



## Analysis of Obedience Factors of Distribution Facilities in Distributing Cosmetics in East Java

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### ABSTRACT

Cosmetics that have no marketing authorization number (MAN) can harm people's health. This study aimed to analyze the factors that affect the obedience of cosmetics distribution facilities in distributing cosmetics that have MAN in East Java based on Niven's theory (understanding the instructions, quality of interaction, beliefs, attitudes, personality, social isolation) and Milgram's theory (the status of the facilities, personal responsibility, the legitimacy of authority figures, the status of authority figures, peer support, the proximity of authority figures). This study was a cross-sectional study, using a validated questionnaire. 179 participants were chosen using simple random sampling. The data were analyzed using Partial Least Square (PLS) ( $\alpha=0.05$ ). The factor based on Niven's theory that has significant relationship with the obedience is the personality ( $p=0.001$ ). The factors based on Milgram's theory that have significant relationship with obedience are the legitimacy of authority figures ( $p=0.025$ ) and peer support ( $p=0.000$ ). Whereas, understanding the instructions, quality of interaction, beliefs, attitudes, social isolation, status of facilities, personal responsibility, the status of authority figures, and the proximity of authority figures have no correlation. Milgram's theory more affects obedience than Niven's theory. Various kinds of education and monitoring evaluation of distribution facilities were implemented to improve obedience.

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#### Kata kunci:

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### ABSTRAK

Kosmetik merupakan salah satu kebutuhan penting tetapi juga dapat membahayakan kesehatan apabila kosmetik tersebut tidak memiliki nomor izin edar. Penelitian ini bertujuan untuk menganalisis faktor kepatuhan sarana distribusi dalam mengedarkan kosmetika yang memiliki nomor izin edar di Jawa Timur berdasarkan Teori Niven (pemahaman tentang instruksi, kualitas interaksi, keyakinan, sikap, kepribadian, isolasi sosial) dan Teori Milgram (status sarana, tanggungjawab pribadi, legitimasi figur otoritas, status figur otoritas, kedekatan figur otoritas). Jenis penelitian observasional dengan desain studi cross sectional. Jumlah sampel sebanyak 179 responden dipilih secara simple random sampling. Instrumen penelitian adalah kuesioner yang sudah divalidasi. Analisis data statistik menggunakan Partial Least Square (PLS) ( $\alpha=0.05$ ). Faktor berdasarkan Teori Niven yang mempengaruhi kepatuhan adalah kepribadian ( $p=0,001$ ). Faktor berdasarkan Teori Milgram yang mempengaruhi kepatuhan adalah legitimasi figur otoritas ( $p=0,025$ ) dan dukungan rekan ( $p = 0,000$ ). Sedangkan pemahaman tentang instruksi ( $p=0,513$ ), kualitas interaksi ( $p=0,860$ ), keyakinan ( $p=0,064$ ), sikap ( $p=0,597$ ), isolasi sosial ( $p = 0,333$ ), status sarana ( $p=0,504$ ), tanggungjawab pribadi ( $p=0,707$ ), status figur

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otoritas ( $p=0,060$ ), dan kedekatan figur otoritas ( $p=0,072$ ) tidak memiliki hubungan signifikan terhadap kepatuhan. Teori Milgram lebih mempengaruhi kepatuhan daripada Teori Niven. Upaya untuk meningkatkan kepatuhan dilakukan melalui berbagai macam edukasi dan evaluasi monitoring sarana distribusi kosmetika.



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## INTRODUCTION

Cosmetics are an essential need for millions of people to support their everyday appearance (Omenka et al., 2016). Indonesia has the world's fourth-largest population, making it a key market for global cosmetics circulation. In 2019, Indonesia's state income from cosmetics was 21.7 trillion rupiah, and it is expected to rise at a rate of 6.5 percent each year (Statista, 2019).

Distributed cosmetics must meet the requirements for labeling with a marketing authorization number (MAN). Distributed cosmetics must meet the requirements for labeling with a MAN. Cosmetics supervision by National Agency of Drug and Food Control (NADFC) consists of pre-market monitoring (pre-market evaluation) by product evaluation at the time of notification to acquire a MAN and post-market control (post-market control) through inspection of cosmetic distribution facilities (NADFC, 2015). Individual business actors or distribution business entities that carry out cosmetic marketing activities, such as supermarkets, cosmetic shops, cosmetics traders, and traders in retail, namely traders who sell products directly to consumers, are the means of distribution of cosmetics in this study, as referred to in the Regulation of the National Agency of Drug and Food Control No. 2 of 2020 concerning Supervision of Production and Circulation of Cosmetics (NADFC, 2020).

Cosmetics supervision is to protect the public from cosmetics that do not meet quality, safety, or benefit requirements. People are especially prone to illegal cosmetics that do not have a MAN due to the ease of availability of illicit cosmetics, the attraction of cosmetic brands, and several health risks. Illegal cosmetics are widely available and pose a variety of health dangers to society. Because the makers are frequently fake and untraceable, a society in which illicit cosmetics hurt or impact people's health cannot be legally protected. This is a common misunderstanding (Sachs, 2019). Cosmetics without a MAN or that are counterfeit are frequently of poor quality. There is no assurance of the safety and purity of raw materials, and it is less expensive than MAN-certified cosmetics (Kimura et al., 2020). Skin surface responses such as burning and itching are possible side effects of using illegal cosmetics (Giovanni et al., 2006). The regulations established by the NADFC must be followed by distribution facilities in the activity of distributing cosmetics. However, NADFC discovered 2875

cosmetic distribution facilities that did not fulfill the requirements in 2018, out of a total of 4173 facilities evaluated (NADFC, 2018a).

The danger posed by illegal cosmetic usage can be reduced by increasing the obedience of distribution facilities to distribute cosmetics that have MAN. The obedience of distribution facilities in distributing cosmetics that have MAN can be influenced by several factors, as explained by Niven's theory and Milgram's theory. Based on Niven's theory, there are six internal factors, such as understanding the instructions, quality of interaction, beliefs, attitudes, personality, and social isolation (Niven, 2002). Whereas, based on Milgram's theory, there are six external factors, including the status of the facilities, personal responsibility, the legitimacy of an authority figures, the status of an authority figures, peer support, and the proximity of an authority figures (Milgram, 1963).

The NADFC Provincial Office in Surabaya (NADFC Surabaya) conducted inspections of cosmetic distribution facilities in the East Java Province. Based on the results of the supervision of NADFC Provincial Office in Surabaya, there are still distribution facilities that distribute cosmetics without MAN in East Java. The NADFC Provincial Office in Surabaya found illegal cosmetics with an estimated value of 1.7 billion rupiah (NADFC, 2018b).

Based on the above problems, it is necessary to analyze the factors that affect the obedience of cosmetics distribution facilities in distributing cosmetics that have a marketing authorization number (MAN) in East Java based on Niven's theory (understanding of instructions, quality of interaction, beliefs, attitudes, personality, and social isolation) and Milgram's theory (status of facilities, personal responsibility, legitimacy of authority figures, status of authority figures, peer support, proximity of authority figures).

## METHOD

This study was an observational cross-sectional study, using a validated questionnaire. The samples used in this study were cosmetic distribution facilities in East Java region which have been inspected in 2015-2019 by the National Agency of Drug and Food Control Provincial Office in Surabaya (NADFC Surabaya), with the following inclusion and exclusion criteria as were shown in Table 1.

**Table 1**  
**Inclusion and exclusion criteria of sample**

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> <li>Actively operating and distributing cosmetics</li> <li>Have been reported in the Integrated Information and Reporting System (IIRS) database of NADFC Surabaya</li> <li>The owner or person in charge of the distribution facility was willing to be a respondent in the research</li> </ul>	<ul style="list-style-type: none"> <li>No longer actively operating</li> <li>Have changed ownership</li> <li>Have changed address</li> <li>Did not have a complete and clear address</li> </ul>

The types of cosmetic distribution facilities used in this study were;

1. Department store
2. Supermarkets
3. Cosmetics stand that located in a traditional market
4. Cosmetics stand that located in a mall area

The respondents in this study were the owners or people in charge of cosmetic distribution facilities. 179 respondents were randomly chosen using simple random sampling. The dependent variable in this study was the compliance of cosmetics distribution facilities in distributing cosmetics that have MAN. Data obtained from the Integrated Information and Reporting System(IIRS) of NADFC Surabaya's secondary data database. Furthermore, the independent variables of this study were understanding of instructions, quality of interaction, beliefs, attitudes, personality, social isolation, status of facilities, personal responsibility, legitimacy of authority figures, status of authority figures, peer support, and proximity of authority figures. Data was obtained using a validated questionnaire.

The questionnaires were filled out by the respondents after receiving an explanation of the study and signing the informed consent form. The questionnaire instrument was tested using the validity and reliability tests of Alpha Cronbach's method. The questionnaire can be stated as reliable if the value of Cronbach's Alpha (CA) > r table at  $\alpha=0.05$ . The reliability test of the questionnaire was 0.911 of CA > 0.3494 of r Table. So, the questionnaire was valid. The validity test of the items in the questionnaire was declared valid as a data collection tool if the Corrected Item-Total Correlation (CITC) value > r table at  $\alpha=0.05$ . The results of the validity test of all items in the questionnaire have a CITC value > r Table (0.3494). So, the questionnaire items were declared valid and can be used in research. In this study, the questionnaire was designed with 31 questions. The data was then analyzed using the Partial Least Squares (PLS) (= 0.05) method.

## RESULTS AND DISCUSSION

The study was conducted on 179 participants with demographic characteristics of the mentioned respondents were shown in Table 2. Regarding sex status, 52.5% of respondents were male. The majority age of the respondents was >40 years old. Most of the respondent's education was senior high school (96.1%).

**Table 2**  
*Demographic characterizations of respondents*

Variables	Frequency	Relative frequency (%)
<b>Gender</b>		
Male	94	52.5
Female	85	47.5
<b>Age Group</b>		
≤40	30	16.8
> 40	149	83.2
<b>Education</b>		
Elementary School	1	0.5
Junior High School	3	1.7
Senior High School	172	96.1
Bachelor's degree	3	1.7

The obedience of cosmetic distribution facilities on distributing cosmetics with MAN is based on secondary data

of IIRS database of NADFC Surabaya. The obedience value was classified based on the percentage value of the number of examinations with the results meeting the provisions (no cosmetics without MAN) per the total number of examinations up to the time of the study. In this study, the compliance was categorized into 4 categories, including none (0-25%), less (25.1-50.0%), enough (50.1-75.0%), and good (75.1-100%). Most of the distribution facilities were categorized as good or complying by distributing cosmetics with MAN (65.9%) (Table 3).

The assessment of the owner/person in charge of distribution facilities for each factor is presented in Table 4. There were 81.0% of respondents that had a very good understanding of the instructions for distributing cosmetics that had MAN. However, only 3.4% had a bad understanding. This was related to the importance of understanding cosmetic distribution that has MAN to prevent side effects and diseases caused by harmful ingredients found in cosmetics.

**Table 3**  
**The obedience of the distribution facilities (N=179)**

Distribution facilities obedience	Frequency	Relative frequency %
None	43	24,0
Less	13	7,3
Enough	5	2,8
Good	118	65,9

The quality of interaction observed in this study was a relationship quality between NADFC Surabaya and the respondents. There were 93.9% (67.6% and 26.3%) of respondents that had good interaction with NADFC Surabaya and only 6.1% that had bad interaction.

This study observed the belief of respondents about the benefit of distributing cosmetics that have MAN. Results showed mostly the respondent's belief that distributed cosmetics with MAN is something useful (70.9%), and only 3.4% with enough faith.

The attitude of distribution facility means its attitude on the regulation of cosmetic distribution that has MAN. This study found the respondents dominantly have a good attitude on distribution cosmetics that have MAN (83.1%), and 1.7% were the opposite (bad attitude).

In this study, "personality" means a personality that was related to the inner benefits obtained in the form of satisfaction of respondents in carrying out orders to distribute cosmetics that have MAN. 54.2% of respondents have very good acceptance regarding the rules for distributing cosmetics that had MAN by being satisfied when they can carry out the order. This study showed only 3.9% had poor acceptance and nothing was very bad.

Social isolation was the involvement of respondents to distributing cosmetics that have MAN. The involvement of respondents in the implementation of regulations for distributing cosmetics that had MAN was very good (55.3%) and only 3.4% had poor involvement.

The status of the facility was the pride and prestige of the cosmetic distribution facility. Mostly, the respondents were very proud (82.7%) of the cosmetics distribution facilities where they work.

Personal responsibility observed in this study was the awareness to be willing to bear everything as a result of obeying the regulations for distributing cosmetics that have MAN. This study found the respondents have a very high responsibility (64.2%) related to distributing cosmetics that have MAN, and no one has a very low responsibility.

**Table 4**  
*The assessment of the owner/person in charge of distribution facilities*

Variables	Frequency	Relative frequency (%)
<b>Understanding the instructions</b>		
Very bad	0	0
Bad	6	3.4
Good	28	15.6
Very good	145	81.0
<b>Quality of interaction</b>		
Very bad	0	0
Bad	11	6.1
Good	47	26.3
Very good	121	67.6
<b>Beliefs</b>		
No belief	0	0
Enough belief	6	3.4
Belief	46	25.7
Very belief	127	70.9
<b>Attitudes</b>		
Very bad	0	0
Bad	3	1.7
Good	27	15.1
Very good	149	83.2
<b>Personality</b>		
Very bad	0	0
Bad	7	3.9
Good	75	41.9
Very good	97	54.2
<b>Social isolation</b>		
Very bad	0	0
Bad	6	3.4
Good	74	41.4
Very good	99	55.3
<b>The status of the facilities</b>		
Poor proud	0	0
Enough proud	0	0
Proud	31	17.3
Very proud	148	82.7
<b>Personal responsibility</b>		
Very low	0	0
Low	0	0
High	64	35.8
Very high	115	64.2
<b>The legitimacy of authority figures</b>		
Very low	0	0
Low	0	0
High	19	10.6
Very high	160	89.4
<b>The status of authority figures</b>		
Very low	0	0
Low	0	0
High	103	57.5
Very high	76	42.5
<b>Peer support</b>		
Very low	0	0
Low	0	0
High	48	26.8
Very high	131	73.2
<b>The proximity of authority figures</b>		
Poor close	0	0
Enough close	22	12.3
Close	116	64.8
Very close	41	22.9

The legitimacy of authority figures was the belief and acceptance of the legality and authority of NADFC Surabaya in enforcing the rules for distributing cosmetics that have MAN. The majority (84.9%) of respondents in this study have very high confidence and acceptance of the legality and authority of NADFC Surabaya in enforcing regulations for distributing cosmetics that have MAN.

The authority figure status was the status or position of NADFC Surabaya based on the level of skills, abilities, knowledge, and professionalism as the instructors for distributing cosmetics that already have MAN. 57.5% of respondents have a high assessment of the level of skills, abilities, knowledge, and professionalism of NADFC Surabaya related to the rules for distributing cosmetics that have MAN.

Peer support was the presence of partners in distribution facilities who supported them to comply with the rules for distributing cosmetics that have MAN. Mostly, the respondents have very high peer support to comply with the regulations for distributing cosmetics that have MAN (73.2%).

The proximity of authority figures was the intensity of the relationship that existed between the distribution of cosmetics facility and NADFC Surabaya. The majority of respondents (87.7%) stated that they were close to NADFC Surabaya. Only 12.3% said it was close enough.

In table 5, the relationship between the variables and obedience is presented.

Partial Least Square (PLS) analysis was used to examine the relationship between the variables ( $\alpha=0.05$ ) (Table 6). The PLS test showed that there are significant relationship between personality ( $p=0.001$ ,  $\beta=0.197$ ), the legitimacy of authority figures ( $p = 0.025$ ,  $\beta=0.147$ ), and peer support ( $p=0.000$ ,  $\beta=0.470$ ) with the obedience of cosmetics distribution facilities in distributing cosmetics that have MAN in East Java. Whereas, understanding the instructions ( $p=0.513$ ,  $\beta=0.054$ ), quality of interaction ( $p=0.860$ ,  $\beta=-0.012$ ), beliefs ( $p=0.064$ ,  $\beta=0.169$ ), attitudes ( $p= 0.597$ ,  $\beta=0.037$ ), social isolation ( $p=0.333$ ,  $\beta=0.063$ ), the status of the facilities ( $p=0.504$ ,  $\beta=-0.049$ ), personal responsibility ( $p=0.707$ ,  $\beta=-0.029$ ), the status of authority figures ( $p=0.060$ ,  $\beta=-0.104$ ) and the proximity of authority figures ( $p=0.072$ ,  $\beta=0.116$ ) have no correlation with the obedience of cosmetics distribution facilities in distributing cosmetics that have MAN in East Java.

To the best of our knowledge, this is the first study in Indonesia to analyze the factors that affect the obedience of cosmetics distribution facilities when distributing cosmetics that have marketing authorization numbers (MAN). It is also the first one to analyze the factors that affect the obedience of cosmetics distribution facilities based on Niven's and Milgram's theories.

The present findings would provide further insights into designing future distribution facilities's control strategies. This study found internal factors based on Niven's theory that influence the obedience of cosmetic distribution facilities in distributing cosmetics that have MAN in East Java Province: personality. However, the external factor based on Milgram's theory that influenced cosmetic distribution facilities were legitimacy of authority and peer support.

**Table 5**  
*The relationship between dependent variables and obedience*

Variables		Obedience (%)										Partial Least Square (PLS) analysis*
		0	25	33	40	50	60	67	75	80	100	
		n	n	n	n	n	n	n	n	n	n	
<b>Understanding the instructions</b>	Very bad	0	0	0	0	0	0	0	0	0	0	p:0.513 β: 0.054
	Bad	1	2	1	1	1	0	0	0	0	0	
	Good	7	0	2	0	4	0	1	1	0	13	
	Very good	32	1	0	0	4	1	2	0	2	103	
<b>Quality of interaction</b>	Very bad	0	0	0	0	0	0	0	0	0	0	p:0.860 β: -0.012
	Bad	6	1	1	0	1	0	0	0	0	2	
	Good	12	2	1	0	2	1	1	1	1	26	
	Very good	22	0	1	1	6	0	2	0	1	88	
<b>Beliefs</b>	No belief	0	0	0	0	0	0	0	0	0	0	p:0.064 β: 0.169
	Enough belief	5	0	0	0	1	0	0	0	0	0	
	Belief	26	2	2	0	2	0	2	1	2	9	
	Very belief	9	1	1	1	6	1	1	0	0	107	
<b>Attitudes</b>	Very bad	0	0	0	0	0	0	0	0	0	0	p:0.597 β: 0,037
	Bad	2	0	1	0	0	0	0	0	0	0	
	Good	17	1	0	0	2	0	0	1	0	6	
	very good	21	2	2	1	7	1	3	0	2	110	
<b>Personality</b>	Very bad	0	0	0	0	0	0	0	0	0	0	<b>p:0.001</b> <b>β: 0.197</b>
	Bad	6	0	0	0	0	0	0	0	0	1	
	Good	27	3	3	1	6	1	2	1	2	29	
	Very good	7	0	0	0	3	0	1	0	0	86	
<b>Social isolation</b>	Very bad	0	0	0	0	0	0	0	0	0	0	p:0.333 β: 0.063
	Bad	4	0	0	0	0	0	0	0	0	2	
	Good	24	1	1	0	4	0	1	1	2	40	
	Very good	12	2	1	2	5	1	2	0	0	74	
<b>The status of the facilities</b>	Poor proud	0	0	0	0	0	0	0	0	0	0	p:0.504, β: -0.049
	Enough proud	0	0	0	0	0	0	0	0	0	0	
	Proud	16	0	0	0	3	0	0	1	0	11	
	Very proud	24	3	3	1	6	1	3	0	2	105	
<b>Personal responsibility</b>	Very low	0	0	0	0	0	0	0	0	0	0	p:0.707 β: -0.029
	Low	0	0	0	0	0	0	0	0	0	0	
	High	23	2	1	0	4	0	1	1	2	30	
	Very high	17	1	2	1	5	1	2	0	0	86	
<b>The legitimacy of authority figures</b>	Very low	0	0	0	0	0	0	0	0	0	0	<b>p:0.025</b> <b>β: 0.147</b>
	Low	0	0	0	0	0	0	0	0	0	0	
	High	11	1	1	0	0	0	0	0	0	6	
	Very high	29	2	2	1	9	1	3	1	2	110	
<b>The status of authority figures</b>	Very low	0	0	0	0	0	0	0	0	0	0	p:0,060, β: -0,104
	Low	0	0	0	0	0	0	0	0	0	0	
	High	26	3	3	1	8	1	3	1	2	55	
	Very high	14	0	0	0	1	0	0	0	0	61	
<b>Peer support</b>	Very low	0	0	0	0	0	0	0	0	0	0	<b>p:0.000</b> <b>β: 0.470</b>
	Low	0	0	0	0	0	0	0	0	0	0	
	High	31	2	2	1	6	0	2	1	2	1	
	Very high	9	1	1	0	3	1	1	0	0	115	
<b>The proximity of authority figures</b>	Poor close	0	0	0	0	0	0	0	0	0	0	p:0.072 β: 0.116
	Enough close	14	0	0	0	2	0	0	0	0	6	
	Close	24	3	2	0	6	1	3	1	2	74	
	Very close	2	0	1	1	1	0	0	0	0	36	

\*p < 0.05

**Understanding the instruction**

The studies of Nurhayati (2021), Dewi (2019) and Lestari et al. (2018) showed that understanding the instruction influenced obedience which was not in line with this study result. This study found that understanding of instruction did not affect obedience. This was because an understanding of instructions did not necessarily make someone comply with

a rule and required a process of internalizing the rules into a person (Masur, 2021).

**Quality of interaction**

Based on this study, the quality of instruction did not influence the degree of obedience. However, this finding was not in line with the study of Dewi (2019) in the compliance of antibiotic consumption that was affected by the quality of

interaction. The statistical results were not significant because the respondents who considered themselves to have good interaction with officers still sold cosmetics that did not have a MAN. Other factors influencing the obedience of respondents, including economic factors (Masur, 2021), were not examined in this study.

### Beliefs

The obedience-based on this study was not influenced by belief. This was because beliefs can be influenced by the desire for self-improvement and social norms (Chilton et al., 2021). This is also due to other factors that can affect obedience, such as knowledge (Marzuki et al., 2021) and perception (Christian, 2021). This result was opposite to the finding of Clark et al. (2020) and Chan et al. (2020), which stated that belief in the benefits of rule can increase obedience.

**Table 6.**  
*Results of Partial Least Square (PLS)*

Variables	p-value	$\beta$	Relation
Understanding the instructions	0.513	0.054	Non significant
Quality of interaction	0.860	-0.012	Non significant
Beliefs	0.064	0.169	Non significant
Attitudes	0.597	0.037	Non significant
Personality	<b>0.001</b>	<b>0.197</b>	<b>Significant</b>
Social isolation	0.333	0.063	Non significant
The status of the facilities	0.504	-0.049	Nonsignificant
Personal responsibility	0.707	-0.029	Nonsignificant
The legitimacy of authority figures	<b>0.025</b>	<b>0.147</b>	<b>Significant</b>
The status of authority figures	0.060	-0.104	Nonsignificant
Peer support	<b>0.000</b>	<b>0.470</b>	<b>Significant</b>
The proximity of authority figures	0.072	0.116	Nonsignificant

### Personality

The statistical analysis showed the influence of personality significantly toward the obedience of cosmetic distribution facilities in distributing cosmetics that have MAN in East Java. The better personality of the respondent, the obedience of distributing cosmetics that have MAN will increase. This was in line with Prayitno et al. (2018) and Nurhayati (2021) that stated the influence of personality against obedience on instruction. But the results of this study were not in line with the findings of Gulati et al. (2017) which showed that personality did not affect the obedience.

### Social isolation

Social isolation did not have a significant effect on obedience. This was not in line with the findings of research conducted by Dewi (2019), which stated that social isolation affected compliance. The study found that there was no effect of social isolation on obedience because the respondents, whether they followed the rules or not, felt actively involved in efforts to implement the rules for distributing cosmetics that had MAN, so the statistical analysis result did not show the effect of social isolation on obedience.

### The status of the facility

The status of the facility did not have a significant influence on obedience. Most of the respondents considered

### Attitude

This study found that attitude did not influence obedience. It was supported by the study of Le et al. (2019) that stated the obedience of handwashing behavior by health workers was not influenced by attitude, and by Sampoerno et al. (2020). The opposite result was reported by Nurhayati (2021) and Clark et al. (2020), who showed the correlation between attitude and obedience. Those with a bad attitude were three times more likely to have a bad obedience (Hartuti et al., 2021). The study found no attitude influence on obedience because most of the respondents considered that they had a good attitude towards the rules, but in practice they still violated the rules, thus causing the results of the analysis to not affect their attitude towards obedience. Other factors, such as cultural considerations, could also have an impact on obedience (Sari et al., 2020).

themselves to have a high sense of pride in the cosmetic distribution facility where they work. But this pride was not directly proportional to the obedience of distributing cosmetics that have MAN. This study was in line with Ningsih (2018), which showed that the status of the facility did not affect obedience to the instructions. The assessment of the respondents on the status indicator of the facility was relatively homogeneous, so this caused the analysis results to have no significant effect on the status of the facility on obedience.

### Personal responsibility

Based on this study, personal responsibility did not influence obedience significantly. Whereas the study of Ningsih (2018) showed that personal responsibility influenced obedience to the instruction, the respondents felt they had very high (64.2%) and high (35.8%) personal responsibility to distribute cosmetics that have MAN, whether they comply with the rules or not, so the statistical test results showed no significant relationship between personal responsibility and obedience.

### The Legitimacy of Authority Figures

The legitimacy of authority figures had a significant impact on the obedience of cosmetic distribution facilities in distributing cosmetics that have MAN at East Java. The higher the legitimacy of NADFC Surabaya, the more the obedience of distribution facilities in distributing cosmetics that have

MAN in East Java will increase. This result was not in line with Ningsih (2018), who showed the legitimacy of authority figures did not affect the obedience of the instruction. This means that the level of authority of NADFC Surabaya, which was under the main tasks and functions, has an impact on the obedience of the owner/person in charge of cosmetic distribution facilities in distributing cosmetics that have MAN.

### The Status of Authority Figure

This study found compliance was not affected by authority figure status. This was supported by the study of Ningsih (2018) that showed the authority figure status did not affect instruction obedience. This was because the respondents who judged NADFC officers had professionalism, knowledge, and skills but were still breaking the rules. Other factors influenced, such as distribution of legal knowledge and sanctions that have not been balanced between the Surabaya NADFC officer and the owner/person in charge of cosmetic distribution facilities (Ye, 2017).

### Peer support

This study found peer support influenced the obedience of cosmetic distribution facilities significantly on distributing cosmetics that have MAN in East Java. This was supported by the study of Widani et al. (2020). The more peer support, the higher the obedience. Partners in distribution facilities, either directly or indirectly, can shape a person's attitude or behavior in obedience to the rule.

### The Proximity of Authority Figure

Obedience was not influenced by the proximity of an authority figure. This finding was supported by Ningsih (2018), who showed that the proximity of an authority figure did not affect obedience, but was not in line with Mahfudhoh et al. (2015) and Pozzi et al. (2018). The proximity of an authority figure is just not enough to make people comply with a rule. Other factors influencing people's obedience, such as culture, cause the results of statistical tests to show no significant effect.

Based on this study, the obedience of cosmetic distribution facilities on distributing cosmetics that have MAN in East Java province was influenced by personality, the legitimacy of authority figures, and peer support. The statistical analysis results showed the external factors based on Milgram's theory were more influential towards the compliance of cosmetic distribution facilities compared to internal factors based on Niven's theory.

There are various efforts that can be made by the NAFDC of Surabaya to increase the compliance of cosmetic distribution facilities to distribute cosmetics that have MAN in East Java, such as:

1. Educate the owners and employees of cosmetic distribution facilities in East Java Province by persuasive messages (Wulansari et al., 2019) so that they can share information, support each other, and give encouragement (Kulik et al., 2016), regarding the following matters: How to access cosmetic MAN information on the website [www.pom.go.id](http://www.pom.go.id) and the Cek BPOM application; how to access various NADFC Indonesia social media; how to conduct consultations

through the Consumer Complaints Service Unit (CCSU) of NADFC Indonesia and NADFC Surabaya.

2. Conduct periodic monitoring and evaluation of cosmetic distribution facilities under the main tasks and authorities of the Indonesian NADFC. Constant monitoring and evaluation can help to improve obedience (Dachirin et al., 2020).
3. Complete the compilation of a database of cosmetic distribution facilities to facilitate monitoring, evaluation, and intervention of educational programs.

### LIMITATION OF THE STUDY

The limitations of this study were the use of secondary data of compliance from NADFC Surabaya and the fact of obedience, which was only using two theories. However, secondary data from the NADFC examination in Surabaya has the advantage that it consists of examination results for several years and has included complete addresses, so that it is very suitable and possible to be used in current research considering that it is still in the COVID-19 pandemic period. From this data, the characteristics of the level of obedience of each distribution facility can be seen. This research is the first conducted in Indonesia related to the analysis of obedience factors of cosmetic distribution facilities in distributing cosmetics that have MAN.

### CONCLUSIONS AND SUGGESTIONS

In this study, Milgram's theory more affects the obedience of cosmetics distribution facilities in distributing cosmetics that have marketing authorization numbers (MAN) than Niven's theory. Furthermore, various kinds of education and monitoring evaluation of distribution facilities are important strategies to improve obedience.

Further research is suggested for the level of obedience to be measured using primary data. It is also possible to analyze the obedience factors based on other compliance theories. The present findings would provide further insights into designing future distribution facilities controlling strategies.

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#### Conflict of Interest Statement

The authors claim that there is no conflict of interest.

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