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Social Media Engagement for Global Influencers

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Consumers use social media to create content, generate online word-of-mouth, and communicate with brands and other consumers. Consumers engage with influencers who deliver content that is timely, entertaining, and interesting to them. Many influencers have a truly global following across the world. However, there is little research on international aspects of social media influencers. Our paper leverages Hofstede's cultural dimensions to study consumer engagement using a novel dataset of global sustainability influencers. Our results indicate that the cultural distance between the influencer and the followers is an important driver of engagement in a nuanced way. While the level of superficial, light engagement is not affected by the cultural distance between an influencer and her followers, the level of deep engagement increases when an influencer and her followers are culturally close. The effect is more pronounced for followers in countries where environmental concerns are considered more important.

Keywords: social media; online wom; influencers; sustainability; Hofstede cultural dimensions

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Introduction

Marketing communications centered around consumer engagement has become a topic of interest both for academic researchers (Ashley & Tuten, 2015; Brodie et al., 2013; Dessart et al., 2016) as well as practitioners looking to apply the latest marketing techniques (Elmhirt, 2019). Influencer advertising is a significant part of marketing budgets (Influencer Marketing Hub, 2020) and has gained visibility as a way to reach consumers globally (Larocca, 2018). Thus, research into influencer marketing topics is a priority for the field of social media marketing research (Voorveld, 2019). Moreover, marketing researchers have highlighted the need for more work on consumer engagement (Gupta et al., 2018) as it relates to online word of mouth and consumer behavior in an international context (Banerjee & Chai, 2019). Our paper aims to contribute to this stream of research by empirically analyzing the effect of cultural distance, as defined by Hofstede's dimensions, on consumer engagement from global consumers who follow influencers. We estimate the impact of cultural distance between the influencer and her followers on engagement. We focus on influencer-follower interactions in the context of sustainability marketing, which has been identified as a growing area of interest for marketers and researchers in general (Lim, 2017; Quoquab & Mohammad, 2020; Sheth et al., 2011), particularly in international contexts (Minton et al., 2018).

Consumer engagement has been at the forefront of research topics in marketing research (Kumar, 2013; Pansari & Kumar, 2017; Tafesse & Wood, 2021). Global consumers are affected by many factors while they engage with brands and companies across borders. Recent research has reflected the difficulties of capturing the complexity of global marketing research into consumer engagement (Gupta et al., 2018). Our paper fills in the gap on the effect of cultural distance on customer engagement in the new advertising ecosystem of online social media interactions.

Our paper uses cultural dimensions first introduced by Hofstede (1980) in order to estimate the cultural distance between influencers and their followers on social media. Recent marketing research has used Hofstede's cultural dimensions to estimate impact of a country's cultural characteristics on advertising and consumer behavior (Crotts & Erdmann, 2000; De Mooij & Hofstede, 2015; Donthu & Yoo, 1998; Dwyer et al., 2005; Winterich et al., 2018). Our work builds on previous literature by using all the six cultural dimensions currently available, extending the empirical analysis to social media platforms like Instagram and focusing on potential strategies for influencer advertising campaigns.

We create a novel dataset of eco-influencers and their followers from across the world in order to analyze the impact of cultural distance, as defined by Hofstede's dimensions, between the influencer and the followers on the engagement. Previous research (McAlister & Pessemier, 1982; Rohm & Swaminathan, 2004; Trijp et al., 1996) suggested that consumers seek out varied products and content and thus may be more likely to engage with influencers different than themselves, while other papers have highlighted that consumers tend to gravitate towards like-communities and similar groups (Cialdini, 2001; Naylor et al., 2011; Wallace et al., 2014). Moreover, consumers may feel conformity (Lascu & Zinkhan, 1999) and be influenced by ethnocentrism (Bruning & Saqib, 2013; Chan et al., 2010; Suh & Smith, 2008), which would lead them to prefer to engage with content that reinforces these tendencies and that content is likely to come from influencers within a close cultural distance. It is thus an empirical question to measure whether consumer engagement is positively or negatively affected by the cultural distance between the influencer and the followers. Our results indicate that deep engagement is inversely correlated with cultural distance, whereas light engagement is not affected by cultural distance. Our research has important managerial implications for influencer marketing and

allocating budgets for online social media campaigns. In particular, cultural similarity is important for deep consumer engagement campaigns, such as detailed product information, but not for awareness campaigns which can be achieved by light engagement.

Furthermore, our empirical research is important for putting into context the field of international influencer marketing. Despite the lack of systematic academic studies on consumer engagement in influencer marketing, industry experts usually point to engagement as the main reason for the success of influencer campaigns. Influencer marketing is used in many industries, ranging from fashion and lifestyle to sports and sustainability (Influencer Marketing Hub, 2020). Influencers create content aimed at their followers in online communities of common interest. Through the content created, the influencers' role ranges from content creator to marketer of products to educator (Yalcin et al., 2020).

Our work also points to another important marketing topic: the increasing appetite for sustainable products and an eco-friendly lifestyle. The sustainability movement has recently gained attention worldwide, as millennial consumers prefer to shop for sustainable products more than previous generations (Nielsen, 2018). In response, companies highlight the sustainability of their products and include sustainability content in their marketing campaigns as a way to increase the consumers' purchase intentions (Park et al., 2018). Thus, influencer advertising using eco-influencers who write about sustainability for their global followers is becoming more common in digital marketing campaigns. In this paper, we focus on eco-influencers, who create sustainability, vegan, clean living, zero trash, and reusable goods content.

Related Literature

Online word of mouth has been studied recently as an extension of consumer communications about or with a brand. Online word of mouth and the use of social media have been proposed as

ways to drive customer engagement (Hanson et al., 2019; Harmeling et al., 2017; Sheng, 2019). Recent studies have added to our understanding of the process by which word of mouth outcomes can be influenced (Audrezet et al. 2020; Hu et al., 2019; Kay et al. 2020; Ki et al., 2020; Tafesse & Wood, 2021). More specifically, Taillon et al. (2020) identified that the perceived similarity between the influencer and the follower impacts word of mouth outcomes, with closeness serving as a moderator. Moreover, Ki and Kim (2019) find that desire to mimic leads to increased word of mouth and purchase intention, while Nam and Kannan (2020) create an extensive map of online consumer interactions, with particular emphasis on international online word of mouth. Thus, online word of mouth is an important and understudied area of international marketing (Banerjee & Chai, 2019) particularly as it relates to differences in cultures. Lam et al. (2009) examines the importance of Hofstede's cultural dimension on word of mouth engagement between consumers. Their paper highlights the importance of cultural difference in word of mouth behavior on in- and out-group discussions particularly across borders. Our paper similarly finds that online consumer engagement is influenced by cultural differences, and that engagement rates vary depending on the type of engagement (light or deep engagement).

Social media influencers have been studied by researchers in various disciplines ranging from computer science to anthropology in the last twenty years (Chang et al., 2020; Ge & Gretzel, 2018; Hughes et al., 2019). A comprehensive survey of the literature by Chang et al. (2020) and further studies by Hughes et al. (2019) indicate that influencer engagement is affected by a range of variables pertaining to the influencer, the audience of followers, the platform and content characteristics. Al-Emadi and Ben Yahia (2020) use data from Quatar and Tunisia to identify five characteristics that impact customer engagement with influencer content:

credibility, storytelling and content quality, fit with the platform, actual and aspired image homophily and consistency. While cultural dimensions are not explicitly discussed in these papers, other recent research conducted in a variety of international cultural contexts (Al-Emadi & Ben Yahia, 2020; Daniel et al., 2018; Dhanesh & Duthler, 2019; Ezzat, 2020; Halim & Karami, 2020; Hu et al., 2020; Navarro et al., 2020) suggests that effects of influencers on their followers are globally observed within each national culture. Our work acknowledges the global and cross-country nature of current social media platforms and adds to this stream of literature by estimating the effect of cross-cultural influencer-follower interactions that have yet to be studied systematically.

Our work also builds on recent work on consumer motivation across cultures (Kanakaratne et al., 2020; Yang et al., 2019). We focus on cultural distance in estimating how it may affect cultural engagement. Our results indicate there is a difference between deep engagement and light engagement, which is perhaps driven by the motivations that consumers have in order to interact with influencers who are either from similar or different cultures. Our results are in line with previous research that focuses on the complex factors that affect global consumers' awareness and intentions in the field of sustainability (Yang et al., 2020).

Our paper has important empirical implication for allocating advertising budgets across countries and online platforms. Recent research on advertising budget allocation (Ofek & Yalcin, 2015; Weinberg & Pehlivan, 2011; Zia & Rao, 2019) and strategic budget allocation to different customer segments (Selove, 2014; Villas-Boas, 2018) points out that managers face a difficult problem in deciding how to best reach new customers while facing budget constraints. Our paper highlights the importance of using an appropriate social media campaign to reach potential consumers. Given an option between an international influencer with a large following and more

culturally distant consumers and a local influencer who is culturally closer to her followers, managers must allocate their advertising budget depending on the goal for the advertising campaign: deep engagement is more likely for latter while the former will achieve light engagement at a lower cost per follower.

The link between search costs, brand loyalty and customer engagement has been extensively studied in game theory (Agrawal, 1996; Kuksov & Zia, 2020) and empirical applications (De Los Santos et al., 2012; Ellison & Ellison, 2009). Recent game theory research has focused on how influencers provide product information to customers (Kuksov & Liao, 2019; Nistor & Selove, 2021). Our paper studies the link between consumer engagement and the cultural distance between the followers and their international influencers. Followers incur a cost in order to engage with influencer content, with different degrees of engagement requiring different levels of costs. Moreover, followers are interacting with the branded content from the influencer. Thus, our results are in line with previous research about higher search costs decreasing search, which in our context implies higher cultural distance decreasing deep engagement.

Methodologically, our paper builds on empirical literature that analyzes interactions across countries. For example, work on dyads that span international borders (Dyer & Chu, 2000; Ferrin & Gillespie, 2010; McEvily et al., 2017; Zaheer & Kamal, 2011) has highlighted the importance of accounting for both home and host countries in the analysis. In our empirical context, we use all the data available on the influencer and the followers' countries, as well as several variables that characterize each influencer. Different countries where followers and influencer live have different measurements on Hofstede's cultural dimensions. We take all these

dimensions into account by creating a weighted index of cultural dimensions for all the followers of an influencer.

Influencer Marketing and Data Description

Social media marketing has become a topic of current research (Voorveld, 2019) because of its rapidly growing importance to both consumers and managers. In particular, research on influencers on social media has been mostly done by the industry, while academic research has also been a growing area of interest in marketing (Bonnevie et al., 2020; Chang et al., 2020; Domingues Aguiar & van Reijmersdal, 2018; Kintu & Ben-Slimane, 2020; Voorveld, 2019).

Influencer marketing campaigns are expected to grow to 9.7 billion dollars in 2020 from 6.5 billion dollars in 2019 (Influencer Marketing Hub, 2020). An industry study run by Nielsen Catalina Solutions listed the return to sales from influencer advertising as more than ten times traditional digital advertising (TapInfluence, 2016). Instagram, which is the platform we focus on in this paper, is the biggest and most used for influencer marketing. The platform, with its highly visual medium and large audience, has led the pack in influencer marketing since 2015. In 2020, CreatorIQ (Influencer Marketing Hub, 2020) estimates that more than 90% of influencer campaigns include ads on Instagram. Instagram is a truly global social media platform: it has influencers and followers all over the world. Instagram has 140 million users in the USA, 120 million users in India, 95 million users in Brazil, 78 million users in Indonesia, 54 million users in Russia, 37 million users in Japan, 31 million users in Mexico and many more in many other countries (Statista, 2020).

The increase in influencer ad marketing campaigns comes as more managers believe that these campaigns are effective. For example, 91% of managers responded in a survey that they

believed that influencer marketing is an effective form of marketing and 66% were planning to increase their budget for it in 2020 (Influencer Marketing Hub, 2020). The industry is still very much in its infancy, with most campaigns being run in-house (4 out of 5), but there are some automated platforms who offer two-sided services to influencers and brands looking to run campaigns. Managers use different outcomes to evaluate campaigns, but engagement is the main goal, with clicks or likes or messages being the most important criteria when evaluating campaign success.

Most of the influencers are in a particular field like fitness, beauty and lifestyle, fashion or sustainability. In this paper we focus on eco-influencers who create content around a sustainable lifestyle. The interest around this category has been growing due to consumers' concerns about the environment and due to a desire from the younger consumers to live a socially responsible lifestyle. Nielsen estimated in 2018 that sales of products with sustainable attributes made up 22% of the total store, while also pointing out that millennials are likely to change their habits to reduce their impact on the environment (Nielsen, 2018). Nielsen expects a decade of sustainability focused consumers, with the total amount spent on these products reaching 150 billion dollars in 2021 per year. Influencers who can create content that highlights a sustainable lifestyle (such a zero trash, vegan cooking, clean eating, recycling) are important for promoting these products to interested consumers.

Our paper uses a novel dataset of eco or sustainability influencers from around the world. Our data collection includes three major components: first, a team of research assistants compiled a list of global eco-influencers, second we used publicly available data on Hofstede's cultural dimensions, and third, we then collected data on influencers from a marketing research agency that acts as a two-sided platform for influencer marketing campaigns.

First, we compiled a list of 98 eco-influencers from across the world. The eco-influencer field is not as widely publicized or analyzed as other influencer fields (unlike fashion or lifestyle influencers, for example). We used several lists compiled by popular press articles (Beauchemin, 2017; Croswell, 2013; Dickson, 2018; Elle, 2008; Etcanada, 2019; Feedspot, 2020; Spoljaric, 2019; Team Kobe, 2019; ThreadUp, 2019) to compile a list of environmentally minded influencers. We included all the influencers listed as top eco-influencers globally and then supplemented with related eco-influencers who may have commented or linked to those top influencers. The field of eco-influencers is relatively small compared to the big areas of influencer marketing and our method quickly yielded a sample of the small universe of global eco-influencers. We capture eco-influencers from several countries and continents. All of the influencers are creating content on Instagram.

[Insert Table 1a around here]

Our influencers come from Asia (18 percent), Europe (21 percent), North America (56 percent), and Oceania (4 percent). The influencers come from several continents, as detailed in Table 1a. They come from 9 countries detailed in Table 1b.

[Insert Table 1b around here]

Second, we supplemented our data with current available measures on Hofstede's cultural dimensions. Hofstede (1991) showed that the cultural background of a country where a customer lives may affect her choices and behavior. Hofstede's (1980, 1991, 2001) cultural framework includes six dimensions measured on a 100-point scale. The dimensions are individualism/ collectivism, masculinity/femininity, uncertainty avoidance, long-term/short-term orientation, power distance, and indulgence/restraint. We use all these dimensions, combined into a weighted

index for each influencer (weighted by the preponderance of the followers from each country who follow that influencer). Further, all six dimensions are then combined in an aggregated measure called Cultural Distance following Moon et al. (2016). We adapt the Moon et al. (2016) formula, itself based on Kogut and Singh (1988), for computing cultural distance using all existing cultural dimensions: $CD_{ij}=[\sum_{D=1}^{6}(I_{iD}-I_{jD})^2/V_D]/6$ with CD_{ij} being the cultural distance between country i where the influencer is located and country j where the follower is located, V_D being the variance along dimension D of the 6 of Hofstede's dimensions, I_{iD} being the index for the D cultural dimension for country i (where the influencer is located) and I_{jD} being the index for the D cultural dimension for country j (where the follower is located).

Third, we collected several variables for each influencer from a market research company specializing in social media influencer campaigns. The website acts like a two-sided platform that allows brands to reach influencers and conduct influencer campaigns. Eco-influencers who create content on Instagram are available for brands to contact and work with on this platform. The platform contains several data fields for each influencer, including contacting details and past historical metrics for each influencer, including Likes and Comments.

We use three measures as dependent variables: ratio of comments to followers on posts as a way to measure deeper consumer engagement, comments to likes ratio as a robustness check to measuring deep consumer engagement, and ratio of likes to followers on posts as a way to measure light engagement. On Instagram, consumers may follow an influencer passively by just reading the post, may "like" a post which is usually very light engagement with the content or may actually write a "comment" on that post, which is considered deep engagement because it

requires more purposeful effort from the consumer. Engagement is considered a main way to evaluate effectiveness of influencer campaigns (Influencer Marketing Hub, 2020).

We collected several other measures: non-engaging followers, percent of followers who are real people, percent of followers who are influencers themselves, percent of followers who have less than 1500 followings themselves. These variables characterize each influencer and are used in a vector of influencer specific characteristics for our analysis.

Table 2 contains some descriptive statistics for our resulting dataset.

[Insert Table 2 around here]

We also collected the countries where the followers are located. Interestingly, the influencers have a truly global appeal: these influencers are followed by customers all over the world. Each influencer has followers from many countries: eighty-six countries are represented in our sample. The social media research company limits their collection to top countries for each influencer. Thus, they report the top five countries each influencer has followers from, along with what percent of followers come from that particular country. Table 3a lists the number of followers from each continent, while Table 3b lists the overall breakdown of countries for followers in our dataset.

[Insert Table 3a around here]

[Insert Table 3b around here]

Empirical Analysis

Our main analysis examines the link between consumer engagement with the content produced by an influencer and the cultural distance between the followers and the influencer.

There are two main ways that the content produced influences the followers: by attracting more followers and by engaging them to interact with the influencer. Thus, an influencer who has a large following may be creating content that appeals to many followers across the world and that content is likely to be engaging (resulting in the large following). The data indicates that there is a clear inverse correlation between the size of the followers for an influencer and the cultural distance: influencers who have a large number of followers have a higher difference culturally from their followers compared to influencers with a small number of followers. Put differently, the followers for each influencer are not randomly distributed across the world. Rather, our data indicates that influencers with small followings tend to have followers who are close to their own culture while big influencers will have a larger average distance to their large base of followers.

[Insert Table 4 here]

In Table 4, the correlation between the Cultural Distance (Log) and Followers is as 0.22 while the correlation between the Followers and Close (which is an indicator variable based on Cultural Distance) is negative.

In order to further investigate the effect of cultural distance on engagement, we estimate the following main specification equation for influencer i: $DeepEngagement_i = \alpha + \beta\ CulturalDistance_i + \theta\ X_i + \varepsilon_i$.

$DeepEngagement_i$ is the dependent variable representing engagement between the Influencer i and her followers. The index for all the followers of influencer i uses the breakdown of all countries where the followers for influencer i are living in, weighted by their preponderance in each influencer's sample of followers. In line with previous work that has used comments and

likes to measure engagement (Chu et al., 2021; Tafesse & Wood, 2021), we assume that engagement can be represented by the comments that followers leave on posts (divided by the number of total followers per influencer). Comments represent deep engagement: a consumer would spend time reading the post and incur a personal cost to post a comment in reply.

$CulturalDistance_i$ is computed by the formula used by Moon et al. (2016). However, in our context, the followers are from several countries, so we create a weighted index of followers and then use that weighted index of cultural dimensions to compute the $CulturalDistance_i$. Unlike Moon et al. (2016), we use all the six cultural dimensions currently identified by research based on Hofstede's body of work. The coefficient β is our main effect.

X_i is a vector of influencer specific characteristics which includes the percent of non-engaging followers, percent of followers who are real people, percent of followers who are influencers themselves, and percent of followers who have less than 1500 followings themselves.

Table 5 indicates that deep engagement is negatively correlated with cultural distance. The model is OLS with robust standard errors. The effect is significant even when the model is estimated as $DeepEngagement_i=\alpha+\beta\ Close_i+\theta\ X_i+\varepsilon_i$, where $Close_i$ represents an indicator variable which is 1 if the cultural distance is lower than the mean of $CulturalDistance_i$.

[Insert Table 5 around here]

Table 5 contains several models estimating the equation of interest. Model 1 is a straightforward OLS estimation with robust standard errors. The coefficient for Cultural Distance, β, is -0.0002 (significant at the 5% level), which means that the further away a follower is from the influencer, her Deep Engagement is lower with the content of the influencer posts. For example, the estimates indicate that a 10% increase in Cultural Distance corresponds to a 0.20 decrease in

comments per 10000 followers. Influencers usually have large followings, up to 13 million in our sample, so a decrease of 0.20 comments per 10000 followers would be important for an influencer campaign, about a 7% decrease for the mean influencer who has close to one million followers. Model 2 adds Influencer specific variables to Model 1 and finds a similar effect: β is -0.0001. The effect means that an increase of 10% in Cultural Distance corresponds to a 0.13 decrease in comments per 10000 Followers. Model 3 uses Close as the independent variable, while Model 4 adds Influencer specific variables to the estimation in Model 3. The results indicate the robustness of the previous specifications: followers who are closer culturally to their influencers tend to be more deeply engaged, with β being 0.0005 in Model 3 and 0.0004 in Model 4 (both significant at the 5% level).

Another way to measure deep engagement is to consider the ratio of comments to overall likes, which indicates what proportion of aware customers are motivated enough to leave a comment. Table 6 includes the results from the estimation of the robustness of the deep engagement model, estimated with OLS with robust standard errors. Models 5 and 6 use the main independent variable Cultural Distance and show that the Cultural Distance is negatively correlated with Comments Per Like (β is -0.0084 in Model 5 and -0.0054 in Model 6, both significant at the 1% and 5% levels respectively). Models 7 and 8 use Close instead, and the coefficient β is 0.0181 and 0.0153 respectively, both significant at the 5% and 1% levels respectively, indicating that closer followers have a higher Deep Engagement with their influencers. Models 6 and 8 include Influencer specific variables. The results are similar to our main specification.

[Insert Table 6 around here]

Our previous results indicate that consumers are less likely to engage deeply with influencers who are culturally distant. However, there must be a reason why these consumers are still following influencers who are culturally distant. We analyze the possibility that followers are superficially interacting with influencers from culturally distant countries. We expand our analysis to LightEngagement, which is proxied by Likes (per follower). The model we estimate is $LightEngagement_i=\alpha+\gamma\ Close_i+\theta\ X_i+\varepsilon_i$, with γ being our main interest effect of cultural distance on light engagement. We estimate this equation using OLS with robust standard errors.

Table 7 presents the results. Models 9 and 10 use the main independent variable Cultural Distance while Models 11 and 12 use Close instead, with robust standard errors. Models 10 and 12 include Influencer specific variables. γ is not significant in any specification, which indicates that cultural distance does not affect light engagement.

[Insert Table 7 here]

Our overall results reveal that some followers are more deeply engaged with the influencers they follow and that this effect is inversely correlated with the cultural distance between the country where the influencer lives and the ones where the followers live. In order to understand what can affect this relationship, we collected additional measures on environmental concerns across the world. In particular, we used the U.S. News ranking on "cares about the environment" (U.S. News, 2020) in order to isolate the part of our follower sample who are more concerned about the environment. Using a median split, we then estimate our main specification separately on the two samples of followers who live in countries with different levels of interest in the environment. Table 8 shows the results of our main specification for Deep Engagement.

[Insert Table 8 around here]

We find that followers who live in countries who care more about the environment are driving the effect of cultural distance on deep engagement. The coefficient in the estimation, β, is significant only for followers who live in a country where customers care about the environment more: β is -0.0003 in Model 1 and is 0.0006 in Model 2 in Table 8 (both significant at the 10% and 5% levels respectively). Model 1 indicates that Cultural Distance is inversely correlated with Deep Engagement and that the magnitude of the coefficient is higher for customers who care about the environment. Model 2 indicates that customers who are Close to the influencers (Close is an indicator based on Cultural Distance) are more likely to have higher Deep Engagement, significantly so at 5% level, and again, the magnitude of the coefficient is higher for customers who care about the environment compared to the full sample from Model 3 in Table 6. Thus, these followers are more likely to engage deeply with the influencers they follow if they live in countries where environmental concerns are more important. This effect is not obvious ex ante: all our influencers and their followers are interested in the environment (we selected our sample to include followers of eco-influencers). Thus, we may have expected that if a follower is living in a country where the environmental concern is low, then that follower may actually engage more with an influencer from a dissimilar culture because that culture would match the follower's interest in sustainability. Indeed, we find the opposite: the effect is stronger for followers who live in countries where environmental concerns are higher.

Theoretical Contribution

The current research offers several theoretical contributions. In this paper, we explore follower *engagement with eco-influencers*, in light of Hofstede's *cultural dimensions*. Previous research has found that influencer engagement can be influenced by a number of variables related to the influencer themselves and to characteristics of the social media platform (Hughes

et al., 2019). Far less attention, however, has been paid to audience-related factors and very little to cultural factors associated with the audience that may impact their engagement with influencer campaigns (Voorveld, 2019), despite the global reach of social media platforms like Instagram (Statista, 2020). We find that the cultural distance between the influencer and her followers is an important determinant of engagement, thereby demonstrating the strong impact that culture can have on not only engagement with, but also the general effectiveness of, influencer marketing campaigns. By design, our study adds to our collective understanding of the impact of the cultural similarities or differences of these cultural dimensions on varying degrees of customer engagement.

Additionally, our study investigates the nuanced differences between *light* and *deep* engagement – an important factor that, to date, has received relatively little attention in the influencer marketing literature. Consumer engagement is considered to be an important means of evaluating campaign effectiveness (Influencer Marketing Hub, 2020), but our paper indicates that managers can use different means to induce light versus deep engagement in a social media campaign. We also provide an empirical estimate of the extent to which cultural factors may affect different levels of engagement and ultimately impact overall campaign effectiveness.

Future research may consider whether different cultural factors play a stronger/weaker role in perceived cultural distance between an influencer and their followers. For example, it is possible that individualism/collectivism plays a bigger role in perceptions of cultural distance than other factors given that this factor is highly relevant to an individual's identity and likely highly salient when evaluating influencer campaigns.

Additionally, it would be interesting for future research to consider the effects of cultural distance on engagement for different types of influencers. In the current research, we focus on

eco-influencers, but there are many other types of influencers including fitness, beauty, and fashion-focused influencers, and different effects may be observed for these other types of influencers. For example, many high-end fashion brands are based in European countries and these brands are highly desirable to consumers across the world. Therefore, European-based fashion influencers may also be perceived as superior to fashion-focused influencers from other countries, thereby leading to higher consumer engagement regardless of the cultural distance between the influencer and the follower.

Managerial Implications

Our paper has important implications for the social media advertising industry. As influencers have become more important, their roles have diversified. Influencers are marketers, being paid to advertise new products but also educators who promote clean living or socially responsible actions (Yalcin et al., 2020). Our paper suggests managers should choose carefully the type of influencers best suited for a particular campaign and how marketing managers should allocate their social media advertising budgets across influencers.

Our results indicate that any attempt to reach broadly across the world would increase the cultural distance between the influencer and the followers and thus decrease deep engagement. Thus, if influencers are promoting products that require deep engagement, or lend their voice for a cause that requires deep engagement from their followers, advertising companies should work with local influencers in highly targeted campaigns where the cultural distance between the influencers and their local followers is small. For example, a campaign for recycling electronics or trash minimizing techniques, which both require deep engagement and dedication on the consumer's part, would be best managed with a group of small influencers with local followers situated culturally close to the influencer. However, if the campaign is broad and has light

engagement as a goal, then advertising companies should choose celebrity influencers who have followers all over the world. For a light engagement campaign, managers should consider working directly with a celebrity influencer, who charge a smaller price per follower compared to smaller influencers.

Moreover, managers should carefully choose influencers for their campaigns in such a way that the influencer's topic of interest matches the campaign and also matches the interests of their followers. Our findings suggest that the engagement effects for eco-influencers are driven by customers who come from countries that care more about the environment. This suggests that a match between the interests of the followers and the campaign topic is beneficial for campaigns that require deep engagement.

Limitations and Further Research

Our paper is an empirical investigation into the effect of cultural distance on customer engagement in the context of social media.

We use a novel dataset of Instagram influencers which allowed us to analyze the problem. Our sample of influencer and their followers captures many countries (eighty-six countries total for the followers) but is not randomly distributed across the world. This reflects both the state of the small field of eco-influencers, which is not as widespread as bigger fields of interest such as fashion or beauty, as well as our method of secondary data collection. Future work could enlarge the universe of types of influencers analyzed and increase the sample size in order to increase the robustness of our findings.

Our sample includes influencers and their followers from all over the world. However, we are still technically restricted to Instagram as a platform, because Instagram is a popular

visual medium. Instagram is most popular in the U.S. and across the world and is quickly gaining more market share in populous markets like India. Future work may be able to expand the sample to include more influencers in order to determine the robustness of our findings across other social media platforms and other languages.

Finally, our work highlights the correlations we find between cultural distance and several variables related to customer engagement. Our inferences reflect an equilibrium in time for the set of influencers we study and the followers they have at this time, rather than a dynamic process of increasing or decreasing the cultural distance on a social media platform. Future work may be able to use experimental data or simulations in order to determine the effects of manipulating the cultural distance between an influencer and their followers. Moreover, we find that the effects depend on the depth of the engagement which can be helpful for future papers that can study the reasons driving these different effects of deep or light engagement across cultures.

Conclusion

Our paper is the first one to empirically analyze the effect of cultural distance on consumer engagement in the context of influencer marketing. We use a novel dataset on eco-influencers who post on Instagram and their followers who may engage with the posts online. Our results indicate that cultural distance is inversely correlated with deep engagement but has no effect on light engagement. Thus, products or campaigns that require deep engagement should see best results from working with local influencers who have small followings of customers located in countries similar to the country of the influencer. However, for products which require light engagement, any influencer campaign will work, regardless of the cultural distance from the influencer to the followers and influencers with a large global reach may be preferred.

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Table 1a: Continents where Influencers are Located

Influencer Continent	Number of Influencers	Percent of Sample
Asia	18	18%
Europe	21	21%
North America	55	56%
Oceania	4	4%
Total	98	100%

Table 1b: List of Countries where the Influencers are Located

Influencer Countries	Number of Influencers	Percent of Sample
Australia	4	4%
Canada	5	5%
China	6	6%
Hong Kong	3	3%
Ireland	3	3%
Singapore	6	6%
Thailand	3	3%
United Kingdom	18	18%
United States	50	51%
Total	98	100%

Table 2: Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Number of followers have less than 1500 followers	98	0.896	0.057	0.622	0.980
Real People	98	0.499	0.102	0.280	0.796
Influencers	98	0.027	0.023	0.000	0.083
Non Engaging Followers	98	0.474	0.112	0.167	0.687
Number of Followers	98	990,380.500	2,314,364.000	1,170.000	13,600,000.000
Number of Likes	98	16,355.490	34,822.200	13.000	171,698.000
Number of Comments	98	269.806	649.725	1.000	5,138.000
Cultural Distance	98	2.919	3.005	0.024	15.462
Ln Cultural Distance	98	0.621	1.042	-3.720	2.738
Ln of Likes	98	7.920	2.020	2.565	12.053
Ln of Comments	98	4.307	1.618	0.000	8.544
Ratio Likes per Follower	98	0.023	0.020	0.001	0.111
Ratio Comments per Follower	98	0.001	0.001	0.000	0.008
Ratio Comments to Likes	98	0.037	0.031	0.003	0.147
Close Cultural Distance Indicator	98	0.653	0.478	0.000	1.000
Cares About the Environment	98	29.103	14.216	5.929	70.530
Cares More Environment (Median Split)	98	0.500	0.503	0.000	1.000

Note: Number of Likes represents a cumulative count of likes per influencer averaged for a 12-month period. Number of Comments represents a cumulative count of comments per influencer averaged for a 12-month period. Cultural Distance is computed using Moon et al. (2016) from all six of Hofstede's cultural dimensions. Close Cultural Distance is an indicator variable that is 1 if the Cultural Distance is lower than the mean and 0 if it is higher than the mean. Cares About the Environment is a raw measure compiled annually by U.S. News (US News, 2020) while Cares More Environment is a median split indicator that is 1 if the country where the followers live is high on that measure.

Table 3a: Continents where Followers Live

Follower Continent	Number of Followers	Percent of Sample
Africa	1,442,325	2%
Asia	6,943,214	11%
Europe	24,202,213	37%
North America	22,080,807	33%
Oceania	4,427,275	7%
South America	6,926,844	10%
Total	66,022,678	100%

Notes: This table includes all followers in our sample. Please note that a follower may be included several times if that follower is following multiple influencers.

Table 3b: Countries where Followers Live (in Thousands)

Follower Country	Count (`000)	Follower Country	Count (`000)	Follower Country	Count (`000)	Follower Country	Count (`000)
Albania	452	Fiji	53	Latvia	6	Saint Vincent the Grenadines	65
Algeria	712	Finland	2	Lesotho	5		
Argentina	523	France	9,616	Malaysia	22	Singapore	269
Armenia	35	Georgia	9	Malta	19	Slovakia	906
Australia	3,895	Germany	2,181	Martinique	14	Slovenia	1
Austria	80	Ghana	22	Mexico	1,049	South Africa	127
Bangladesh	3	Greece	6	Moldova	45	Spain	24
Bermuda	287	Guatemala	950	Monaco	5	Sweden	15
Bolivia	1,481	Honduras	12	Morocco	18	Switzerland	4
Botswana	3	Hong Kong	147	Netherlands	1	Taiwan	1
Brazil	4,752	Hungary	89	New Zealand	479	Tanzania	268
Cameroon	0	India	3,483	Nigeria	11	Thailand	205
Canada	661	Indonesia	360	Norway	12	Trinidad and Tobago	135
Chile	43	Iran	1,051	Palestine	34		
China	449	Ireland	161	Panama	15	Turkey	492
Colombia	1	Israel	36	Peru	89	Uganda	107
Comoros	85	Italy	1,181	Philippines	8	Ukraine	2,701
Costa Rica	306	Jamaica	1,444	Poland	1,213	United Kingdom	1,714
Croatia	354	Japan	332	Portugal	1,231	United States	16,510
Dominican Rep.	239	Jersey	190	Puerto Rico	382	Uruguay	2
Ecuador	6	Jordan	6	Romania	3	Venezuela	31
El Salvador	12	Korea South	0.1	Russia	1,991	Zambia	85

Table 4: Correlations between Number of the Followers and Cultural Distance

	Cultural Distance (ln)	Followers	Close Indicator
Cultural Distance (ln)	1.00		
Followers	0.22	1.00	
Close Indicator	-0.6961	-0.19	1.00

Note: Cultural Distance is computed using Moon et al. (2016) from all six of Hofstede's cultural dimensions. Close Cultural Distance is an indicator variable that is 1 if the Cultural Distance is lower than the mean.

Table 5: Effect of Cultural Distance on Deep Follower Engagement

	Model 1		**Model 2**		**Model 3**		**Model 4**	
	Comments Per Follower		**Comments Per Follower**		**Comments Per Follower**		**Comments Per Follower**	
Cultural Distance (Ln)	-0.00021	**	-0.00013					
	(0.00009)		(0.00008)					
Followers			0.00000	***			0.00000	***
			(0.00000)				(0.00000)	
Close Cultural Distance					0.00050	**	0.00037	**
					(0.00019)		(0.00016)	
Influencers Specific Characteristics	No		Yes		No		Yes	
Observations	98		98		98		98	
R Squared	0.0350		0.1120		0.0441		0.1210	

Notes: *p<0.1 **p<0.05 ***p<0.01 The model uses robust standard errors.

Number of Comments represents a cumulative count of comments per influencer averaged for a 12-month period. Cultural Distance is based on Moon et al. (2016) from all six of Hofstede's cultural dimensions. Close Cultural Distance is an indicator variable that is 1 if the Cultural Distance is lower than the mean. Influencer Specific Characteristics include non-engaging followers, percent of followers who are real people, percent of followers who are influencers themselves, and percent of followers who have less than 1500 followings themselves.

Table 6: The Robust Effect of Cultural Distance on Deep Follower Engagement

	Model 5 Comments per Like		**Model 6 Comments per Like**		**Model 7 Comments per Like**		**Model 8 Comments per Like**	
Cultural Distance (Ln)	-0.0084	***	-0.0054	**				
	(0.0023)		(0.0022)					
Followers			0.00000	***			0.00000	***
			(0.0000)				(0.0000)	
Close Cultural Distance					0.0181	***	0.0153	***
					(0.0053)		(0.0047)	
Influencers Specific Characteristics	No		Yes		No		Yes	
Observations	98		98		98		98	
R Squared	0.0789		0.2900		0.0769		0.3122	

Notes: *p<0.1 **p<0.05 ***p<0.01 The model uses robust standard errors.

Number of Comments represents a cumulative count of comments per influencer averaged for a 12-month period. Cultural Distance is based on Moon et al. (2016) from all six of Hofstede's cultural dimensions. Close Cultural Distance is an indicator variable that is 1 if the Cultural Distance is lower than the mean. Influencer Specific Characteristics include non-engaging followers, percent of followers who are real people, percent of followers who are influencers themselves, and percent of followers who have less than 1500 followings themselves.

Table 7: No Significant Effect on Light Engagement

	Model 9 **Likes Per Follower**	**Model 10** **Likes Per Follower**		**Model 11** **Likes Per Follower**	**Model 12** **Likes Per Follower**	
Cultural Distance (Ln)	-0.0004	-0.0005				
	(0.0023)	(0.0026)				
Followers		0.0000	***		0.0000	***
		(0.0000)			(0.0000)	
Close Cultural Distance				0.0021	0.0009	
				(0.0045)	(0.0046)	
Influencers Specific Characteristics	No	Yes		No	Yes	
Observations	98	98		98	98	
R Squared	0.0005	0.0763		0.0024	0.0762	

Notes: *p<0.1 **p<0.05 ***p<0.01 The model uses robust standard errors.

Number of Likes represents a cumulative count of likes per influencer averaged for a 12-month period. Cultural Distance is based on Moon et al. (2016) from all six of Hofstede's cultural dimensions. Close Cultural Distance is an indicator variable that is 1 if the Cultural Distance is lower than the mean. Influencer Specific Characteristics include non-engaging followers, percent of followers who are real people, percent of followers who are influencers themselves, and percent of followers who have less than 1500 followings themselves.

Table 8: The Effect of Followers from Countries with High or Low Concern for the Environment

	Model 1: Comments per Follower		Model 2: Comments per Follower	
	Followers in High Environment Concern Countries	**Followers in Low Environment Concern Countries**	**Followers in High Environment Concern Countries**	**Followers in Low Environment Concern Countries**
Cultural Distance (Ln)	-0.0003 *	-0.0001		
	(0.0001)	(0.0001)		
Close Cultural Distance			0.0006 **	0.0004
			(0.0003)	(0.0003)
Observations	49	49	49	49
R Squared	0.0477	0.0159	0.0394	0.0515

Notes: *p<0.1 **p<0.05 ***p<0.01 The model uses robust standard errors.

Number of Comments represents a cumulative count of comments per influencer averaged for a 12-month period. Cultural Distance is based on Moon et al. (2016) from all six of Hofstede's cultural dimensions. Close Cultural Distance is an indicator variable that is 1 if the Cultural Distance is lower than the mean.

We used the U.S. News ranking on "cares about the environment" (U.S. News, 2020) to perform a median split on our full sample, with 49 influencers having followers from countries where concern for the environment is higher than the rest of the sample.