

Theory of Planned Behavior on the Determinants of Cosmetic Hormones Use to Overcome Gender Dysphoria among Transgenders in Yogyakarta, Indonesia

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ABSTRACT

Background: Gender dysphoria refers to discomfort or distress that is caused by a discrepancy between an individual's gender identity and the gender assigned at birth (and the associated gender role and/or primary and secondary sex characteristics). Gender reassignment surgery is performed to change primary and/or secondary sex characteristics. For male to female gender reassignment, surgical procedures may include genital reconstruction (vaginoplasty, penectomy, orchidectomy, clitoroplasty) and cosmetic surgery (breast implants, facial reshaping, rhinoplasty, abdominoplasty, thyroid chondroplasty (laryngeal shaving), voice modification surgery (vocal cord shortening), hair transplants). This study aimed to examine the determinants of cosmetic hormones among transgender in Yogyakarta, Indonesia, using Theory of Planned Behavior (TPB).

Subjects and Method: This was a cross-sectional study carried out in Yogyakarta, Indonesia, in November 2018. A sample of 201 transgender was selected by snowball sampling and fixed disease sampling, consisting of 67 transgender using cosmetic hormone and 134 transgender not using cosmetic hormone. The dependent variable was the use of cosmetic hormones. The independent variables were age, knowledge, education, intention, attitude, perceived behavioral control, and subjective norm. The data were collected by questionnaire and analyzed by path analysis.

Results: Cosmetic hormone use was directly increased by strong intention ($b = 1.65$; 95% CI = 0.98 to 2.31; $p < 0.001$), positive attitude ($b = 1.15$; 95% CI = 0.48 to 1.81; $p = 0.001$), but decreased by strong perceived behavioral control not to use cosmetic hormone ($b = -1.02$; 95% CI = -1.70 to -0.34; $p = 0.003$). Cosmetic hormone use was indirectly affected by age, education, locus of control, attitude, perceived behavioral control, subjective norm, and social norm.

Conclusion: Cosmetic hormone use is directly increased by strong intention, positive attitude, but decreased by strong perceived behavioral control not to use cosmetic hormone. Cosmetic hormone use is indirectly affected by age, education, locus of control, attitude, perceived behavioral control, subjective norm, and social norm.

Keywords: cosmetic hormone, transgender, Theory of Planned Behavior

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BACKGROUND

The ideal body shape is everyone's dream, including transgender people. Transgender is a word used to describe for people who do, feel, think or look different from the sex that has been determined since birth (Olvionita, 2013).

The work demands of transgender people usually make them look feminine. They try this feminine form in various ways to make it look attractive. Things that are done usually the use of cosmetics and the use of chemicals that are inserted into the body. This is the choice taken by some transvestites to increase their feeling of

comfort with their appearance. Some choose not to take hormones or do surgery, but still feel as beautiful as those who use hormones, silicon and / or change their genitals (Lentera, 2016).

A study in Thailand showed that 89% of 474 kathoi (female transgender) were found to use hormones and 75% of them used injections; as in other Southeast Asian countries (Poomprueketal, 2014). Research in Thailand on male (transgender) and Kathy tom, found that 35% of toms and 73% of kathoi used cross sex hormones without being monitored by health workers and toms using cross sex hormones were known to suffer bodily pain and mental disorders (Gooren et al., 2014).

Transgender people in Indonesia are better known as "*waria*". *Waria* (the acronym of *wanita-pria*) are men who tend to behave as women in their daily lives. The existence of transvestites has long existed in history and has a position in different societies (Prayudi, 2014). The number of transvestites recorded from 33 provinces in Indonesia in 2010 was 31,179 (Ministry of Social Affairs, 2012).

Many claim that the ideal sign of femininity in Indonesia is having well-formed bright breasts and skin, in which women use various chemical products (Idrus and Hyman, 2014). For transgender people themselves, this is their main desire, by having soft, white skin and beautiful breasts. Sexual surgery or other cosmetic surgery is often not available or too expensive for most transvestites. In this case, related to the use of chemicals included in their bodies, it becomes a problem that must be addressed. In reality, they use these substances without a doctor's prescription and only rely on the experience that is available and in giving (such as silicone injections) also carried out by non-professional personnel. Not to mention

other dangers that can arise due to such practices such as the use of syringes alternately which can cause the danger of contracting HIV, the use of non-sterile devices, and the dangers of mall practices that may occur. This is also related to the sale/supply of goods or certain chemical or illegal chemicals, so that the cosmetics / drug providers such as pharmacies also participate in the use of chemicals for body formation.

Abuse of hormonal drugs or chemicals used by transvestites is still found in Indonesia with the aim of forming his body so as to cause various health problems for his body. Like the case of a transvestite in Jember who died, allegedly after doing silicone injections in her breasts, in which after injecting silicone in a beauty salon, her breasts experienced swelling (Detiknews, 2010).

Many legal rules have been violated in Indonesia regarding the practice of silicone injections. Law No. 8 of 1999 concerning Consumer Protection, states consumer rights including security, comfort and safety in consuming goods and or services that have been violated by business actors. In addition to violating the Consumer Protection Act, salon entrepreneurs who offer silicone injection services also violate Law No. 23 of 1992 concerning health.

Yogyakarta is one of the cities that has become a destination for migrants, both from students, workers, and tourists. This makes Yogyakarta has a mixture of cultures from various regions in Indonesia and even from abroad. One form of it is the existence of transvestites in Yogyakarta. The existing transgender population is scattered in several places, from the data of the Kebaya Non-Governmental Organization (NGO) (Yogyakarta Waria Family) in 2017, the number of transvestites in Yogyakarta is 190, spread across several regions in

Yogyakarta, but the number of transvestites in Yogyakarta this is not only a native of Yogyakarta but also many immigrants from several regions in Indonesia. The existence of this transgender also creates vulnerability to emerging health problems, one of which is about the use of hormonal drugs and cosmetics.

The behavior of using cosmetics and hormonal drugs in the formation of a transvestite's body can be identified using planned behavior theory. According to planned behavior theory, intention (and behavior) is a function of three basic determinants. The first one is the attitude towards behavior that can be either positive or negative towards a certain behavior that is interesting. The second determinant of intention is the individual's perception of social pressure to do or not do a behavior. Because it relates to normative perception decisions, this factor is called subjective norms. The third determinant of intention is a sense of self-confidence or the ability to perform a desired behavior called perception of behavioral control.

The rise of the behavior of using hormonal cosmetics drugs in transvestites in Yogyakarta made author interested in conducting research that aims to determine the determinants of using hormonal cosmetics drugs using theory of planned behavior.

SUBJECTS AND METHOD

1. Study Design

This study is an observational analytic with cross-sectional design. It was conducted in Yogyakarta, in November 2018.

2. Population and Samples

The population was the transgender community in Yogyakarta. The researcher used a ratio of 1: 2 between the case group and the control group. The case group in this study was transgender who used hormonal and cosmetic drugs amounting to 67

subjects and the control group was transgender who did not use 134 hormonal and cosmetic drugs. The sampling technique was fixed disease sampling and snowball sampling.

3. Study Variables

The dependent variable is the use of hormonal and cosmetic drugs. The independent variables are age, knowledge, educational background, social norms, location of control, attitude, subjective norm, perceived behavior control, and intention.

4. Operational Definition of Variables

Age is the age of the research subject when using cosmetics and / or hormone therapy. The older the subject, the use of hormonal drugs and cosmetics will also decrease. The measurement scale is continuous, which was converted into a dichotomy for analysis with code 0 for ages 15-35, 1 for ages 36-64.

Knowledge is the knowledge possessed by the respondent regarding the use of cosmetics and hormone therapy. The more individuals have good knowledge about the use of hormonal and cosmetic drugs, the individual will reduce or not even use hormonal and cosmetic drugs in terms of body formation. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for low and 1 is for high.

The educational background is the last level of education that has been taken by the research subject. A high educational background will reduce the behavior of subjects to use hormonal and cosmetic drugs due to their knowledge of the side effects of these behaviors. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for low and 1 is for high.

Social norms are general habits that become the benchmark of behavior in a community group and certain area boundaries. If in an environment there are

norms that prohibit or limit the behavior of using hormonal and cosmetic drugs, the subject also will not use these hormonal and cosmetic drugs. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for low and 1 is for high.

Location control is the degree of one's beliefs about the extent to which he has control over the consequences of events that occur in his life, compared to forces outside his control. Location of control is divided into two, namely internal and external. Location of internal control is where the individual's beliefs about what happens in his life are the result of his own decisions, while the location of external control is that individuals believe what happens is fate or fate that cannot be changed. If the location of a person's control comes from the internal, he can control not to use hormonal and cosmetic drugs. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for external and 1 is for internal.

Attitude is the subject's opinion about the use of cosmetics and hormone therapy in transgender. A positive attitude will make individuals tend to use hormonal and cosmetic drugs. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for negative, 1 is for positive.

Subjective norms are beliefs regarding the perceived support of transgender individuals from the social environment, family members and coworkers who have an influence on the decision to use hormonal drugs and cosmetics. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for weak, 1 is for strong.

The perception of behavior control is the assumption of transgender individuals

about the ease or difficulty of the decision to use hormonal drugs and cosmetics. The stronger the perception of behavioral control, the subject will not use hormonal and cosmetic drugs. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for weak and 1 is for strong.

Intention is the desire of the individual transgender to choose or not to use hormonal drugs and cosmetics. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for low and 1 is for high.

The behavior of using hormonal and cosmetic drugs is the behavior of transgender individuals to use at least one type of hormonal and cosmetic medicine until the study was conducted. The measurement scale is continuous which is then converted into a dichotomy for analysis. Code 0 is for weak and 1 is for strong.

5. Research Instruments

Data collection was done using a questionnaire that has been tested for reliability. The reliability test used was AlphaCronbach test and half-life test on 30 research subjects.

6. Data Analysis

The results of the characteristics analysis of the research subjects and univariate analysis in the form of categorical / dichotomous data are described in the form of frequency (n) and percentage (%). Bivariate analysis was performed using Chi Square test. Multivariate analysis was carried out using path analysis with the SPSS Stata program, through the following stages:

- a. Model specifications
- b. Model identification
- c. Fit model
- d. Parameter estimation
- e. Model re-specification

7. Research Ethics

Research ethics was obtained from the Research Committee at the Faculty of Medicine, Universitas Sebelas Maret, Surakarta. Research ethics include informed consent, anonymity, and confidentiality. ID research ethics protocol 01/18/11/337.

RESULTS

1. Sample Characteristics

Table 1 showed sample characteristics. Most of the study subjects aged ≥ 35 years were 60.7%, education <senior high school was 59.7%, and transgender who used hormonal and cosmetic drugs were 67 (33.3%).

Table 1. Sample Characteristics

Characteristics	n	%
Locus of Control		
Internal	101	50.2
External	100	49.8
Attitude		
Positive	101	50.2
Negative	100	49.8
Knowledge		
High	129	64.2
Low	72	35.8
Social Norm		
High	111	55.2
Low	90	44.8
Subjective Norm		
High	103	51.2
Low	98	48.8
Perceived behavior control		
Strong	114	56.7
Weak	87	43.3
Intention		
Strong	105	52.2
Weak	96	47.8

2. Bivariate Analysis

Table showed the results of bivariate analysis. Table 2 showed that there was a relationship between age and hormonal cosmetic use (OR= 0.49; 95% CI= 0.28 to 0.88; p= 0.016).

There was a relationship between education and hormonal cosmetic use (OR= 0.49; 95% CI= 0.28 to 0.88; p= 0.016).

There was a relationship between knowledge and hormonal cosmetic use (OR= 0.31; 95% CI= 0.17 to 0.58; p<0.001).

There was a relationship between social norm and hormonal cosmetic use (OR= 2.28; 95% CI= 1.29 to 4.03; p= 0.004).

There was a relationship between locus of control and hormonal cosmetic use (OR= 2.63; 95% CI= 1.48 to 4.68; p= 0.001).

There was a relationship between attitude and hormonal cosmetic use (OR= 2.94; 95% CI= 1.66 to 5.23; p<0.001).

There was a relationship between subjective norm and hormonal cosmetic use (OR= 0.49; 95% CI= 0.28 to 0.86; p= 0.013).

There was a relationship between perceived behavior control and hormonal cosmetic use (OR= 0.32; 95% CI= 0.17 to 0.58; p<0.001).

There was a relationship between intention and hormonal cosmetic use (OR= 6.81; 95% CI= 3.64 to 12.72; p<0.001).

3. Path Analysis

Figure 1 depicted the path analysis model with estimation. Figure 1 showed that the number of observed variables was 10, the endogenous variables were 6, the exogenous variables were 4, and the parameter was 18. Degree of freedom= (observed variable x (variable which observed + 1)) / 2 - (endogenous variable + exogenous variable + parameter) = (10 x (10 + 1)) / 2 - (6 + 4 + 18) = 17 (over-identified).

Table 3 showed the results of path analysis. Table 3 showed that cosmetic hormone use was directly increased by strong intention, positive attitude, but decreased by strong perceived behavioral control not to use cosmetic hormone.

Table 2. The Results of Bivariate Analysis

Variables	The use of Hormonal Drug and Cosmetic				OR	CI 95%	p
	Yes		No				
	n	%	n	%			
Age							
15-35 years old	60	75.9	19	24.1	0.49	0.26 – 0.91	0.025
36-64 years old	74	60.7	48	39.3			
Education							
≥ HS	44	54.3	37	45.7	0.39	0.21 – 0.72	0.002
< HS	90	75	30	25			
Knowledge							
High	77	59.7	52	40.3	0.39	0.20 – 0.76	0.005
Low	57	79.2	15	20.8			
Social Norm							
High	63	56.8	48	43.2	0.35	0.19 – 0.66	0.001
Low	71	78.9	19	21.1			
Location of Control							
Internal	57	56.4	44	43.6	0.39	0.21 – 0.71	0.002
External	77	77	23	23			
Attitude							
Positive	80	79.2	21	20.8	3.24	1.74 – 6.04	<0.001
Negative	54	54	46	46			
Subjective Norm							
High	55	53.4	48	46.6	0.28	0.15 – 0.52	<0.001
Low	79	80.6	19	19.4			
Perceived Behavioral Control							
Strong	64	56.1	50	43.9	0.31	0.16 – 0.59	<0.001
Weak	70	80.5	17	19.5			
Intention							
Strong	78	74.3	27	25.7	2.06	1.14 – 3.75	0.017
Weak	56	58.3	40	41.7			

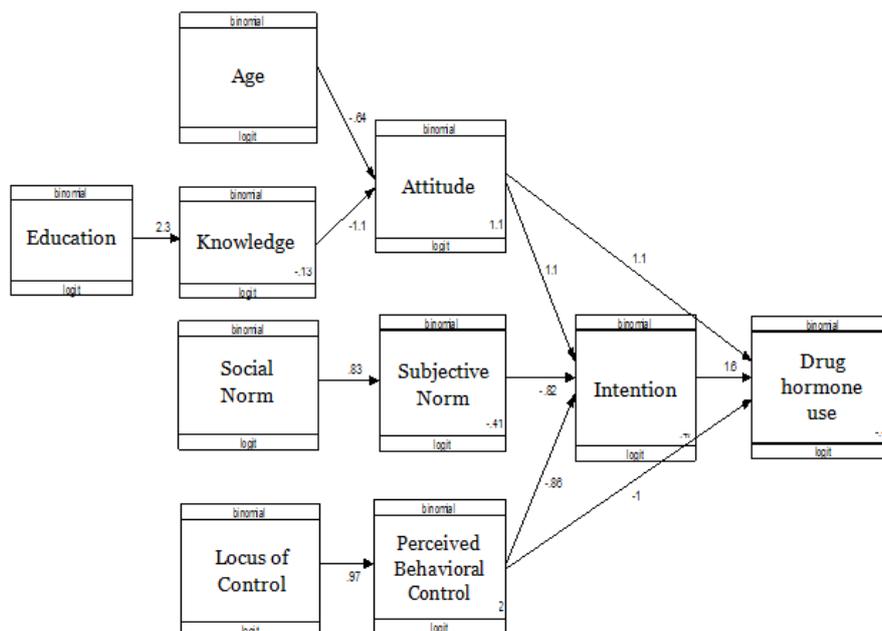


Figure 1. Path analysis model on the determinants of the use of hormonal and cosmetic drugs

Table 3. The results of path analysis

Dependent Variables	Independent Variables	b	CI 95%		p
			Lower Limit	Upper Limit	
Direct effect					
The use of hormonal and cosmetic drugs	← Attitude	1.15	0.48	1.81	0.001
	← Perceived behavioral control	-1.02	-1.69	-0.34	0.003
	← Intention	1.64	0.98	2.31	<0.001
Indirect effect					
Intention	← Attitude	1.08	0.48	1.67	<0.001
	← Subjective norm	-0.82	-1.42	-0.21	0.008
	← Perceived behavioral control	-0.86	-1.47	-0.25	0.006
Attitude	← Age	-0.64	-1.23	-0.04	0.036
	← Knowledge	-1.11	-1.72	-0.49	<0.001
Subjective norm	← Social Norm	0.83	0.26	1.39	0.004
Knowledge	← Education	2.34	1.53	3.16	<0.001
Perceived behavioral control	← Locus of control	0.97	0.39	1.54	0.001
Nobservation= 201					
Log likelihood= -737.65					

There was a direct effect of perceived behavioral control on the behavior of hormonal and cosmetic drug use and it was statistically significant. High perceived behavioral control had a logodds score to use hormonal and cosmetic drugs by -1.02 unit higher than low perceived behavioral control (b=-1.02; 95% CI= -1.69 up to -0.34; p= 0.003).

There was a direct effect of subjects' intention on the behavior of hormonal and cosmetic drug use and it was statistically significant. Strong intention had a logodds score to use hormonal and cosmetic drugs by 1.64 unit higher than weak intention (b=1.64; 95% CI= -0.98 up to 2.31; p= <0.001).

Cosmetic hormone use was indirectly affected by age, education, locus of control, attitude, perceived behavioral control, subjective norm, and social norm.

Strong intention increased with positive attitude (b= 1.08; 95% CI= 0.48 to 1.67; p<0.001), but decreased with subjective norm (b= -0.82; 95% CI= -1.42 to -

0.21; p= 0.008), and perceived behavior control (b= -0.86; 95% CI= -1.47 to -0.25; p= 0.006).

Attitude was affected by age (b= -0.64; 95% CI= -1.23 to -0.04; p= 0.036) and knowledge (b= -1.11; 95% CI= -1.72 to -0.49; p<0.001).

Subjective norm was affected by social norm (b= 0.83; 95% CI= 0.26 to 1.39; p= 0.004).

Knowledge was affected by education (b= 2.34; 95% CI= 1.53 to 3.16; p<0.001).

Perceived behavior control locus of control (b= 0.97; 95% CI= 0.39 to 1.54; p= 0.001).

DISCUSSIONS

1. The effect of attitude on the use of hormonal and cosmetic drugs

The results showed that attitudes affected the behavior of using hormonal drugs and cosmetics. The attitude of the individual was something that was closely related to the behavior of the individual. A person's attitude should be consistent with behavior.

If the attitude was not consistent with the behavior, there may be external factors that made the attitude and behavior became inconsistent. These factors were external value systems in the community, including norms, politics, culture, and the like (Suharyat, 2009).

The behavior of using hormonal and cosmetic drugs was also influenced by attitude. A transgender who has a positive attitude or support for the use of hormonal and cosmetic drugs, would tend to do this behavior. Conversely, if his attitude was negative or ignored the use of hormonal and cosmetic drugs, then the individual would not do the behavior.

2. The effect of perceived behavioral control on the use of hormonal and cosmetic drugs

The results showed that perceived behavioral control affected the use of hormonal drugs and cosmetics. This was in line with Ajzen (2005) who stated that perceived behavioral control was a function based on trust which called control beliefs, which was an individual's belief about the presence or absence of factors that support or inhibit an individual to perform a behavior. This belief was based on the individual's previous experience of a behavior, information of individual about a behavior that was obtained by making observations on the knowledge that belong to them or others, and also by various other factors that can increase or decrease individual feelings about the level of difficulty in conducting a behavior.

In the context of the study on the use of hormonal and cosmetic drugs by transgender people, individuals who felt that they have no difficulties or obstacles would tend to conduct these behaviors.

3. The effect of intention on the use of hormonal and cosmetic drugs

The results showed that intention affected the behavior of using hormonal drugs and cosmetics. This was in line with Ajzen (2005) who stated that intention was the competence of the individual based on the individual's desire to perform certain behaviors.

If the individual intended to do the behavior, the individual would tend to do the behavior, but on the contrary, if the person did not intend to do the behavior, the individual tend to not conduct that behavior. Transgenders who have strong intentions about the use of hormonal and cosmetic drugs would tend to perform these behaviors, whereas if the intention was weak, the transgenders would not conduct the behavior of using hormonal and cosmetic drugs.

4. The effect of attitude on the use of hormonal and cosmetic drugs through intention

The results showed that a positive attitude would increase the intention to use hormonal and cosmetic drugs. This was in accordance with Anggraini (2013) which stated that intention was influenced by individual attitudes, when individuals have a positive attitude, they tend to have strong intentions to conduct a behavior.

If transgender individuals have a positive attitude towards the use of hormonal and cosmetic drugs, then the intention would also be higher to perform these behaviors.

5. The effect of subjective norm on the use of hormonal and cosmetic drugs through intention

The results showed that high subjective norms would reduce the intention of transgenders to use hormonal and cosmetic drugs. The result of this study was in line with Lee (2009) who stated that the effect

of subjective norms became the main predictor in decision making where the influence of subjective norms was able to suggest, process, and strengthen an individual's intention of action or behavior. In this context, it was called negative behavior, the stronger or higher the individual subjective norms, the lower the individual's intention to use hormonal drugs and cosmetics.

6. The effect of perceived behavioral control on the use of hormonal and cosmetic drugs through intention

The results showed that strong perceived behavioral control would reduce the intention to use hormonal and cosmetic drugs. This was in line with the Theory of Planned Behavior, a person can act on his intention only if he has control over his behavior. This theory not only emphasized on the rationality of human behavior, but also on the belief that behavioral targets were under the control of the individual's consciousness or that behavior did not only depend on one's intentions, but also on other factors that were not under the control of individuals, for example the availability of resources and opportunities to show these behaviors (Lestari et al, 2015).

In this context, the perceived behavioral control was only for positive behavior, while in this study, the behavior was negative, which was the use of hormonal and cosmetic drugs. Therefore, the perceived behavioral control would reduce the intention to use hormonal and cosmetic drugs.

7. The effect of age on the use of hormonal and cosmetic drugs through attitude

The results showed that transgenders who were older would have an attitude which did not support the use of hormonal and cosmetic drugs. This was in accordance with Shelley et al. (2009) who stated that

attitudes can grow as long as the people live. Throughout his/her life, people have never stopped learning. The process of accommodation and assimilation of knowledge and experience was occurred during human's life. It was in this long process that the values of life were acquired by humans, who were likely to be able to grow their attitudes towards the subject or object.

In the context of the use of hormonal and cosmetic drugs, transgenders aged >35 years old would have a negative attitude or did not support the behavior because as they get older, the increase in their knowledge of the side effects of these behaviors would also increase and that would affect their attitude.

8. The effect of knowledge on the use of hormonal and cosmetic drugs through attitude

The results showed that high knowledge would lead to negative attitudes or not support the use of hormonal and cosmetic drugs. This was in line with Purnomo (2010) which stated that there was a relationship between high knowledge and good attitude.

In the context of the use of hormonal and cosmetic drugs by transgender, transgenders who have high knowledge of these behaviors would have an attitude that did not support the use of hormonal and cosmetic drugs.

9. The effect of social norm on the use of hormonal and cosmetic drugs through subjective norm

The results showed that strong social norms would increase individual subjective norms about the use of hormonal drugs and cosmetics in transgender groups in Yogyakarta. This was supported by Kana et al. (2014) on social environment (friends) which influenced subjective norms. The informants considered that a friend can influence the intention because by looking

at the status of the informant who has not been open with other people, even his own family, then one community friend was considered the closest person that he has.

In the context of this research, social influences were social norms in the individual environment. When there were social norms that prohibit the use of hormonal and cosmetic drugs, the subjective norms of transgender individuals would also ignore these behaviors.

10. The effect of education on the use of hormonal and cosmetic drugs through knowledge

The results showed that high level of education would increase the knowledge of transgender individuals about the use of hormonal drugs and cosmetics. Education has an effect that was closely related to information obtained by individuals (Hutagalung, 2002 in Primasarietal, 2010).

In the context of this research, when transgender individuals have a high educational background, the input of information also became more so that their knowledge was higher as well.

11. The effect of location of control on the use of hormonal cosmetic through perceived behavior control

The results of the study indicated that there was a relationship between the location of control and perceived behavioral control. According to Mearns in the context of health, the location of control was the individual's belief about the place to control the factors that affected his health (Murti, 2018). The location of the control itself was divided into two, namely internal and external control location. The internal control was the individual's belief that the location of the power that determined the events in his life was within himself. The external control was the individual's belief that the

location of the power that determined the events in his life was fate.

In the context of this study, transgender individuals who have an internal control location would have a strong perceived behavioral control so they tend to not use hormonal drugs and cosmetics, while transgender individuals who have external control locations would have weak perceived behavioral control and tend to use hormonal drugs and cosmetics.

REFERENCES

- Ajzen I (2005). *Attitudes, personality, and behavior*. New York: Open. University Press.
- Anggraini L (2013). Hubungan antara kepribadian otoritarian dengan sikap, niat, dan perilaku diskriminasi terhadap homoseksual. CALYPTRA.
- Detiknews (2010). Usai suntik silikon di payudara, seorang waria tewas. <https://news.detik.com/berita-jawa-timur/d-1493201/usai-suntik-silikon-dipayudara-seorang-waria-tewas>.
- Gooren LJ, Sungkaew T, Giltay EJ, Guadamuz TE (2014). Cross-sex hormone use, functional health and mental well-being among transgender men (toms) and transgender women (kathoeyes) in thailand. *Culture, Health & Sexuality*.
- Idrus NI, Hymans TD (2014). Balancing benefits and harm: Chemical use and bodily transformation among Indonesia's transgender waria. *International Journal of Drug Policy*.
- Kana I, Nayoan C, Limbu R (2016). Gambaran perilaku pencegahan hiv dan aids pada lelaki suka lelaki (lsl) di kota kupang tahun 2014. *Unnes Journal of Public Health*. <https://doi.org/10.15294/ujph.v5i3.10995>
- Kemensos RI (2012). *Kementerian sosial dalam angka pembangunan kesejahteraan sosial*. Jakarta: Badan Pendidikan

- dan Penelitian Kesejahteraan Sosial Pusat Data dan Informasi Kesejahteraan Sosial.
- Lee (2009). Gender different in hongkong adolescents consumers green purchasing behavior. *Journal of Consumer Marketing*. 26(2):87- 96.
- Lestari HEP, Shaluhiah Z, Demartoto A (2015). Pengaruh pengetahuan dan perceived behavior control terhadap niat laki-laki yang berhubungan seksual dengan laki-laki (lsl) untuk melakukan vct di kabupaten Madiun. *Jurnal Promosi Kesehatan Indonesia*.
- Olvionita RW (2013). Transgender dalam film (studi semiologi representasi identitas seksual transgender dalam film “the iron ladies”). Skripsi thesis, Universitas Muhammadiyah Surakarta.
- Poompruek P, Boonmongkon P, Guadamuz TE (2014). For me... it’s a miracle’: injecting beauty among kathoeis in a provincial thai city. *International Journal Drug Policy*.
- Prayudi AD (2014). Kebermaknaan hidup waria. Undergraduate Thesis, UIN Sunan Ampel Surabaya.
- Primasari R, Fajar NA, Misnaniarti (2010). Faktor-faktor yang berhubungan dengan perilaku seksual berisiko terinfeksi pms di kalangan waria binaan pkbisumatera selatan. *Jurnal Ilmu Kesehatan Masyarakat*. 01 (03): 194-200. Universitas Sriwajaya.
- Purnomo J, Miuhlisin A (2010). Hubungan antara tingkat pengetahuan dengan sikap lansia dalam mengatasi kekambuhan penyakit reumatik di posyandu lansia kelurahan karangasem kecamatan laweyan kota Surakarta. *Jurnal Terbitan Berkala Ilmiah*. Universitas Muhammadiyah Surakarta. <http://hdl.handle.net/11617/3704>.
- Shelley ET, Peplau LA, Sears DO (2009). Psikologi sosial. Jakarta:Kencana Prenada Media Group.
- Suharyat Y (2009). Hubungan antara sikap, minat dan perilaku manusia. *Jurnal FKIP : REGION*.