

THE INFLUENCE OF ANCHORING BIAS IN INSTAGRAM ADS ON THE PERCEPTION OF UNIVERSITAS NEGERI MEDAN STUDENTS

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Abstract

This study investigated how anchoring bias techniques shape university students' perceptions of Instagram advertisements. We analyzed the persuasive effects of common anchoring strategies, including price contrasts, urgency cues, and scarcity messages. Using a mixed-methods approach, we surveyed 30 students from Universitas Negeri Medan, who evaluated four Instagram ad brochures and answered a series of open-ended questions. The findings revealed a strong persuasive effect: 80% of participants reported they were more likely to purchase after seeing the ads, and an overwhelming 90% identified price discounts as the most compelling element. Furthermore, over half of the respondents (56%) felt that the language used in the ads created a pressure to buy. While many students recognized the persuasive tactics at play, the majority still found the advertisements convincing. This research demonstrates that anchoring bias is a powerful tool in influencing consumer perception, particularly on a visually rich platform like Instagram.

Keywords: *Anchoring Bias; Cognitive Bias; Instagram Advertising; Consumer Perception; Digital Marketing;*

Introduction

In today's digital marketplace, persuasive language is everything. Among the many strategies marketers use, techniques that leverage anchoring bias have proven remarkably effective at swaying consumer decisions. Anchoring, a cognitive bias first introduced by [Tversky and Kahneman \(1974\)](#), describes our tendency to rely heavily on the first piece of information we receive the "anchor" when making subsequent judgments.

On a platform like Instagram, this bias is constantly at play. Marketers trigger it using tactics like price framing (showing a crossed-out original price next to a new, lower one), urgent calls to action, and scarcity cues to guide how users interpret promotions and,

ultimately, their buying behavior. The fusion of compelling imagery with sharp, strategic language creates fertile ground for anchoring effects that boost an offer's perceived value and create a sense of immediacy. In a fastpaced digital world where attention is fleeting and impulse buys are common, these techniques are especially powerful.

While research has explored anchoring in broad marketing contexts, little attention has been paid to how it affects university students specifically, those with academic training in language and literature. These students, who are skilled in rhetorical and linguistic analysis, might be expected to view advertising messages with a more critical eye. The central question, then, is whether this critical awareness blunts the effect of anchoring or if the bias is powerful enough to override it.

This study aims to fill that gap by examining how anchoring strategies in Instagram ads influence students at Universitas Negeri Medan. We focus on specific anchoring elements price framing, urgency, and scarcity to understand how these cues shape students' perceptions of value, affordability, and their intent to make a purchase.

Literature Review

1. **Anchoring Bias in Decision-Making.** Anchoring bias is a cognitive shortcut where individuals latch onto an initial piece of information to make subsequent judgments. This "anchor," whether it's a price or a time limit, frames the entire decision-making process. For instance, [Zong and Guo \(2022\)](#) found that consumers were more willing to accept a higher price if they had first been anchored to an even higher reference price during their shopping experience. This shows just how profoundly initial expectations can shape our final choices.
2. **Anchoring Strategies in Digital Marketing.** In the digital realm, anchoring is a go-to tactic. Reference pricing displaying a discounted price next to a crossed-out original is a classic application. Marketers also use urgent phrases like "Only Today!" or scarcity cues like "Limited Stock!" to trigger a fear of missing out (FOMO) and speed up consumer decisions. Research from [Mocanu and Szakal \(2023\)](#) has shown that these strategies significantly increase conversion rates, especially when paired with strong visuals and strategic timing.
3. **Instagram as a Platform for Persuasion.** Instagram has become a powerhouse for visually persuasive marketing. Its features, from Stories and Reels to countdown stickers, are tailor-made for emphasizing scarcity and time-sensitive offers. According to [Rahayuningrat et al. \(2024\)](#), younger audiences on Instagram respond strongly to ads that use compelling visuals to highlight discounts and urgency. This synergy between visual media and psychological triggers makes anchoring techniques incredibly effective on the platform.

4. Student Audiences and Persuasive Advertising. Interestingly, even students with a heightened awareness of language are not immune to these marketing techniques. This susceptibility can manifest in several ways. Consumers can be passively influenced when they take in the initial information about an item, showing emotional responses to urgency and scarcity phrases, especially when packaged in engaging visuals (Ruan, 2024). In other cases, consumers willingly accept a high anchor value when they are influenced by factors like brand image, which makes them actively follow the high anchor (Ruan, 2024). This suggests that powerful visuals and suggestive language can often bypass our cognitive defenses, even among more educated audiences.

Method

This study employed a mixed-methods approach to gain a comprehensive understanding of how anchoring techniques in Instagram ads affect student perceptions. We combined quantitative survey data with qualitative thematic analysis to capture both the "what" and the "why" behind their responses.

A total of 30 students from Universitas Negeri Medan, all active Instagram users from the English Literature department, were selected through purposive sampling. Data was collected via an online questionnaire where participants were shown four different Instagram ad brochures. Each ad featured specific anchoring techniques, such as price contrasts, limited-time offers, and scarcity messages.

After viewing the ads, students answered a series of open-ended questions designed to explore their emotional reactions, their perception of the offer's value, and their likelihood of making a purchase. The quantitative data from scaled questions were analyzed for descriptive statistics, while the written responses were analyzed thematically to identify recurring patterns in how students interpreted the ads.

Result and Discussion



This brochure applies anchoring technique by displaying the original price Rp268.181, which is then crossed out and replaced with the discounted price Rp195.455. This creates a psychological effect where consumers perceive the offer as more valuable. Additionally, the Rp48 ribuan/person breakdown makes the price seem more affordable. The "FREE 4 McFlurry feat OREO" offer further enhances the deal's attractiveness.

Figure 1. Brochure Using Anchoring and Price Framing in McDonald's Ramadan Package Offer

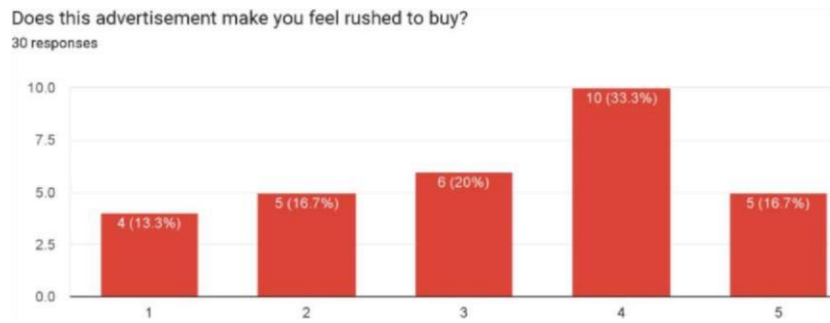


Chart 1. The persentase of customers'felt rushed to buy

The chart data illustrates how the advertisement makes people feel rushed to buy. The majority of respondents rated their urgency level between 3 and 5, with 10 respondents (33.3%) selecting 4, making it the most common choice. This suggests that while not everyone feels pressured, the ad still creates a significant sense of urgency in purchasing decisions.



This brochure uses the anchoring technique by highlighting a discount of up to 80%, making the original price seem significantly higher than the discounted one. Additionally, the phrase “Starting from 20RB” establishes a low reference point, making other deals appear more affordable in comparison. The visual emphasis on essential Ramadan items enhances the sense of urgency and necessity.

Figure 2. Brochure Highlighting Discount Anchoring with “Up to 80%” and Low Price Entry Point

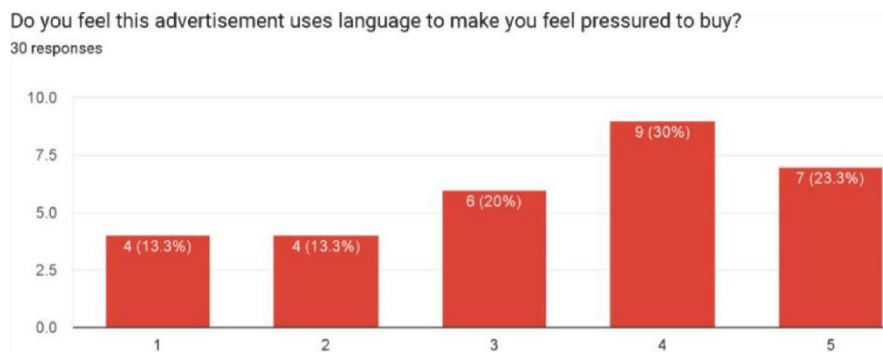


Chart 2. Perceived Pressure from Advertisement Language

Based on data from 30 respondents, the majority feel that the language in this advertisement creates pressure to buy the product. 30% (9 people) selected 4, and 23.3% (7 people) selected 5, indicating that more than half of the respondents feel pressured by the advertisement's language. Meanwhile, only 13.3% (4 people) do not feel pressured

(choosing 1 or 2). This suggests that the advertisement's language strategy is quite effective in creating a sense of urgency and encouraging purchasing decisions.



This advertisement applies the anchoring effect by displaying the original price before the discounted price, making the discount seem more significant. Additionally, the “up to 80% off” headline draws attention, even if not all items have the maximum discount. The use of specific percentages and limited-time offers creates urgency, encouraging immediate purchases.

Figure 3. Promotional Ad Applying Anchoring Effect and Scarcity Language



Chart 3. Most Attention-Grabbing Words or Phrases in Advertisement

This graph indicates that the most attention-grabbing words or phrases in the advertisement are related to discounts, such as "50% discount" (13.3%), "discount up to 80%", and "discount price until...". This proves that consumers are more interested in price offers than other elements in the advertisement. Additionally, various forms of the word "discount" appear in several responses with small but evenly distributed percentages, indicating that discount-based marketing strategies have a strong appeal to potential buyers.



Domino's Pizza "Bukber Seru" clearly displays the original price (Rp 41,363) before the discounted price (Rp 27,727). This price contrast makes the discount appear more significant, leading to a stronger perceived value and increasing purchase likelihood.

Figure 4. Domino's Pizza "Bukber Seru" Brochure Featuring Direct Price Anchoring Strategy

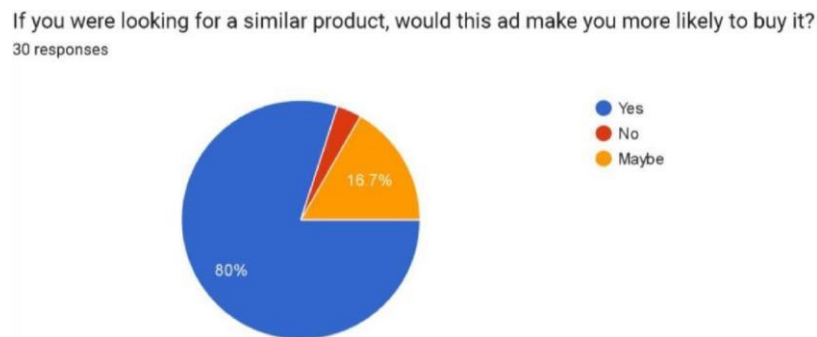


Chart 4. Likelihood of Consumers Buying the Product After Seeing the Advertisement

The graph shows how likely consumers are to buy a similar product after seeing the advertisement. A significant 80% of respondents answered "Yes," indicating that the advertisement successfully influences purchase decisions. Meanwhile, 16.7% answered "Maybe," showing some uncertainty, and a very small percentage responded "No." This suggests that the ad is highly effective in convincing consumers to consider purchasing the product.

Do you think the advertisement exaggerates its claims to influence consumers?
30 responses

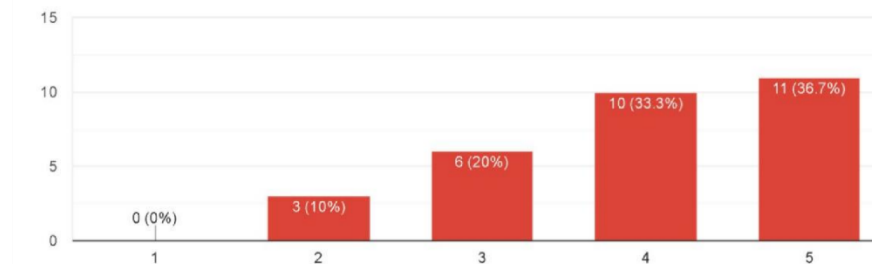


Chart 5. The Extent to Which the Advertisement Exaggerates Its Claims

The next graph examines whether the advertisement exaggerates its claims to influence consumers. A significant 36.7% of respondents rated it at level 5, and 33.3% at level 4, suggesting that the majority believe the advertisement may be somewhat exaggerated. Only 10% rated it at level 2, and 20% at level 3, indicating that a small portion of respondents consider the claims to be reasonable. This highlights a potential concern regarding the credibility of the advertisement if consumers perceive it as overly exaggerated. Overall, the advertisement effectively creates urgency and increases purchase intent, particularly through pricing strategies. However, the perception of exaggerated claims could negatively impact its credibility, which advertisers should consider when crafting their messages.

Table 1. Preferred Advertisement Based on Discount and Appeal

No	Initials	Age	Gender	Preferred Advertisement & Reason
1	MK	20	M	2, because it's a limited-time discount.
2	NB	21	M	The one with an 80% discount.
3	AS	20	F	Ads with price changes, as they show how much I'm saving.
4	TA	20	M	Domino's, because the portion size is likely to be small.
5	AN	20	F	3, because it offers an 80% discount.
6	ZD	21	F	The last one (pizza ad), as it offers variety and affordability.
7	CP	20	F	Shopee, due to the significant discounts.
8	KM	19	F	3, because it offers an 80% discount.
9	SA	20	F	Domino's Pizza ad.
10	RK	21	M	The one with an 80% discount, as it seems like a great deal.
11	KF	21	F	Shopee, because I browse it daily.
12	HSM	20	F	The discount offer, as it provides direct financial benefits.

No	Initials	Age	Gender	Preferred Advertisement & Reason
13	RM	19	F	Shopee, as the discounts increase my confidence in shopping there.
14	YAS	20	F	The last ad, due to its big discount.
15	YPS	20	F	Shopee.
16	SIL	21	F	Ads offering free items, as they create a sense of profit.
17	FZ	20	F	3, as it provides an 80% discount.
18	RL	20	M	McDonald's, because it's food.
19	FD	21	F	The second ad, as it includes an 80% discount and a price starting at Rp 20,000.
20	JLS	21	F	Shopee, as it frequently offers discounts that align with the advertisement.
21	SP	21	F	The first one.
22	NA	20	F	Shopee, as it provides big discounts on cheap items.
23	AA	20	M	-
24	NM	21	F	Shopee, due to large discounts making purchases feel lucky.
25	MK	21	F	Ads with price discounts, as they provide direct savings.
26	NB	21	F	Domino's Pizza ad, as it offers a clear discount, a complete meal package, and a seasonal Ramadan theme.
27	MN	21	M	The third one, as 80% is a great deal.
28	GH	21	M	They are all the same.
29	LP	20	M	2, because of the discount.
30	TK	20	M	The one with an 80% discount.

The table highlights that the majority of respondents (especially females) are drawn to advertisements that emphasize significant discounts (80%) and direct savings. Shopee was the most frequently preferred ad due to its well-known sales and daily promotions, making consumers feel confident in their purchases. Additionally, Domino's Pizza attracted attention from both male and female participants, with some recognizing its meal variety and affordability. Free items and urgency-based promotions, such as "limited-time discount," also influenced preferences. Males tended to focus more on food-related ads, while females paid closer attention to savings, discounts, and daily shopping habits. Overall,

the findings suggest that advertisements combining bold discounts, clear savings, and urgency triggers are the most effective in engaging consumers.

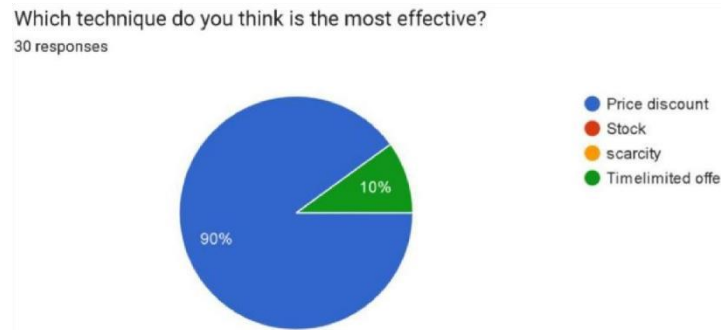


Chart 5. Most Effective Advertising Technique

The second graph examines which advertising technique is considered the most effective. The overwhelming majority, 90% of respondents, chose "Price discount" as the most influential factor in persuading them. Meanwhile, 10% selected "Time-limited offer," showing that urgency also plays a role in consumer decision-making. However, "Stock" and "Scarcity" were not chosen at all, suggesting that consumers are more motivated by price reductions than by the idea of limited availability. These results highlight that while many consumers perceive advertising claims as exaggerated, discounts remain the most compelling technique in influencing their purchasing decisions.

Table 2. Consumer Perception of Online Brochures

No	Initials	Age	Gender	Answer
1	MK	20	M	Yes, because sometimes it pushes me to open the app and scroll through their products.
2	NB	21	M	Yes, because they want to attract as many consumers as possible through persuasive ads and interesting promotions.
3	AS	20	F	Yes, because it makes me confident to buy.
4	TA	20	M	I don't fully believe in it, but many people are tempted by discounts and attractive offers, which make them buy things they don't actually need.
5	AN	20	F	No
6	ZD	21	F	Yes. With advanced technology and digital access, attractive ads make people think they will always get such discounts.
7	CP	20	F	Yes, because it makes people confident to buy at a cheap price.
8	KM	19	F	Yes, because they use words that make me interested in buying.

No	Initials	Age	Gender	Answer
9	SA	20	F	Yes, some designs manipulate consumers into buying things they didn't initially need.
10	RK	21	M	Yes, because it makes people confident to buy.
11	KF	21	F	Yes, because brochures offer big discounts, making consumers think they are getting great benefits.
12	HSM	20	F	Yes, they use persuasive techniques like scarcity, discounts, and urgency to influence buying behavior.
13	RM	19	F	Yes, because that is the purpose of advertising.
14	YAS	20	F	Yes, because it stimulates consumers' desire to buy.
15	YPS	20	F	Yes.
16	SIL	21	F	Yes, because it influences people to buy.
17	FZ	20	F	Sometimes, because not all promotional products manipulate consumers.
18	RL	20	M	No, it's designed to convince consumers, not necessarily to manipulate them.
19	FD	21	F	Yes, because when customers see discounts, they are more likely to buy.
20	JLS	21	F	Yes, I believe so.
21	SP	21	F	Yes, because it makes me confident to buy.
22	NA	20	F	Yes, it makes me want to buy because of limited-time discounts.
23	AA	20	M	Yes, that's actually the purpose of advertisements.
24	NM	21	F	Yes, but not all advertisements offer big discounts.
25	MK	21	F	Yes, because they use techniques like discounts and limited-time offers to encourage quick purchases.
26	NB	21	F	Yes, because they use discounts, attractive visuals, and persuasive language to encourage purchases.
27	MN	21	M	Yes, because consumers need opportunities to act. Brochures show whether deals are short-term or for bulk purchase.
28	GH	21	M	Yes, because it makes us believe we are getting more benefits.
29	LP	20	M	-

No	Initials	Age	Gender	Answer
30	TK	20	M	Yes, because sometimes it pushes me to open the app and scroll through their products.

From the responses, a significant majority (26 out of 30) believe that online brochures influence consumer behavior. Many respondents mention that persuasive techniques, such as discounts, urgency, and attractive visuals, play a key role in making people more confident to buy. Some participants (like Respondents 4, 5, and 18) express skepticism, stating that while advertisements are designed to convince buyers, they do not always manipulate them into unnecessary purchases. A few (Respondents 17 and 24) acknowledge that not all promotions are equally persuasive or manipulative.

The results highlight the effectiveness of digital marketing strategies in influencing consumer behavior, particularly through discounts and urgency-based advertising. However, some consumers are aware of these tactics and remain cautious about making impulsive purchases. This suggests that while advertisements can successfully attract buyers, a portion of consumers still critically evaluate the offers before deciding to purchase.

Conclusion

This study confirms that anchoring bias is a potent persuasive tool in Instagram advertising, but its effectiveness with an educated student audience comes with important nuances. The research reveals two key takeaways:

First, price is king. For this demographic, the concrete, quantifiable appeal of a significant price discount is overwhelmingly more effective than abstract psychological triggers like scarcity or urgency. Students, it seems, are pragmatic; they respond to tangible value.

Second, awareness does not equal immunity. These students were able to critically identify exaggeration and persuasive intent, yet they remained highly influenced by strong price anchors. This suggests that the cognitive pull of a good deal can often outweigh rational skepticism.

For marketers targeting a young, educated audience, the implication is clear: focus on creating a strong value proposition through clear and significant price anchors. Relying on tired scarcity tactics may not only be ineffective but could also damage credibility. In the end, while persuasive techniques are powerful, building long-term trust requires backing them up with genuine value.

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