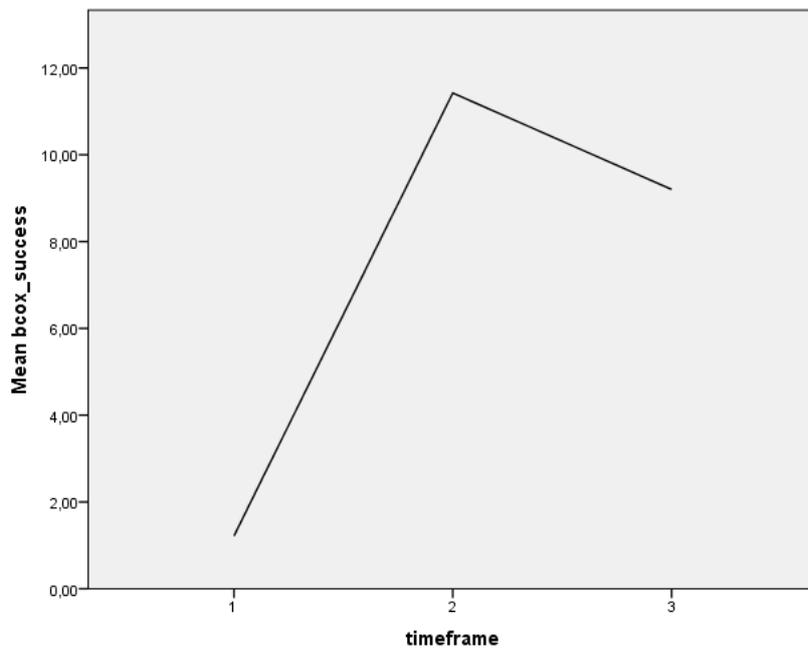
Figure 16. Mean changes of success.

Furthermore, a bivariate analysis was conducted to investigate correlations between the dependent variables – emotions, similarity, differentiation and success - as well as with the independent variable time frame. This was done to test hypotheses 2 and 3 that similarity and differentiation affect a new product's success (positively) as well as consumers' emotions. It shows, that there were no significant correlations between consumers' emotions and the similarity, differentiation and success perceptions (Table 45). Hence, hypothesis 3 (H3) was rejected. Another finding was that the sentiment analysis variables had very high significant correlations amongst themselves ($r > .9$; $p < .05$, table 45). This aligns with the means for positive and negative emotions being nearly equal throughout time and increase in near unison (Figures 12 & 13). Another finding was that both similarity ($r= .85$; $p = .00 < .05$) and differentiation ($r = .812$; $p = .00 < .05$) correlated positively with success over time (Table 45). Hypothesis 2 was thus accepted. Additionally, the similarity and differentiation perception were found to correlate highly with each other ($r = .924$, $p = .00 < .05$).

Additionally, the correlation matrix supported hypothesis 1 (H1) because the similarity and differentiation perceptions correlated (positively) with the independent variable time frame ($r = .507$, $p = .17 < .05$; $r = .439$, $p = .039 < .05$). Hence the similarity and differentiation perception changed over time. Moreover, there were also negative correlations of consumers' emotions with time frames ($r = -.532$ to $-.506$, $p = .013$ to $.02 < .05$). This supports the mean changes indicating a decrease in consumers' emotions towards the UFC.

Table 45. Correlation matrix (significance for * p < .05; ** p < .01).

Correlations

		bcox_positive	bcox_negative	bcox_anxiety	bcox_anger	bcox_sadness	bcox_similarity	bcox_differentiation	bcox_success	timeframe
bcox_positive	Correlation Coefficient	1,000	,981**	,981**	,981**	,900**	-,048	-,010	-,019	-,507*
	Sig. (2-tailed)	.	,000	,000	,000	,000	,805	,961	,921	,017
	N	15	15	15	15	15	15	15	15	15
bcox_negative	Correlation Coefficient	,981**	1,000	,981**	1,000**	,919**	-,067	-,029	-,039	-,507*
	Sig. (2-tailed)	,000	.	,000	.	,000	,729	,882	,842	,017
	N	15	15	15	15	15	15	15	15	15
bcox_anxiety	Correlation Coefficient	,981**	,981**	1,000	,981**	,898**	-,029	,010	,000	-,506*
	Sig. (2-tailed)	,000	,000	.	,000	,000	,881	,960	1,000	,020
	N	15	15	15	15	15	15	15	15	15
bcox_anger	Correlation Coefficient	,981**	1,000**	,981**	1,000	,919**	-,067	-,029	-,039	-,507*
	Sig. (2-tailed)	,000	.	,000	.	,000	,729	,882	,842	,017
	N	15	15	15	15	15	15	15	15	15
bcox_sadness	Correlation Coefficient	,900**	,919**	,898**	,919**	1,000	-,115	-,077	-,068	-,532*
	Sig. (2-tailed)	,000	,000	,000	,000	.	,552	,692	,728	,013
	N	15	15	15	15	15	15	15	15	15
bcox_similarity	Correlation Coefficient	-,048	-,067	-,029	-,067	-,115	1,000	,924**	,850**	,507*
	Sig. (2-tailed)	,805	,729	,881	,729	,552	.	,000	,000	,017
	N	15	15	15	15	15	15	15	15	15
bcox_differentiation	Correlation Coefficient	-,010	-,029	,010	-,029	-,077	,924**	1,000	,812**	,439*
	Sig. (2-tailed)	,961	,882	,960	,882	,692	,000	.	,000	,039
	N	15	15	15	15	15	15	15	15	15
bcox_success	Correlation Coefficient	-,019	-,039	,000	-,039	-,068	,850**	,812**	1,000	,446*
	Sig. (2-tailed)	,921	,842	1,000	,842	,728	,000	,000	.	,039
	N	15	15	15	15	15	15	15	15	15
timeframe	Correlation Coefficient	-,507*	-,507*	-,506*	-,507*	-,532*	,507*	,439*	,446*	1,000
	Sig. (2-tailed)	,017	,017	,020	,017	,013	,017	,039	,039	.
	N	15	15	15	15	15	15	15	15	15

Discussion

Going back to the research question *"How does the evolution of the similarity and differentiation perceptions of a new product correlate with consumers' emotions towards a product as well as its success?"*, the results indicated the following:

The similarity and differentiation perceptions increased over time (H1 accepted). Besides that, both the differentiation and similarity perceptions were found to positively correlation with the success of a new product (H2 accepted). Ultimately, this was accompanied by a decrease in emotions including both negative and positive emotions, but they were not linked to either similarity, differentiation (H3 rejected) and product success perceptions. So, the results support previous research that indicated that both similarity and differentiation are important for a product's success (Zimmerman & Zeitz, 2002; Depphouse & Carter, 2005). Moreover, the findings support the older and newer literature about the institutional theory because both similarity and differentiation increased and were positively correlated with each other (Scott, 2005; Beckert, 2010). The emphasis of the older institutional theory on similarity (DiMaggio & Powell, 1983; Scott, 1987; Zucker, 1987) is supported as well since the means for similarity were higher than those of differentiation (Appendix, table 44). This would imply that when managing new products, one must favor similarity over differentiation without ignoring differentiation demands. This could be done by conforming on non-diagnostic attributes leaving the core product intact (Porac et al., 2011; Cattani et al., 2017). This was done in the case of the UFC through a ruleset and banning certain techniques and fouls which indicates a similarity strategy (García & Malcolm, 2010, Szczerba, 2014; Bolelli, 2016). Also, it seems as if the similarity perception was rapidly increasing. This is in line with previous research which postulated a non-linear increase in similarity due to one event signifying similarity might cause another one (Zimmerman & Zeitz, 2002; Delmar & Shane, 2004). In the case of the UFC this could have been the lift of a state ban which then led to other states lifting their bans leading to a rapidly increasing similarity perception.

Like theorized, the UFC as a new product caused strong consumers' emotions especially in the first time frame (Choi et al., 2011; Bolelli, 2016). However, the results also indicate that consumers' emotions decrease after some time passed and don't correlate with the similarity and differentiation perception as well as perceived product success. Thus, this is a unique finding of this study which seems counterintuitive also given the literature (Krober-Riel, 1984; Ehrenberg et al., 1997; Wood & Moreau, 2006; Humphreys, 2010; Choi et al., 2011; Vinodhini & Chandrasekaran, 2012). Nonetheless, the emotions decreased whilst the similarity, differentiation and success perception increased. Additionally, the most prominent negative sub-sentiment in the raw data was anger (Appendix, figure 17) throughout the time frames which is not surprising given that the sport requires close

combat engagements which for consumers might relate to acts of (uncontrolled) venting of anger. So, it can serve as a vicarious outlet of anger for some who watch it (Cheever, 2009). Another unexpected finding was that the negative and positive emotions are so highly correlated, and their means were virtually equal (Appendix, table 44; table 45). This is contrary to the assumption that the UFC in its infancy was mostly perceived as negative (García & Malcolm, 2010; Hill, 2013). However, this can be explained with emotion concepts mutually defining each other (negative being the opposite of positive) and anger, anxiety and sadness being sub-sentiments of negativity. The same applies to the high correlation between similarity and differentiation.

Finally, since the mean change from the 2nd to 3rd time frame was not significant, this research does not support the notion that the UFC's success is decreasing (Appendix, table 44). This is contrary to the assumption of some journalists that the pinnacle of the UFC is over, and the company's success is declining (Tabuena, 2017; Wyman, 2018, Pearson, 2018).

Next, strengths and shortcomings of the research will be discussed. Regarding the saturation method, it has the weakness that it is dependent on the researcher's decision whether saturation is reached. Nonetheless, it "offers […] intersubjectivity, reflexivity, and feasibility while maintaining a responsible level of methodological quality." (Malterud, 2012, p. 8). Adding to that, there was certainly fitting data that was not captured and unfitting data that was, but because of that the thresholds for the hit and false hit rate were established. Adding to that, only articles that had fitting headlines were included which reduced the instances of obtaining unrelated data (cf. Humphreys, 2010). So, it is assumable that the dictionary measured what it was supposed to measure and hence it has solid internal validity (Neuendorf, 2016). This is also due to the fact the LIWC default dictionary is used often and so are custom dictionaries added to it (Humphreys, 2010; Robinson et al., 2013; Humphreys & Wang, 2017; O'dea et al., 2017). So, it is assumable that there is high concurrent validity. On top of that, the replicability is high due to the LIWC dictionary being available online (liwc.com), the custom dictionary is in the Appendix (Table 1) and an example changelog for the saturation method being included (Appendix, table 2).

Another important consideration is that results from automated content analysis have a high external validity/ generalizability due to the usually high sample size. At first glance this holds true for the data used in this research, too (N^{Total} = 1.109). However, it is noteworthy that the statistically significant results from SPSS were acquired from a small sample size (N^{SPSS} = 15) which reduces the external validity/generalizability. This is somewhat weakened by the fact that the sample sizes per group were equal (Hair et al., 2010). Still, this is the biggest issue with the data used and undermines the true statistical power it could have unfolded, especially due to external validity being a strength of automated text analysis (Neuendorf, 2016; Humphreys & Wang, 2017). A possible solution for the

small sample size would have been to let LIWC2015 analyze single articles which inevitably lead to an immense increase of time needed to collect and analyze the word counts. Nonetheless, the statistical analysis reflected trends that were already visible in the raw word count data (Appendix, figure 17). Furthermore, the Bonferroni correction was used to reduce problems arising from using a standard p-value and a small sample. While some researchers consider the Bonferroni correction for the p-values as too strict, it is useful to acquire more reliable significances for differences. Hence, type I error i.e. rejection of a true hypothesis was reduced (Hair et al., 2010; Field, 2013; Humphreys & Wang, 2017). Also, when making inferences from the findings of the first time frame, it should be considered that there was a low number of articles ($N^{1993-2000} = 15$) that formed the number of cases per group (5). Thus, this may render statistical inferences less meaningful.

Further, regarding the construct validity, consisting of discriminant and convergent validity, the correlation matrix revealed that emotions' concepts correlated highly with each other and lowly with the similarity/ differentiation and success perception and vice versa (Table 45). This shows that the constructs were distinct enough and hence the construct/ content validity is assumable (Messick, 1998). Additionally, predictive validity – the degree to which one variable can predict the extent of another - is assumable for the significant correlations that were found (Cronbach & Meehl, 1955), e.g. the one between similarity and success (Table 45). However, it is advised to not automatically conclude that correlation means causation, i.e. that similarity influences success. Also, using the raw word count instead of the percentage numbers helped with the fact that the newspaper samples differed vastly in their number of articles and words per article (Kern, 2016; Humphreys & Wang, 2017). Thus, the comparability of the results was enhanced. Moreover, even though product success was measured as perceived product success, the results are in line with the reported success of the UFC over time (Rosenberg, 1993; Flinn, 2016; Critchfield, 2017).

Moreover, there were no ethics concerns regarding the data collection and usage since the articles were published to be read by an as big as possible audience. Additionally, neither the names of the authors were of interest for the study nor was the type of newspaper. Finally, the chance of wrongly written words is rather low due to journalists being more educated than the average consumer, so it is assumable that the loss of data due to spelling errors is neglectable (Neuendorf, 2016).

Conclusion

From this, it can be concluded that there are great changes in the emotions as well as the similarity, differentiation and success perceptions of a new product. In the case of the UFC, both positive and negative emotions decreased over time. Additionally, both the similarity and differentiation

perception increased over time, so did the success perception. Regarding the increase, the similarity perception was higher throughout time in comparison to differentiation. Further, no correlations were found between emotions and similarity, differentiation and success perceptions. However, the similarity and differentiation perceptions were found to correlate positively with each other and the success perception.

Summing up, this research contributes to institutional theory because it emphasizes the importance of the similarity perception and its increase over time. However, differentiation should be pursued to a lower extant as well because of the significant positive correlation it has with both similarity and success. Hence, it would be advisable to not just focus on similarity evolution but to take the differentiation evolution into account as well.

Regarding future research, for the case of the UFC, it would be interesting to see how the data correlates with the attendance numbers, pay-per-view buy rate and the TV ratings. Even though there is already a comprehensive attempt of selecting this type of data, there is no complete dataset that allows for this type of comparison yet. However, these indicators might not be enough nowadays, so including clicks and engagement on social media as well as revenues from TV broadcasting deals and attendance numbers/revenues might paint a more reliable holistic picture. Other cases that are not about private companies, but about public companies that are obliged to publish annual reports might be easier to use when replicating this study. Besides that, it may be interesting to re-test the finding that the similarity, differentiation and success perception were not correlating with consumers' emotions because it is opposing the literature. So, further research might help to solidify or reject this unique and unexpected finding especially since the literature is sparse.

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