

Validity Test of Hypomania Checklist: Suicide Ideation as A Criterion

Felinda Stefika^{1,*}, Ediasri Toto Atmodiwirjo¹, P. Tommy Y. S. Suyasa¹

¹*Faculty of Psychology, Tarumanagara University, Jakarta, Indonesia*

**Corresponding author. Email: felinda.717181011@stu.untar.ac.id*

ABSTRACT

This study aims to look at the construct validity of the Indonesian version of HCL-33, namely (1) factor loading per dimension and overview of HCL-33 Mean (positive response) in Bipolar Disorder participants and MDD participants. In addition, this study (2) wanted to see the reliability (Alpha Cronbach), (3) the description of the recommended number of HCL items after being adapted into Indonesian based on validity and reliability tests, (4) to see the participants' demographic information based on the adapted HCL, (5) to test the criterion validity of HCL through sensitivity and specificity tests, (6) to test the criterion validity of HCL with suicide ideation as measured by SSI and (7) to test the construct validity (discriminant evidence) of HCL against depression as measured by BDI-II. In diagnosing Bipolar Disorder, information about Hypomania or Mania and Depression is needed. Hypomania or mania can be measured using HCL-33, while Depression is measured using BDI-II. Patients with Bipolar Disorder experience episodes of hypomania, episodes of mania, and episodes of depression but spend more time in their lives in depressive episodes. Episodes of mania and hypomania are states of increased mood and increased motor energy that are limited in different duration of time and differ in severity. While depressive episodes are sad or depressed moods, reduced interest or pleasure in various activities for at least two weeks, and there are changes in attitude and behaviour than usual, which causes damage to social functions, work, and other functional areas. The suicide ideation can lead to suicide is one of the symptoms of depression. As a result, there is a high number of deaths in the world due to suicide in patients with Bipolar Disorder. However, the diagnosis of Bipolar Disorder is difficult because there is no information about mania or hypomania from the patient, the clinician who does not ask about mania or hypomania episodes, and the patient shows symptoms of depression when meeting with the clinician so that diagnosis errors often become unipolar depression. Research on 158 samples who diagnosed with Bipolar Disorder by Psychiatrists from the Indonesian Bipolar Disorder community, namely BCI (Bipolar Care Indonesia) and the control group is participants without diagnosis of Bipolar Disorder. Sampling is done by non-random namely purposive samples in patients who have been diagnosed with Bipolar Disorder and convenience samples in the control group consist of participants who are not diagnosed with Bipolar Disorder. The data analysis method uses the quantitative correlational method. The results found reliability (Alpha Cronbach) of 0.84 in the dimension I "Active/Elated" and 0.77 in the second dimension "Irritable/Risk-taking". The result of the criterion validity is the sensitivity of 91.4% in Bipolar Disorder. While the specificity test of 80% was found in this study. HCL has good construct validity (discriminant evidence) against depression as measured by BDI-II which there is no significant correlation with BDI-II ($p > 0.05$). Test of the criterion validity with the suicide ideation resulting there is a significant positive correlation of HCL score of dimension II "Irritable / Risk-taking" with the suicide ideation as measured by SSI ($p < 0.05$). In conclusion, the Indonesian version of HCL has good validity and reliability in hypomania and mania screening especially in depressed participants and clinicians in Indonesia should use the adapted HCL recommended by researcher in the process of diagnosing Bipolar Disorder so that appropriate treatment can be given as early as possible. The aim is to prevent the severity of Bipolar Disorder which can lead to the suicide ideation which can lead to suicide.

Keywords: *Bipolar Disorder, Hypomania, HCL-33, HCL, Suicide Ideation*

1. INTRODUCTION

Bipolar is a chronic mood disorder decreasing its sufferers' life quality. According to WHO [1], there are about 60 million people suffer from Bipolar. In Indonesia, with various biological, psychological, and social factors as well as various citizens, the mental disorder case is increasing. Data from Ministry of Health of Indonesian Republic in 2013 show that the prevalence of mood disorder is about 14 million people or 6% of total Indonesian citizens (Ministry of Health of Indonesian Republic, "The Family's Role Supports People's Mental Health"). According to the leader of Bandung Bipolar Care of Indonesia (BCI), Andri Suratman, regarding to data collected by BCI, 2% of Indonesian people have mood disorder or well-known as Bipolar Disorder. 2% means that there are 72,860 people who have Bipolar Disorder (Halo Bandung, "BCI stated that there are 2% of Indonesian people who suffer from Bipolar Disorder").

Besides the high prevalence of Bipolar Disorder on Indonesian people, Bipolar Disorder can cause high risk of suicide on its sufferers. According to data by Association of Indonesian Psychiatrist Specialist in Jakarta (PDSJKI Jaya), the mortality rate on Bipolar Disorder sufferers is twice up to third times higher than other mental disorders, such as Schizophrenia. That number is even 20 times higher than common population. According to Nova Riyanti Yusuf, the leader of PDSJKI Jaya in Health Seminar of World Bipolar Day 2018, death on Bipolar disorder sufferers is mostly caused by suicide (Kumparan, "The Cause of High Mortality Rate of Bipolar Disorder Sufferers"). Moreover, a psychiatrist, Nurmiati Amir, stated that 25-60% of Bipolar Disorder sufferers had tried to commit suicide once in their life, and untimely death caused by suicide was 15 to 20%. In addition, about 10 to 20% of Bipolar Disorder sufferers were dead because of suicide (Kumparan, "The Cause of High Mortality Rate of Bipolar Disorder Sufferers").

Other studies find similar result. One-third of Bipolar Disorder patients had a history of committing suicide for the whole of their life [2]. Bipolar Disorder has an association with the increase of suicide ideation risk and attempted suicide with estimated rate on 10-15% of Bipolar Disorder patients [3]. Among individuals with Bipolar Disorder, the estimation of attempted suicide is 25-50% in which there is higher proportion of suicide ideation [4]. Then, 1 out of 10 Bipolar Disorder outpatients has increasing suicide ideation during 6-month follow-up study. Similar finding is found by the study conducted by Valtonen et al. [5] to 191 bipolar patients. It is found that 116 patients had suicide ideation and 80% of them had attempted suicide during their life.

The high rate of committing suicide on Bipolar Disorder patients can be prevented through giving appropriate treatment as early as possible. However, it is difficult to do the prevention because Bipolar Disorder is one of mental disorders which is hardly diagnosed accurately in the early giving impacts on its sufferers, such as high treatment cost, decreased productivity because they cannot work [6] and suicide [7]. In addition, nearly one-third of people with BD

report getting the wrong diagnosis at least once and it may even take up to 10 years before a correct diagnosis can be made in some cases [3, 6, 8, 9, 10].

Common diagnosis fault and high risk of suicide on Bipolar Disorder patients increase the concern of needs of anticipation, i.e. accurate Bipolar diagnosis as early as possible so that the patients can be treated appropriately. Therefore, screening hypomania/ mania is essential so that Bipolar Disorder showing depression symptom can be diagnosed accurately. Nowadays, there are five self-rated questionnaire measuring hypomania/ mania on Bipolar Disorder, such as MDQ (Mood Disorder Questionnaire), HCL-16 (Hypomania Checklist-16), HCL-20 (Hypomania Checklist-20), HCL-32 (Hypomania Checklist-32), and HCL-33 (Hypomania Checklist-33). Angst et al. [11] created HCL-32 based on DSM-IV-TR which had been adapted into some languages in many countries. Then, HCL-20 [12] and HCL-16 [13] which were the short version of HCL-32 were created. The distinction of HCL-32 from HCL-20 and HCL-16 is that it has higher internal consistency (Alpha Cronbach) than HCL-20 and HCL-16 (.86 versus .78 versus .73).

Another distinction of HCL-32 from MDQ is the sensitivity on HCL-32 is higher than MDQ (HCL-32: 87%-90% versus MDQ: 80%-84%). On the other hand, the specificity of MDQ is higher than HCL-32 (HCL-32: 26%-42% versus MDQ: 44%-69%) [14]. Moreover, regarding to a study on Bipolar Disorder in Spain conducted by Vieta et al. [15], HCL-32 has higher internal consistency than MDQ (.94 versus .90). The transcultural analysis on 2606 patients in five continents throughout the world (North Europe, South Europe, East Europe, South America, and East Asia) shows that HCL-32 has good stability [16].

Similar finding is also found by Gamma et al. [16] who conducted a transcultural study (BRIDGE Study) on 5635 patients from five different cultural areas, such as Iberia (Portugal and Spain), North Europe (Germany and Netherland), North Europe (Armenia/ Georgia, Bulgaria, Macedonia, Slovakia, and Ukraine), North Africa (Bosnia, Egypt, Iran, Morocco, and Pakistan), and East Asia (China, Korea, Taiwan, and Vietnam) shows that HCL-32 has Alpha Cronbach .96 with 82% of sensitivity and 73% of specificity [16].

Then, HCL-32 is modified into HCL-33 in which an item is added to the HCL-32 version. HCL-33 is the latest modification of HCL-32 which is more effective in measuring hypomania/ mania [17]. The distinction of HCL-33 from HCL-32 is that the reliability (Alpha Cronbach) of HCL-33 is higher than HCL-32 (.88 on the sample of Chinese and Taiwanese, .82 on the sample of Italian, and .86 on the sample of Swedish) [3]; so it is indicated that HCL-33 has higher internal consistency than HCL-32 [17]. Adaptation of HCL-33 [16] on the sample of Chinese shows that HCL-33 has great psychometric as the screening tool of BD-I and BD-II from non-Bipolar as it occurs on the sample of Italian and Swedish [3]. The Alpha Cronbach value for HCL-33 is .92 on the whole samples, .93 for factor I "Active/elated", and .76 for factor II "Risk-taking/irritable". The first factors (F1) are positive symptoms of hypomania/ mania (more active, happy, confidence, and cognitive

increase), while the second factors (F2) are negative aspects of hypomania/ mania (irritable, impulsive, sloppy, more drug abuse) [11]. However, a study by Feng et al. [17] does not study its correlation with the suicide ideation which becomes one of the greatest risks on individuals with Bipolar Disorders. Besides, the study does not collect data about comorbid on axis I and axis II of the participants. Meanwhile, psychiatric comorbid, whether it is axis I or axis II, can influence hypomania/ mania score, which is called comorbid General Anxiety Disorder [18] and comorbid Substance Abuse [19].

In Indonesia, adaptation and validation of HCL have not been studied, while accurate Bipolar Disorder diagnosis on patients showing depression symptom has to be conducted as early as possible. From the early diagnosis then Bipolar Disorder patients can be treated appropriately so that it can decrease the severity level of the Bipolar Disorder and it is expected to be able to prevent suicidal risks.

This study aims to look at the construct validity of the Indonesian version of HCL-33, namely (1) factor loading per dimension and overview of HCL-33 Mean (positive response) in Bipolar Disorder participants and MDD participants. In addition, this study (2) wanted to see the reliability (Alpha Cronbach), (3) the description of the recommended number of HCL items after being adapted into Indonesian based on validity and reliability tests, (4) to see the participants' demographic information based on the adapted HCL, (5) to test the criterion validity of HCL through sensitivity and specificity tests, (6) to test the criterion validity of HCL with suicide ideation as measured by SSI and (7) to test the construct validity (discriminant evidence) of HCL against depression as measured by BDI-II. In diagnosing Bipolar Disorder, information about Hypomania or Mania and Depression is needed.

HCL can be a measurement tool for Hypomania and Mania screening in individuals with depressive symptoms as a companion when the clinician conducts an interview based on DSM to his client when determining the diagnosis so that it can help the clinician in making the correct diagnosis. In addition, the results of this study can be used to increase clinicians' attention to the risk of suicide in Bipolar Disorder patients so that clinical assistance and treatment plans can be pursued in accordance with the results of careful measurements of suicide risk.

2. METHOD

2.1. Research Participants and Procedures

The characteristics of participants for research group are those who are in 18-65 years old as stated by the previous study by Feng et al. [17], have Bipolar Disorder diagnosis from psychologist/ psychiatric, and are willing to give informed consent. The sampling technique for the research group was using a purposive non-random (non-probability sampling) technique. In Indonesia, there is a Bipolar community consisting of people with Bipolar Disorder and

who are not diagnosed with Bipolar Disorder but have curiosity about Bipolar or whose relatives or relatives have Bipolar Disorder. This community is called BCI (Bipolar Care Indonesia). After holding a meeting with the Founder from BCI (Bipolar Care Indonesia), then the researcher obtained permission to collect questionnaire data via e-form (google form) in the BCI community.

Researchers managed to collect 70 participants with a diagnosis of Bipolar Disorder. The majority of participants' characteristics were female (78.6%), single status (60%), last education was a Bachelor's Degree (55.7%) and an average age of 28.69 (SD = 7.05).

For the control group, the characteristics of the participants are those who are in 18-65 years old, do not get diagnosis or have not gotten Bipolar Disorder diagnosis yet from Psychologist/ Psychiatric, and are agree to give informed consent. The control group of this study is a group of individuals who have never diagnosed by psychologist/ psychiatric; thus, they are assumed as normal by the researcher. The researcher got accessible participants from students of Tarumanagara University. The technique of choosing samples for control group uses non-probability sampling which is a kind of convenience sampling.

Researchers managed to collect 88 participants without a diagnosis of Bipolar Disorder. The majority of participants' characteristics were female (91%), single status (75%), the latest education was a Bachelor's Degree (58.8%) and the average age was 25.45 (SD = 6.58).

As a result, the total number of sampling from research and control group is 158 participants with majority characteristic is female (81%), single (68.4%), Bachelor Degree (58.2%) and Mean age 26.48 (SD=5.91).

Moreover, the approach used to answer the research questions is correlational quantitative approach. The research design used in this study is non-experimental research design, namely Differential Research and between-subject non-equivalent group design. Then, the purpose of this study is to test the reliability and validity of HCL-33 in Indonesian version. Since the researcher did not use manipulated condition for each group, the researcher could not generalize or balance each group. In this study, two groups have been available, i.e. members of BCI community (those who are diagnosed having Bipolar Disorder) as the research group and students who are not or not yet diagnosed having Bipolar Disorder as the control group. As it is previously mentioned that there is no manipulated condition, the researcher cannot ensure that both groups are equivalent. In this case, the study is called between-subjects non experimental: non-equivalent group design.

The data collection is administered via online using e-form through Google Form. The data collection was conducted from September 14 to October 17, 2019 through the Founder of BCI (Bipolar Care Indonesia) by distributing e-form link to BCI members from all over Indonesia via Social Media.

In conducting this study, some procedures are conducted. First, the researcher sent a link of Google Form to the leader (Contact Person) of BCI community with initial V. Then, V distributed the link via Whatsapp. Participants who filled in

the agreement statement then filled in the e-form and sent the responses via online. In this case, every participant who was willing to participating in this study should have mentioned e-mail address and phone number as the control data and for giving reward in a form of OVO or Go-Pay balance worth Rp. 10.000. Those responses had been automatically delivered to the researcher's Google Form master.

After the responses are collected, the researcher imported the data to excel. The data were then re-coded based on the blueprint of dimensions in the measurement tool and scores of each item. After that, the data in excel were exported to SPSS for data processing. Before calculating the reliability, consistency or respondents' serious responses test based on the responses of HCL-33 were conducted. It was aimed at adding odd and even items from each dimension, and then multiplying the results of odd and even items from each dimension. The result of the multiplication was then screened. Participants who got $\leq - .06$ were eliminated and excluded from the next data processing.

Reliability test of dimension "Active/Elated" and dimension "Irritable/Risk-Taking" was then administered after screening the data. The internal reliability (Alpha Cronbach) will be accepted if the minimum value is .70 [17]. Item-total correlation with the minimum level of .30 to above is considered as the item with discriminative ability [20]. Therefore, if the items with item-total correlation level under .30 are excluded from the reliability calculation, Alpha Cronbach of each dimension will increase more than .80.

Factor analysis calculation using SPSS is by calculating Factor Loading of each item which is classified into dimension I "Active/Elated" and dimension II "Irritable/Risk-taking". In the previous study, the factor loading is $< .40$ [17]. In this study, it is found that there are eight items having factor loading of $< .40$: item number 6 and 10 in dimension I "Active/Elated" and item number 28-33 in dimension II "Irritable/Risk-taking".

Data of this study are analyzed with SPSS (Statistical Package for the Social Sciences) 25.0 version. The level of significant is determined on .05 (two tailed). Previously, normality test of data were tested using Komogorov Smirnov linear regression analysis. The validity of criterion with discriminant test calculation consists of discriminant HCL score consisting of HCL dimension I and dimension II score. The total score of BDI and SSI score were tested with Pearson correlation analysis. Then, the construct validity was calculated with difference mean test of current mood state on Bipolar Disorder and MDD group using Independent Sample t-test and One Way ANOVA. Moreover, the second construct validity was administered with total score differ test of HCL-33, including dimension I "Active/Elated" and HCL-33 dimension II "Irritable/risk-taking" score, BDI score, and SSI score on Bipolar Disorder group with and without comorbid using Independent Sample t-test.

2.2. Measurement/ Research Instrument

2.2.1. HCL-33 (Hypomania Checklist-33)

HCL-33 consists of two dimensions. The first dimension is called dimension "Active/Elated" in which the score of hypomania/ mania will be higher if individuals need less sleep, feel more energy, have more confidence, enjoy their job more, do more interaction, more often or willing to travelling, physically more active, plan more activities or projects, have more creative ideas, have less shame, wear more colorful dress or make-up, want to meet or meet more people, are more interested in sexual activities, talk more, think faster, make more joke or joke when talking, do any new things, do something faster or easier, and have higher mood and optimistic.

The second dimension is called dimension "Irritable/Risk-taking". The score of hypomania/ mania will be higher if individuals take risks to drive faster or speeding, spend more money or wasteful, take risks in daily life (in jobs or other activities), get involved in fight, drink more coffee, smoke more cigarette, drink more alcohol, consume more illegal drugs, gamble more, and eat more. Besides, high irritability, such as being easily distracted, having jumping minds when thinking about topics, more impatient or irritable, and doing any tiring or annoying behavior to other people can also make the score of hypomania/ mania higher.

2.2.1.1 Items

HCL-33 is the last modification of HCL-32 which is a screening tool of hypomania/ mania created by Prof. Jules Angst from Zurich University Psychiatric Hospital, Zurich, Switzerland in 2005. Based on DSM-IV, Prof. Jules Angst and his colleagues created self-reported questionnaire to measure hypomania/ mania, especially on patients with MDD (Major Depressive Disorder) to help clinicians in diagnosing Bipolar Disorder [3]. In this case, HCL-32 consists of 32 positive items with "yes" or "no" response. HCL-32 consists of two dimensions: 20 items on dimension I "Active/Elated" and 12 items on dimension II "Irritable/Risk-Taking".

Dimension "Active/Elated" is the indicator of hypomania/ mania symptom related to energy and activities (the increase of activities, energy, social contact, communication with other people, and confidence). Then, dimension "Irritable/Risk-taking" is a symptom or an aspect which is more negative on hypomania/mania, such as irritable, impulsive, sloppy, alcohol or drug abuse [11].

A study conducted by Feng et al. [17] to 350 patients of MDD found that HCL-33 in which items about sexuality, such as "increased libido" and "increased sexual activity", become one item. Thus, the number of item is 33 with dimension I "Active/Elated" consisting of 19 items (number 1-6, 10-19, 21, 23, and 27) and dimension II "Irritable/Risk-Taking" consisting of 12 items (number 7-9, 20, 22, 24-26, and 28-33). The result of reliability is found that the reliability of dimension I is .93 and dimension II is .76 [17]. The scale of responses is 0-1 with 0 as the minimum score and 33 for the maximum score.

These are the positive items on dimension I “Active/Elated” and dimension II “Irritable/Risk-taking” in English version.

Table 1 HCL-33 Items of Dimension I “Active/Elated” in English Version

No	“Active/Elated” Dimension
1	<i>I need less sleep</i>
2	<i>I feel more energetic and more active</i>
3	<i>I am more self-confident</i>
4	<i>I enjoy my work more</i>
5	<i>I am more sociable (make more phone calls, go out more)</i>
6	<i>I want to travel and/or do travel more</i>
10	<i>I am physically more active (sport etc.)</i>
11	<i>I plan more activities or projects</i>
12	<i>I have more ideas; I am more creative</i>
13	<i>I am less shy or inhibited</i>
14	<i>I wear more colorful and more extravagant clothes/make-up</i>
15	<i>I want to meet or actually do meet more people</i>
16	<i>I am more interested in sex and/or I am more sexually active</i>
17	<i>I talk more</i>
18	<i>I think faster</i>
19	<i>I make more jokes or puns when I am talking</i>
21	<i>I engage in lots of new things</i>
23	<i>I do things more quickly and/or more easily</i>
27	<i>My mood is higher, more optimistic</i>

Table 2 HCL-33 Items of Dimension II “Irritable/Risk-taking” in English Version

No	“Irritable/Risk-taking” Dimension
7	<i>I tend to drive faster or take more risks when driving</i>
8	<i>I spend more money/too much money</i>
9	<i>I take more risks in my daily life (in my work and/or other activities)</i>
20	<i>I am more easily distracted</i>
22	<i>My thoughts jump from topic to topic</i>
24	<i>I am more impatient and/or get irritable more easily</i>
25	<i>I can be exhausting or irritating for others</i>
26	<i>I get into more quarrels</i>
28	<i>I drink more coffee</i>
29	<i>I smoke more cigarettes</i>
30	<i>I drink more alcohol</i>
31	<i>I take more drugs (sedatives, anxiolytics, stimulants...)</i>
32	<i>I game or gamble more</i>
33	<i>I eat more or I binge more</i>

2.2.1.2 Reliability

HCL-33 has .96 for reliability of Alpha Cronbach for the total of both dimensions. Alpha Cronbach .97 for dimension I “Active/Elated” and .91 for dimension II “Irritable/ Risk-Taking” [17,21].

2.2.1.3 Validity

Convergent validity with MDQ (Mood Disorder Questionnaire) measures the correlation between the score of hypomania/ mania from MDQ with the total score of HCL-33 [17, 21]. The respondents are grouped into two groups based on the score of MDQ, i.e. normal (0-2) and hypomania/ mania (≥ 3). The result shows that respondents with hypomania/ mania have higher HCL-33 score significantly than control group ($p < 0.001$) [17]. Discriminant validity with HAMD (Hamilton Depression Rating Scale) found that there was not significant correlation between HCL-33 total score and level of depression severity which is measured by HAMD [17]. The validity of criterion measuring sensitivity and specificity shows good result, namely 72% and 74% respectively [17].

2.2.1.4 Content Validity/ Expert Judgment

Content validity of HCL-33 is administered through Expert Judgment method. First, the researcher translated HCL-33 to Indonesian by the help of Sworn Translator. Then, the translation was revised by the researcher and advisors in order to be more communicative; thus, the conveyed message will not be ambiguous and can avoid research finding bias. The final revision was then scored by five experts of Clinical Psychiatric and Psychologist from inside and outside Tarumanagara University. The format of scoring table by expert can be seen in Table 3.

Table 3 Expert Judgment Format

Questionnaire Items	Translation Results by Sworn Translator	Translation Revisions	Appropriate	Inappropriate	Suggestion

All items have appropriate judgment from the five experts. Revision on sentence in each item is obtained from the most frequent suggestions from the experts. If the suggestions from the three experts were different, the researcher decided to choose which suggestions to be chosen. In this case, each expert gave judgment whether the items on the measurement tools were suitable with the measured construct. There are two assumptions [22] :

- a. If the experts who judge are more than the total number of experts, the item has particular level of content validity.

b. The more experts judge the higher the level of content validity is

The formula to calculate CVR (Content Validity Ratio) is:

$$CVR = \frac{n_e - (N / 2)}{N / 2} \tag{1}$$

Ne = the number of experts stating *appropriate*

N = the number of experts judging

If experts stating *appropriate* are fewer, the value of CVR is negative. On the other hand, if a half of the experts stating *appropriate* and the other half stating *inappropriate*, the value of CVR is zero. Table 4 is the table of minimum value of CVR based on the number of experts [22].

Table 4 Norm of CVR

Number of assessors	Minimum CVR value
5	.99
6	.99
7	.99
8	.75
9	.78
10	.62
11	.59
12	.56
13	.54
14	.51
15	.49
20	.42

The calculation of content validity of HCL-33 according to CVR formula:

$$CVR = (5 - 2.5) / 2.5 = 2.5 / 2.5 = 1$$

According to the CVR calculation, all experts state that all HCL-33 items are appropriate; thus, 1 is obtained. It means that all items in HCL-33 have good content validity which is appropriate to measure hypomania/ mania construct on Bipolar Disorder. Then, after the process of expert judgment, HCL-33 items in Indonesian are obtained as the final.

Table 5 HCL-33 Items according to Expert Judgment Result

No	HCL-33 Items
1	<i>I need less sleep</i>
2	<i>I feel more energetic and more active</i>
3	<i>I am more self-confident</i>
4	<i>I enjoy my work more</i>
5	<i>I am more sociable (make more phone calls, go out more)</i>
6	<i>I want to travel and/or do travel more</i>

7	<i>I tend to drive faster or take more risks when driving</i>
8	<i>I spend more money/too much money</i>
9	<i>I take more risks in my daily life (in my work and/or other activities)</i>
10	<i>I am physically more active (sport etc.)</i>
11	<i>I plan more activities or projects</i>
12	<i>I have more ideas; I am more creative</i>
13	<i>I am less shy or inhibited</i>
14	<i>I wear more colorful and more extravagant clothes/make-up</i>
15	<i>I want to meet or actually do meet more people</i>
16	<i>I am more interested in sex and/or I am more sexually active</i>
17	<i>I talk more</i>
18	<i>I think faster</i>
19	<i>I make more jokes or puns when I am talking</i>
20	<i>I am more easily distracted</i>
21	<i>I engage in lots of new things</i>
22	<i>My thoughts jump from topic to topic</i>
23	<i>I do things more quickly and/or more easily</i>
24	<i>I am more impatient and/or get irritable more easily</i>
25	<i>I can be exhausting or irritating for others</i>
26	<i>I get into more quarrels</i>
27	<i>My mood is higher, more optimistic</i>
28	<i>I drink more coffee</i>
29	<i>I smoke more cigarettes</i>
30	<i>I drink more alcohol</i>
31	<i>I take more drugs (sedatives, anxiolytics, stimulants...)</i>
32	<i>I game or gamble more</i>
33	<i>I eat more or I binge more</i>

2.2. BDI-II (Beck Depression Inventory–II)

BDI was created by Beck et al. in 1996 [23]. The operational definition of BDI is a condition in which depression score will be higher if the individuals are sad, are pessimistic, feel for being failed in the past, lose passion, feel guilty, feel being punished, hate themselves, criticize themselves, have suicide ideation, cry, feel anxious, barely make decision, feel not feasible, feel not energized, have sleeping pattern change, are irritable, have appetite change, have difficulty in concentrating, are tired, and lose sexual desire. In this case, BDI consists of a dimension, namely depression which consists of 21 positive items. Each item has range of score from 0-3. The calculation of score is administered by adding score of each item. The total score indicates the level of depression severity which can be classified into four categories. Score 0-9 is “None/ Minimal”, 10-18 is “Mild to Moderate”, 19-29 is “Moderate to Severe”, and 30-63 is “Severe” [24]. Similar to BDI-1, scoring of BDI-II is administered by adding the score from each item of 21 items. Each item has score 0-3. The total score is about 0-63. Total score can be categorized into four categories: 0-13 “None/ Minimal”, 14-

19 “Mild”, 10-28 “Moderate”, and 29-63 “Severe”. The Alpha Cronbach value of BDI-II is .91 [23].

2.2.3. SSI (The Scale for Suicide Ideation)

The Scale for Suicide Ideation (SSI) was created by Beck et al. [25]. It is aimed at quantifying the intensity of recent desire to committing suicide by measuring various dimensions of minds or hopes to destroy self. The operational definition of SSI is the lower the desire to stay alive, the higher the desire to end life; the higher the desire to die than to live, the higher the desire to do suicide; the more frequent the desire to do suicide, the more frequent the urge to do suicide. Moreover, the score of suicide ideation will be higher if the individuals are agree on suicide ideation, unable to suppress the desire to do suicide, have an attempt to do suicide, have a reason of doing suicide to manipulate other people or to overcome or escape from problems, have an attempt to realize the idea of doing suicide, think or plan clear planning as the preparation for death, have specific planning to do suicide, have more opportunity in considering or thinking about suicide, have real preparation like collecting pills or tablets, let something threaten or endanger their life, have a courage and ability to do suicide, and try to refrain themselves in expressing the idea of doing suicide, and even try to hide the idea of doing suicide.

In this case, SSI consists of 19 items, but an item called “suicidal note” is excluded because it does not have coefficient value since all participants have score 0 on that item. Each item has level of intensity 0-2; thus, the score is about 0-38. Moreover, SSI consists of three factors: factor I

is called “Active Suicidal Desire” which consists of 12 items; factor II is called “Preparation” consisting of three items; and factor III is called “Passive Suicidal Desire” consisting of three items. The examples of positive SSI items are “How much is your desire to stay alive?”, “How much is your reason to live rather than to die?”, “If you have the desire to commit suicide, how often does that idea come?”, “How far can you suppress the desire to commit suicide?”, “What is your reason when you think about having a suicide?”. The reliability value (Alpha Cronbach) is .89 [25].

3. FINDINGS

3.1 Main Analysis

Construct validity test is the description of loading factor per dimension factor and the description of HCL mean (positive response) difference on participants with Bipolar Disorder and MDD. The analysis factor is administered to 33 items from HCL-33 with two dimensions: dimension I “Active/Elated” and dimension II “Irritable/Risk-Taking”. The component of analysis uses Varimax rotation. According to Table 6, there are eight items having loading factor below .40, such as item number 6, 10, and 28-33. Item of dimension I “Active/Elated” which should belong to the dimension II Irritable/Risk-Taking (Item-total correlation < .20) is item number 1 stating “I do not really need to sleep” and number 16 stating “I prefer to talk or reading about sexual or to do sexual activities actively”.

Table 6 Loading Factor per Dimension of HCL-33

Dimension	No	Item	Loading Factors	
			Dimension I	Dimension II
			Active/Elated	Irritable/Risk-taking
Active/Elated	1	<i>I need less sleep</i>	.229	.458
Active/Elated	2	<i>I feel more energetic and more active</i>	.715	-.159
Active/Elated	3	<i>I am more self-confident</i>	.693	-.282
Active/Elated	4	<i>I enjoy my work more</i>	.588	-.390
Active/Elated	5	<i>I am more sociable (make more phone calls, go out more)</i>	.577	-.088
Active/Elated	6	<i>I want to travel and/or do travel more</i>	.399	.203
Irritable/Risk-taking	7	<i>I tend to drive faster or take more risks when driving</i>	.034	.554
Irritable/Risk-taking	8	<i>I spend more money/too much money</i>	.152	.507

Irritable/Risk-taking	9	<i>I take more risks in my daily life (in my work and/or other activities)</i>	.081	.515
Active/Elated	10	<i>I am physically more active (sport etc.)</i>	.368	-.123
Active/Elated	11	<i>I plan more activities or projects</i>	.435	.134
Active/Elated	12	<i>I have more ideas; I am more creative</i>	.522	.058
Active/Elated	13	<i>I am less shy or inhibited</i>	.761	-.104
Active/Elated	14	<i>I wear more colorful and more extravagant clothes/make-up</i>	.458	.164
Active/Elated	15	<i>I want to meet or actually do meet more people</i>	.523	.102
Active/Elated	16	<i>I am more interested in sex and/or I am more sexually active</i>	.117	.412
Active/Elated	17	<i>I talk more</i>	.504	.074
Active/Elated	18	<i>I think faster</i>	.535	.178
Active/Elated	19	<i>I make more jokes or puns when I am talking</i>	.504	.041
Irritable/Risk-taking	20	<i>I am more easily distracted</i>	-.194	.738
Active/Elated	21	<i>I engage in lots of new things</i>	.502	.077
Irritable/Risk-taking	22	<i>My thoughts jump from topic to topic</i>	.011	.607
Active/Elated	23	<i>I do things more quickly and/or more easily</i>	.495	.078
Irritable/Risk-taking	24	<i>I am more impatient and/or get irritable more easily</i>	-.112	.732
Irritable/Risk-taking	25	<i>I can be exhausting or irritating for others</i>	-.025	.679
Irritable/Risk-taking	26	<i>I get into more quarrels</i>	-.176	.678
Active/Elated	27	<i>My mood is higher, more optimistic</i>	.723	-.325
Irritable/Risk-taking	28	<i>I drink more coffee</i>	.008	.393
Irritable/Risk-taking	29	<i>I smoke more cigarettes</i>	-.068	.222
Irritable/Risk-taking	30	<i>I drink more alcohol</i>	.119	.000

Irritable/Risk-taking	31	<i>I take more drugs (sedatives, anxiolytics, stimulants...)</i>	-.076	.245
Irritable/Risk-taking	32	<i>I game or gamble more</i>	.074	.240
Irritable/Risk-taking	33	<i>I eat more or I binge more</i>	.069	.232

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 3 iterations.

Then, the researcher wants to identify the difference mean of positive response on HCL-33 between participants with Bipolar Disorder and participants with MDD as it can be seen in Table 7. It shows that there is difference between the individual group with Bipolar Disorder and MDD in term

of positive response in each HCL-33 item, except for item number 16, 21, 26, 28, and 29.

To know the significant difference of mean score of HCL-33 between participants with Bipolar Disorder and participants with MDD, test of different mean using One Way ANOVA is administered.

Table 7 The Frequency of Positive Response between Participants with Bipolar Disorder and Participants with MDD

Dimension	No	Items	Frequency of Positive Response	
			Mean	
			Bipolar Disorder	MDD
Active/Elated	1	<i>I need less sleep</i>	.47	.25
Active/Elated	2	<i>I feel more energetic and more active</i>	.82	.50
Active/Elated	3	<i>I am more self-confident</i>	.79	.50
Active/Elated	4	<i>I enjoy my work more</i>	.84	.75
Active/Elated	5	<i>I am more sociable (make more phone calls, go out more)</i>	.60	.50
Active/Elated	6	<i>I want to travel and/or do travel more</i>	.71	.00
Irritable/Risk-taking	7	<i>I tend to drive faster or take more risks when driving</i>	.29	.25
Irritable/Risk-taking	8	<i>I spend more money/too much money</i>	.61	.50
Irritable/Risk-taking	9	<i>I take more risks in my daily life (in my work and/or other activities)</i>	.35	.25
Active/Elated	10	<i>I am physically more active (sport etc.)</i>	.50	.25
Active/Elated	11	<i>I plan more activities or projects</i>	.79	.50
Active/Elated	12	<i>I have more ideas; I am more creative</i>	.86	.50
Active/Elated	13	<i>I am less shy or inhibited</i>	.74	.50
Active/Elated	14	<i>I wear more colorful and more extravagant clothes/make-up</i>	.37	.00
Active/Elated	15	<i>I want to meet or actually do meet more people</i>	.51	.00
Active/Elated	16	<i>I am more interested in sex and/or I am more sexually active</i>	.37	.75
Active/Elated	17	<i>I talk more</i>	.74	.75
Active/Elated	18	<i>I think faster</i>	.81	.50
Active/Elated	19	<i>I make more jokes or puns when I am talking</i>	.69	.25
Irritable/Risk-taking	20	<i>I am more easily distracted</i>	.55	.50
Active/Elated	21	<i>I engage in lots of new things</i>	.58	.75
Irritable/Risk-taking	22	<i>My thoughts jump from topic to topic</i>	.78	.25
Active/Elated	23	<i>I do things more quickly and/or more easily</i>	.75	.25
Irritable/Risk-taking	24	<i>I am more impatient and/or get irritable more easily</i>	.65	.50

Irritable/Risk-taking	25	<i>I can be exhausting or irritating for others</i>	.66	.50
Irritable/Risk-taking	26	<i>I get into more quarrels</i>	.41	.50
Active/Elated	27	<i>My mood is higher, more optimistic</i>	.76	.25
Irritable/Risk-taking	28	<i>I drink more coffee</i>	.37	.50
Irritable/Risk-taking	29	<i>I smoke more cigarettes</i>	.13	.25
Irritable/Risk-taking	30	<i>I drink more alcohol</i>	.05	.00
Irritable/Risk-taking	31	<i>I take more drugs (sedatives, anxiolytics, stimulants...)</i>	.08	.00
Irritable/Risk-taking	32	<i>I game or gamble more</i>	.15	.00
Irritable/Risk-taking	33	<i>I eat more or I binge more</i>	.64	.50

Table 8 Descriptive Information of HCL-33 Score on Participants with Bipolar Disorder and Participants with MDD

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Tot_HCL	Bipolar Disorder	134	.54	.15	.01	.51	.56	.19	1.0
	MDD	4	.36	.20	.10	.04	.69	.11	.58

Note: Tot_HCL is the total score of HCL-33 on participants with Bipolar Disorder and participants with MDD

Table 9 ANOVA Difference Test of Score HCL-33 between Participants with Bipolar Disorder and Participants with MDD

		Sum of Squares	df	Mean Square	F	Sig.
Tot_HCL	Between Groups	.315	2	.157	6.738	.002
	Within Groups	3.618	155	.023		
	Total	3.933	157			

Note: Tot_HCL is the total score of HCL-33 on participants with Bipolar Disorder and participants with MDD

Table 9 shows that there is significant difference of mean on HCL-33 score between participants with Bipolar Disorder and participants with MDD ($p < .05$).

3.2 Reliability Test (Alpha Cronbach)

The internal consistency by calculating the value of Alpha Cronbach of HCL-33 is .836 for dimension I “Active/Elated” and .768 for dimension II “Irritable/ Risk-Taking”.

Table 10 Alpha Cronbach HCL-33 for Dimension I “Active/Elated”

Cronbach's	
Alpha	N of Items
.836	19

Table 11 Alpha Cronbach HCL-33 for Dimension II “Irritable/Risk-taking”

Cronbach's	
Alpha	N of Items
.768	14

3.3 The Description of Recommended HCL Items

Regarding the loading factor of each item in which items with factor loading is $< .40$ are excluded from the measurement tools, the researcher recommends 25 items from the adapted HCL. Moreover, regarding to factor analysis, dimension or factor of each item is adjusted. Then, 25 items namely 15 items for dimension “Active/Elated”

and 10 items for dimension “Irritable/Risk-Taking”. Table 12 is the recommendations from adapted HCL.

Table 12. The Description of HCL Items which are not Recommended by the Researchers

Dimension	No	HCL Items	Description
Active/Elated Active/Elated	6 10	<i>I want to travel and/or do travel more</i> <i>I am physically more active (sport etc.)</i>	Not Recommended Not Recommended
Irritable/Risk-taking	28	<i>I drink more coffee</i>	Not Recommended
Irritable/Risk-taking	29	<i>I smoke more cigarettes</i>	Not Recommended
Irritable/Risk-taking	30	<i>I drink more alcohol</i>	Not Recommended
Irritable/Risk-taking	31	<i>I take more drugs (sedatives, anxiolytics, stimulants...)</i>	Not Recommended
Irritable/Risk-taking	32	<i>I game or gamble more</i>	Not Recommended
Irritable/Risk-taking	33	<i>I eat more or I binge more</i>	Not Recommended

3.3.1 Demography Information of Participants based on Adapted HCL

Regarding the result of diagnosis by the researcher, it is found that 134 participants with Bipolar Disorder (Bipolar Disorder I= 103, Bipolar Disorder II= 12, Other Bipolar Disorder= 19), 4 participants with MDD, and 20 normal participants (without manic, hypomanic, and depressive symptom). Most research participants are women (81%), single (68.4%), graduated from bachelor degree (58.2%), and average of 26 years old (Mean= 26.48, SD= 5.91).

3.4 Validity of Criterion through Sensitivity and Specificity Test

As the indicator of screening characteristics of HCL, the researcher looks for sensitivity and specificity. Sensitivity and specificity are calculated by analyzing crosstabs between diagnosis based on HCL and diagnosis from Psychologist/ Psychiatrist. The sensitivity on Bipolar Disorder participants is 91.4%, while specificity on normal participants is 80%.

3.4.1 Validity of Criterion Test on Suicide Ideation
3.4.1.1 Bipolar Disorder Group

The correlation between HCL score of dimension I “Active/Elated” and dimension II “Irritable/Risk-Taking” on BDI (Beck Depression Inventory) score and SSI (The Scale of Suicide Ideation) score of Bipolar Disorder group is conducted using Pearson Correlation.

Table 13 The Pearson Correlation between HCL Score, Active/Elated HCL Score, BDI Score, and SSI Score on Bipolar Disorder Participants

		Tot_BDI	Tot_SSI
Tot_HCL	Pearson Correlation	.116	-.013
	Sig. (2-tailed)	.183	.885
	N	134	134
Tot_HCL_AE	Pearson Correlation	-.214*	-.221*
	Sig. (2-tailed)	.013	.010
	N	134	134
Tot_HCL_RT	Pearson Correlation	.407**	.224**
	Sig. (2-tailed)	.000	.009
	N	134	134

***. Correlation is significant at .01 level (2-tailed).*

**. Correlation is significant at .05 level (2-tailed).*

Note: Tot_HCL is the total score of HCL on Bipolar Disorder participants; Tot_HCL_AE is the total score of HCL dimension “Active/Elated”; Tot_HCL_RT is the total score of HCL dimension “Irritable/Risk-Taking”.

Table 13 shows that:

- The total score of HCL doesn’t correlate significantly with BDI score ($p > .05$) and SSI score ($p > .05$).
- The total score of HCL dimension “Active/Elated” correlates negatively, significantly on BDI score ($p < .05$) and SSI score ($p < .05$).
- The total score of HCL dimension “Irritable/Risk-Taking” correlates positively, very significantly on BDI score ($p < .01$) and SSI score ($p < .01$).

It can be concluded that the higher the level of increased activities the lower the score of depression and suicide ideation. On the other hand, the higher the irritability and risk-taking, the higher the score of depression and suicide ideation. However, there is not significant correlation between total score of HCL-33 and score of depression and suicide ideation.

3.4.1.2 MDD Group

The correlation between HCL score dimension I “Active/Elated” and dimension II “Irritable/Risk-taking” and BDI (Beck Depression Inventory) and SSI (The Scale of Suicide Ideation) score on MDD group is calculated using Pearson Correlation.

Table 14 Pearson Correlation between HCL Score, HCL Active/ Elated Score, BDI Score, and SSI Score on MDD Participants

		Tot_BDI	Tot_SSI
Tot_HCL	Pearson Correlation	-.811	-.711
	Sig. (2-tailed)	.189	.289
	N	4	4
Tot_HCL_AE	Pearson Correlation	.164	.328
	Sig. (2-tailed)	.836	.672
	N	4	4
Tot_HCL_RT	Pearson Correlation	-.985*	-.965*
	Sig. (2-tailed)	.015	.035
	N	4	4

*. Correlation is significant at .05 level (2-tailed).

Note: Tot_HCL is the total score of HCL on MDD participants; Tot_HCL_AE is the total score of HCL dimension “Active/Elated”; Tot_HCL_RT is the total score of HCL dimension “Irritable/Risk-Taking”.

Table 14 shows that:

- The total score of HCL does not correlate significantly on BDI and SSI score ($p > .05$).
- The total score of HCL dimension “Active/Elated” does not correlate significantly on BDI score ($p > .05$) and SSI score ($p > .05$).
- The total score of HCL dimension “Irritable/Risk-Taking” correlates negatively, significantly on BDI score ($p > .05$) and SSI score ($p < .05$).

It can be concluded that there is difference between individuals with Bipolar Disorder and individuals with Depression Unipolar or also known as MDD. On individuals with MDD, the higher the irritability and risk-taking the lower the score of depression is. On both Bipolar Disorder and MDD group, there is not significant difference between total score of HCL and depression and suicide ideation score.

Table 17 The Correlation between Current Mood State and HCL-33 Score on Bipolar Disorder and MDD Participants

Current mood state	BD (n=134)			MDD (n=4)		
	N	HCL-33 score		N	HCL-33 score	
		Mean	SD		Mean	SD
1. Very worse than usual	7	0.48	0.16	1	0.45	-
2. Worse than usual	20	0.47	0.11	2	0.35	0.34
3. A little worse than usual	32	0.55	0.14	1	0.32	-
4. No better or worse than usual	28	0.54	0.16	0	-	-
5. A little better than usual	30	0.55	0.17	0	-	-
6. Better than usual	17	0.60	0.15	0	-	-
7. Very better than usual	0	0	0	0	-	-
p Value by Independent Sample t-test		>0.05			>0.05	
Note: BD= Bipolar Disorder; MDD= Major Depressive Disorder						

3.5 Construct Validity Test (Discriminant Evidence) on Depression

To test the significant difference of HCL mean score on participants with Bipolar Disorder and MDD, Pearson Correlation is used.

Table 15 Descriptive Information of HCL Mean Score and BDI Score on Bipolar Disorder and MDD Participants

	Mean	Std. Deviation	N
Tot_HCL	.534	.157	138
Tot_BDI	1.500	.514	138

Table 16 Pearson Correlation between HCL Score and BDI Score on Bipolar Disorder and MDD Participants

		Tot_HCL	Tot_BDI
Tot_HCL	Pearson Correlation	1	.083
	Sig. (2-tailed)		.332
	N	138	138
Tot_BDI	Pearson Correlation	.083	1
	Sig. (2-tailed)	.332	
	N	138	138

Note: Tot_HCL is the total score of HCL on Bipolar Disorder and MDD participants; Tot_BDI is the total score of BDI on Bipolar Disorder and MDD participants.

Table 16 shows that there is not significant correlation between HCL and BDI score ($p > .05$) which means that HCL has good discriminant validity on BDI.

3.6 Additional Analysis

3.6.1 The Comparison between Current Mood State and HCL Score

Analysis using Independent Sample t-test is conducted to do different mean test between current mood state and total score of HCL on Bipolar Disorder and MDD group.

Table 17 shows that there is not significant correlation between current mood state and total score of HCL on both Bipolar Disorder and MDD group ($p > .05$). The analysis of difference mean test using One Way ANOVA to see the significant difference of mean among current mood state on Bipolar Disorder and MDD participant also shows that the result is not significant ($p > .05$).

3.6.2 The Comparison of SSI score on Bipolar Disorder participants with comorbid and Bipolar Disorder participants without comorbid

The difference mean test using Independent Sample t-test is aimed at calculating the correlation between comorbid and without comorbid on Bipolar Disorder group towards SSI score.

Table 18 Descriptive Information of HCL Score, Dimension Irritable/Risk-taking HCL, and SSI Score on Bipolar Disorder Participants with Comorbid and Bipolar Disorder Participants without Comorbid

	Comorbid	N	Mean	Std. Deviation	Std. Error Mean
Tot_HCL	With Comorbid	53	.588	.166	.023
	Without Comorbid	81	.506	.137	.015
Tot_HCL_RT	With Comorbid	53	.478	.214	.030
	Without Comorbid	81	.363	.189	.021
Tot_SSI	With Comorbid	53	.776	.430	.059
	Without Comorbid	81	.592	.467	.052

Note: Tot_HCL is the total score of HCL on Bipolar Disorder participants with Comorbid and without Comorbid; Tot_HCL_RT is the total score of HCL dimension “Irritable/Risk-taking” on Bipolar Disorder participants with Comorbid and without Comorbid; Tot_SSI is the total score of SSI on Bipolar Disorder participants with Comorbid and without Comorbid.

Table 19 Independent Sample t-test between HCL Score, Dimension Irritable/Risk-Taking HCL, and SSI Score on Bipolar Disorder Participants with Comorbid and without Comorbid

		F	Sig.	t	df	Sig. (2-tailed)
Tot_HCL	Equal variances assumed	4.878	.029	3.087	132	.002
	Equal variances not assumed			2.965	96.129	.004
Tot_HCL_RT	Equal variances assumed	.685	.409	3.266	132	.001
	Equal variances not assumed			3.184	101.572	.002
Tot_SSI	Equal variances assumed	.356	.552	2.293	132	.023
	Equal variances not assumed			2.333	117.721	.021

Note: Tot_HCL is the total score of HCL on Bipolar Disorder participants with Comorbid and without Comorbid; Tot_HCL_RT is the total score of HCL dimension “Irritable/Risk-taking” on Bipolar Disorder participants with Comorbid and without Comorbid; Tot_SSI is the total score of SSI on Bipolar Disorder participants with Comorbid and without Comorbid.

Table 19 shows that:

- a. There is significant difference on total score of HCL ($p < .05$) between Bipolar Disorder with comorbid and without comorbid.
- b. There is significant difference on total score of HCL dimension II “Irritable/Risk-taking” ($p < .05$) between Bipolar Disorder with comorbid and without comorbid.

- c. There is significant difference on total score of SSI ($p < .05$) between Bipolar Disorder with comorbid and without comorbid.

It can be concluded that there is a significant difference of total score of HCL-33, HCL dimension II “Irritable/Risk-taking” score, and suicide ideation score between individuals with Bipolar Disorder with comorbid and without comorbid.

4. DISCUSSION AND SUGGESTION

This study has answered the purpose stated in Chapter 1 of Introduction, namely (1) to know the validity of HCL-33 in Indonesian version by identifying loading factor per dimension and mean description (positive response) of HCL-33 on Bipolar Disorder and MDD participants, (2) to know the reliability (Alpha Cronbach) of HCL-33 in Indonesian version, (3) to know the description of the number of recommended HCL-33 items after being adapted to Indonesian, (4) to know the description of demography data of participants based on the adapted HCL (HCL-25), (5) to test validity of criterion, namely the validity when using sensitivity and specificity test and predictive validity of HCL-33 using sensitivity and specificity test, (6) to test validity of criterion on suicide ideation measured by SSI, and (7) to test the construct validity of HCL-33 on depression measured by BDI.

Loading factor below .40 is on item number 6, 10, and 28-33. Item number 6 stating "I want to travel and/or do travel more" does not match with Indonesian custom in which traveling referring to long distance traveling or vacation is rarely done by people, especially for those who work, because company regulation about taking holiday is only given once in a year. Then, item number 10 stating "I am physically more active (sport etc.)." For Indonesian people, physical activities like exercise are barely done due to working and family activities. Besides, for item number 28 stating "I drink more coffee" does not suit Indonesian people because not all Indonesian people, especially women (the majority of this research participants), drink coffee. Then, number 29 stating "I smoke more frequently or a lot" also does not suit because Indonesian women barely smoke. Besides, items number 30-32 do not suite because Indonesian people mostly uphold their religion values in which drinking alcohol, having illegal drugs, and gambling violate the religion values; thus, these items are likely to obtain less positive response from participants. Moreover, item number 33 stating "I eat more or I binge more" has different custom with Indonesian custom because Indonesian people commonly have less portion of eating, yet more frequent, namely more than three times in a day. It is different from western custom which portion of eating can be more with less frequent.

The frequency of positive response is greater on MDD than on Bipolar Disorder on item number 16, 21, 26, and 29. However, there is significant difference of mean on HCL-33 score between participants with Bipolar Disorder and participants with MDD ($p < .05$). The result is in line with the study conducted by Feng et al. (2016) on the sample of Chinese clinicians showing the item number 16, 29, 30, and 31. Item number 16 states "I am more interested in sex and/or I am more sexually active". Due to cultural factor in eastern countries, sexuality is still a taboo topic to talk. Moreover, since most of the research participants are women, Indonesian women tend not to openly talk about sexuality. Item number 21 states "I engage in lots of new things". Besides unclear, most Indonesian women are less involved in many new things compared to men who have higher mobility. Then, item number 26 states "I get into

more quarrels". Women are commonly less involved in a fight than men because they tend to hold their emotions, especially when they are angry or annoyed. On the other hand, men are frontal in expressing their emotions. The last, item number 29 states "I smoke more cigarettes". Most eastern cultures, especially in Indonesia, women hardly smoke than men. In short, cultural and gender factors can affect the participants' score on HCL-33 in both Bipolar Disorder and MDD group.

Regarding to research findings, HCL-33 has good reliability and validity in detecting Bipolar Disorder. The internal Consistency (Alpha Cronbach) of dimension I "Active/Elated" is .84 which is a bit lower than the previous study conducted by Feng et al. [17] which obtained .93. Meanwhile, the dimension II "Irritable/Risk-Taking" is .77 which is in line with the previous study by Feng et al. [17] which obtained .76.

Regarding to the result of validity and reliability analysis, the HCL recommended by the researcher is obtained. There are 25 items which are recommended from the adapted HCL: 15 items for dimension "Active/Elated", namely item number 2-5, 11-15, 17-19, 21, 23, and 27; 10 items for dimension "Irritable/ Risk-Taking", namely item number 1, 7-9, 16, 20, 22, and 24-26.

In line with the study conducted by Feng et al. [17] in which 70% participant was women, the participants of this study are mostly women (81%). Besides, in line with the study conducted by Feng et al [17] there is not significant correlation between current mood state and total score of HCL-33 on both Bipolar Disorder and MDD group. It shows that participants' current mood state when filling the questionnaire did not affect the score of HCL-33 in which they were asked to recall good mood state in recent 12 months. The difference mean among current mood states is also not significant ($p > .05$) showing that the choices of answer of current mood state are not significantly different from each other or consist of ambiguous meaning which can cause confusion in choosing appropriate answers. In this case, the result is different from the findings of Feng et al.'s [17] study. In their finding, it is found that there is significant result ($p < .05$) among current mood states.

Sensitivity or the percentage of positive screening on individuals with Bipolar Disorder is 91.4%. The result is higher than the previous study conducted by Feng et al. [17, 21] which is only 72%. For the specificity, the percentage of negative screening on normal individuals is 80% which is also higher than the findings of study by Feng et al. [17, 21] which is only 74%. Thereby, it can be stated that the percentage of specificity and sensitivity of Indonesian version of HCL-33 in this study is higher than specificity and sensitivity of HCL-33 in Chinese version, HCL-32, and MDQ [21].

There is a negative, significant correlation between dimension I "Active/Elated" and suicide ideation score measured by SSI. Dimension I "Active/Elated" is a positive symptom of hypomania/ mania described as the increase of activities or energy and cognitive. The dimension is commonly not known as pathology because of its characteristic which becomes "bright" dimension of Bipolar Disorder and can even increase someone's level of

functional [26]. According to a study by Drapeau and DeBrule [27] on participants with average 24.9-year-old, when someone suffers hypomania, his/ her divergent thinking and creativity will increase; thus, his/ her behavior becomes not more pathology, but increases his/ her cognitive function. As a result, the increase of this dimension can decrease the risk of suicide ideation [27].

In this case, HCL-33 has two opposite dimensions, namely dimension "Active/Elated" which is the positive symptom of hypomania/ mania and dimension "Irritable/Risk-taking" which is the negative symptom of hypomania/ mania; so, both dimensions cannot be combined. Scoring of these two dimensions should not be combined in the total score, but each score has to be separated based on the dimension to distinguish positive and negative symptom [28].

Positive, significant correlation between dimension II "Irritable/Risk-Taking" and suicide ideation score measured using SSI is obtained. Dimension II "Irritable/Risk-Taking" is a negative symptom of hypomania/ mania in which individuals can be more irritable than happy, and they take risk which can danger their live. The negative symptom can be considered as pathology behavior which is included in the "dark" dimension of Bipolar Disorder which commonly should be cured [26]. From the finding of this study, the higher the irritable/ risk-taking of someone the more behavior will be pathology; thus, it can affect his/ her mind by the appearance of suicide ideation [27].

In line with the study conducted by Feng et al. [17], Angst et al. [16], and Wu et al. [29], the researcher does not find any significant correlation between the total score of HCL-33 and depression score measured using BDI on participants with Bipolar Disorder and participants with MDD. The result shows that HCL-33 has good discriminant construct validity towards BDI-II.

The result on individuals with Bipolar Disorder with comorbid and without comorbid shows that there is significant difference on total score of HCL-33 in which participants with comorbid have HCL-33 mean score which is significantly higher than participants without comorbid. Besides, the score of HCL-33 dimension II "Irritable/Risk-taking" on participants with comorbid significantly have greater mean than participants without comorbid. In dimension I "Active/Elated" and depression score, mean on participants with comorbid is greater than participants without comorbid, but the difference is not significant. In addition, the score of suicide ideation on participants with comorbid have higher mean significantly than participants without comorbid.

In line with DSM-V [30] and other studies, comorbid can increase the risk of suicide ideation of individuals with Bipolar Disorder. Moreover, in line with other studies, it is found that there is an effect of comorbid on suicide ideation [31]. In addition, since most participants of this study are women, according to DSM-V, gender can affect comorbidity in which women with Bipolar Disorder commonly have more frequent comorbid and depressive symptom than men; thereby, it can affect the suicide ideation.

However, this study has some weaknesses. First, this study uses internet which can ease the researcher to collect data from participants spreading throughout Indonesia. It can affect the findings of this study because the researcher cannot control the duration and seriousness in filling in the questionnaire. Besides, collecting data through Google Form causes no absolute privacy towards the participants' data as the risk of having internet through Google. It is better for future researchers to use questionnaire as well as interview directly to maintain privacy of participants' data and strengthen the control. Second, the characteristics of participants, especially on gender, and the participant number of each group is imbalance which can affect the findings of the study. The number of participants of each group should be greater and equal. Third, there is limitation of findings in this study because those who participated in this study were only outpatients. It should have involved inpatients in the study. Fourth, additional data relating to psychotic symptom, onset of Bipolar Disorder, the change of episode and the level of severity, and the impact of Bipolar Disorder towards patients' life cannot be obtained because there was not in-depth interview. As a result, the researcher cannot check the truth of diagnosis with symptoms showed by the participants which can only be obtained through in-depth interview directly. Fifth, this study does not identify the risk factors, such as medical therapy, genetic factor, and the history of Bipolar Disorder in the family. The future researchers should ask information about those factors which have impact on the risk of severity level of Bipolar Disorder [30].

In conclusion, the characteristic of psychometric of the Indonesian version adapted HCL, namely HCL-25, is good. Then, the hypothesis of this study is that (1) there is negative, significant correlation between HCL dimension "Active/Elated" and suicide ideation score; and (2) there are positive, significant correlation between HCL dimension "Irritable/Risk-taking" and suicide ideation score. Practically, clinicians should be more careful on the risk of suicide ideation of individuals with Bipolar Disorder, especially on individuals with high score on "Irritable/Risk-taking" symptoms and have a comorbid mental disorder.

5. CONCLUSION

HCL-25 which is adapted to Indonesian version has good validity and reliability in screening Bipolar Disorder, especially on individual with major depressive symptom. It means that HCL-25 is able to discriminate individuals with Bipolar Disorder from individuals without Bipolar Disorder well. The adapted HCL-25 also has good validity of criterion towards suicide ideation because there is a significant correlation between HCL dimension "Irritable/Risk-taking" and suicide ideation score on participants with Bipolar Disorder. Similar result is also found on participants with MDD in which HCL dimension "Irritable/Risk-taking" score significantly correlates with suicide ideation score.

Moreover, the Indonesian version of adapted HCL-25 has good discriminant validity in which there is significant

difference on HCL score and BDI-II score on Bipolar Disorder and MDD participants. Through the adapted HCL in Indonesian version for screening hypomania and mania, it is expected to help clinicians in diagnosing accurately on individuals with Bipolar Disorder so that rapid change of episode, serious level of severity, and suicide which correlate with those things can be avoided. Moreover, appropriate treatment is essential to prevent the suicide ideation which can cause disability or death caused by suicide. In addition, clinicians, family, relatives, and society should increase vigilance towards the risk of suicide ideation on individuals with Bipolar Disorder.

REFERENCES

- [1] Dinkesmdo. (2019). Peran Keluarga Dukung Kesehatan Jiwa Masyarakat. Retrieved August 7th, 2019 from <https://dinkes.manadokota.go.id/2019/04/18/peran-keluarga-dukung-kesehatan-jiwa-masyarakat/>
- [2] Goldstein, T. R., Birmaher, B., Axelson, D., Ryan, N. D., Strober, M. A., Gill, M. K., ... Keller, M. (2005). History of suicide attempts in pediatric bipolar disorder: Factors associated with increased risk. *Bipolar Disorders*, 7(6), 525–535. <https://doi.org/10.1111/j.1399-5618.2005.00263.x>
- [3] Angst, J., Adolfsson, R., Benazzi, F., Gamma, A., Hantouche, E., Meyer, T. D., ... Scott, J. (2005). The HCL-32: Towards a self-assessment tool for hypomanic symptoms in outpatients. *Journal of Affective Disorders*, 88(2), 217–233. <https://doi.org/10.1016/j.jad.2005.05.011>
- [4] Köhler-Forsberg, O., Madsen, T., Behrendt-Møller, I., Sylvia, L., Bowden, C. L., Gao, K., ... Nierenberg, A. A. (2017). Trajectories of suicidal ideation over 6 months among 482 outpatients with bipolar disorder. *Journal of Affective Disorders*, 223(July), 146–152. <https://doi.org/10.1016/j.jad.2017.07.038>
- [5] Valtonen, H. M., Suominen, K., Mantere, O., Leppämäki, S., Arvilommi, P., & Isometsä, E. (2007). Suicidal behaviour during different phases of bipolar disorder. *Journal of Affective Disorders*, 97(1–3), 101–107. <https://doi.org/10.1016/j.jad.2006.05.033>
- [6] Mistry, S., Escott-Price, V., Florio, A. D., Smith, D. J., & Zammit, S. (2019). Genetic risk for bipolar disorder and psychopathology from childhood to early adulthood. *Journal of Affective Disorders*, 246(November 2018), 633–639. <https://doi.org/10.1016/j.jad.2018.12.091>
- [7] Goodwin, G. M. (2012). Bipolar depression and treatment with antidepressants. *British Journal of Psychiatry*, 200(1), 5–6. <https://doi.org/10.1192/bjp.bp.111.095349>
- [8] Baldessarini, R. J., Tondo, L., Baethge, C. J., Lepri, B., & Bratti, I. M. (2007). Effects of treatment latency on response to maintenance treatment in manic-depressive disorders. *Bipolar Disorders*, 9(4), 386–393. <https://doi.org/10.1111/j.1399-5618.2007.00385.x>
- [9] Engel-Yeger, B., Gonda, X., Muzio, C., Rinosi, G., Pompili, M., Amore, M., & Serafini, G. (2016). Sensory processing patterns, coping strategies, and quality of life among patients with unipolar and bipolar disorders. *Revista Brasileira de Psiquiatria*, 38(3), 207–215. <https://doi.org/10.1590/1516-4446-2015-1785>
- [10] Meyer, Thomas D., Schrader, J., Ridley, M., & Lex, C. (2014). The Hypomania Checklist (HCL) - Systematic review of its properties to screen for bipolar disorders. *Comprehensive Psychiatry*, 55(5), 1310–1321. <https://doi.org/10.1016/j.comppsy.2014.03.002>
- [11] Angst, J., Meyer, T. D., Adolfsson, R., Skeppar, P., Carta, M., Benazzi, F., ... Gamma, A. (2010). Hypomania: A transcultural perspective. *World Psychiatry*, 9(1), 41–49. <https://doi.org/10.1002/j.2051-5545.2010.tb00268.x>
- [12] Bech, P., Christensen, E. M., Vinberg, M., Bech-Andersen, G., & Kessing, L. V. (2011). From items to syndromes in the Hypomania Checklist (HCL-32): Psychometric validation and clinical validity analysis. *Journal of Affective Disorders*, 132(1–2), 48–54. <https://doi.org/10.1016/j.jad.2011.01.017>
- [13] Forty, L., Kelly, M., Jones, L., Jones, I., Barnes, E., Caesar, S., ... Smith, D. J. (2010). Reducing the Hypomania Checklist (HCL-32) to a 16-item version. *Journal of Affective Disorders*, 124(3), 351–356. <https://doi.org/10.1016/j.jad.2010.01.004>
- [14] Meyer, Thomas D., Bernhard, B., Born, C., Fuhr, K., Gerber, S., Schaerer, L., ... Bauer, M. (2011). The Hypomania Checklist-32 and the Mood Disorder Questionnaire as screening tools - Going beyond samples of purely mood-disordered patients. *Journal of Affective Disorders*, 128(3), 291–298. <https://doi.org/10.1016/j.jad.2010.07.003>
- [15] Vieta, E., Sánchez-Moreno, J., Bulbena, A., Chamorro, L., Ramos, J. L., Artal, J., ... Angst, J. (2007). Cross validation with the mood disorder questionnaire (MDQ) of an instrument for the detection of hypomania in Spanish: The 32 item hypomania symptom check list (HCL-32). *Journal of Affective Disorders*, 101(1–3), 43–55. <https://doi.org/10.1016/j.jad.2006.09.040>
- [16] Gamma, A., Angst, J., Azorin, J. M., Bowden, C. L., Perugi, G., Vieta, E., & Young, A. H. (2013). Transcultural validity of the Hypomania Checklist-32 (HCL-32) in patients with major depressive episodes. *Bipolar Disorders*, 15(6), 701–712. <https://doi.org/10.1111/bdi.12101>
- [17] Feng, Y., Xiang, Y. T., Huang, W., Wang, G., Feng, L., Tian, T. F., ... Angst, J. (2016). The 33-item Hypomania Checklist (HCL-33): A new self-completed screening instrument for bipolar disorder. *Journal of Affective Disorders*, 190, 214–220. <https://doi.org/10.1016/j.jad.2015.09.057>
- [18] Simon, N. M., Zalta, A. K., Otto, M. W., Ostacher, M. J., Fischmann, D., Chow, C. W., ... Pollack, M. H. (2007). The association of comorbid anxiety disorders with suicide attempts and suicidal ideation in outpatients with bipolar disorder. *Journal of Psychiatric Research*, 41(3–4), 255–264. <https://doi.org/10.1016/j.jpsychires.2006.08.004>

- [19] Nallet, A., Weber, B., Favre, S., Gex-Fabry, M., Voide, R., Ferrero, F., ... Aubry, J. M. (2013). Screening for bipolar disorder among outpatients with substance use disorders. *European Psychiatry*, 28(3), 147–153. <https://doi.org/10.1016/j.eurpsy.2011.07.004>
- [20] Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York: McGraw-Hill.
- [21] Feng, Y., Wang, Y.-Y., Huang, W., Ungvari, G. S., Ng, C. H., Wang, G., ... Xiang, Y.-T. (2017). Comparison of the 32-item Hypomania Checklist, the 33-item Hypomania Checklist, and the Mood Disorders Questionnaire for bipolar disorder. *Psychiatry and Clinical Neurosciences*, 71(6), 403–408. <http://dx.doi.org/10.1111/pcn.12506>
- [22] Lawshe, C. H. (1975). A quantitative approach to content validity". *Personnel Psychology. A Quantitative Approach to Content Validity". Personnel Psychology*, 561–580.
- [23] Beck, A., Steer, R., Ball, R., & Ranieri, W. (1996). Comparison of Beck Depression I in Psychiatric Inventories -1A and - Outpatients. *Journal of Personality Assessment*, 67(3), 588–597. <https://doi.org/10.1207/s15327752jpa6703>
- [24] Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8(1), 77–100. [https://doi.org/10.1016/0272-7358\(88\)90050-5](https://doi.org/10.1016/0272-7358(88)90050-5)
- [25] Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: The Scale for Suicide Ideation. *Journal of Consulting and Clinical Psychology*, 47(2), 343–352. <https://doi.org/10.1037/0022-006X.47.2.343>
- [26] Holtmann, M., Pörtner, F., Duketis, E., Flechtner, H. H., Angst, J., & Lehmkuhl, G. (2009). Validation of the Hypomania Checklist (HCL-32) in a nonclinical sample of German adolescents. *Journal of Adolescence*, 32(5), 1075–1088. <https://doi.org/10.1016/j.adolescence.2009.03.004>
- [27] Drapeau, C. W., & DeBrule, D. S. (2013). The Relationship of Hypomania, Creativity, and Suicidal Ideation in Undergraduates. *Creativity Research Journal*, 25(1), 75–79. <https://doi.org/10.1080/10400419.2013.752231>
- [28] Meyer, Thomas D., Hammelstein, P., Nilsson, L. G., Skeppar, P., Adolfsson, R., & Angst, J. (2007). The Hypomania Checklist (HCL-32): its factorial structure and association to indices of impairment in German and Swedish nonclinical samples. *Comprehensive Psychiatry*, 48(1), 79–87. <https://doi.org/10.1016/j.comppsy.2006.07.001>
- [29] Wu, Y. S., Angst, J., Ou, C. S., Chen, H. C., & Lu, R. B. (2008). Validation of the Chinese version of the Hypomania Checklist (HCL-32) as an instrument for detecting hypo(mania) in patients with mood disorders. *Journal of Affective Disorders*, 106(1–2), 133–143. <https://doi.org/10.1016/j.jad.2007.06.004>
- [30] American Psychiatric Association. (2013). DSM 5. Arlington. <https://doi.org/10.1017/CBO9781107415324.004>
- [31] Elizabeth Sublette, M., Carballo, J. J., Moreno, C., Galfalvy, H. C., Brent, D. A., Birmaher, B., ... Oquendo, M. A. (2009). Substance use disorders and suicide attempts in bipolar subtypes. *Journal of Psychiatric Research*, 43(3), 230–238. <https://doi.org/10.1016/j.jpsychires.2008.05.001>

APPENDIX-A

**Hypomania Checklist – 25
(English Version)**

Personal details: Age

--	--

 years
Male Female

Centre

Number

Energy, activity and mood

At different times in their life everyone experiences changes or swings in energy, activity and mood (“highs and lows” or “ups and downs”). The aim of this questionnaire is to assess the characteristics of the “high” periods.

1) First of all, how are you feeling today compared to your usual state:
(Please mark only ONE of the following)

Much worse than usual	Worse than usual	A little worse than usual	Neither better nor worse than usual	A little better than usual	Better than usual	Much better than usual
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2) How are you usually compared to other people?

Independently of how you feel today, please tell us how you are normally compared to other people, by marking which of the following statements describes you best.

Compared to other people my levels of activity, energy and mood ...
(Please mark only ONE of the following)

... are always rather stable and even	... are generally higher	... are generally lower	... repeatedly show periods of ups and downs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3) Please try to remember a period when you were in a “high” state.

How did you feel then? Please answer all these statements independently of your present condition.

In such a state:	Yes	No
1. I need less sleep	<input type="checkbox"/>	<input type="checkbox"/>
2. I feel more energetic and more active	<input type="checkbox"/>	<input type="checkbox"/>
3. I am more self-confident	<input type="checkbox"/>	<input type="checkbox"/>
4. I enjoy my work more	<input type="checkbox"/>	<input type="checkbox"/>
5. I am more sociable (make more phone calls, go out more)	<input type="checkbox"/>	<input type="checkbox"/>
6. I tend to drive faster or take more risks when driving	<input type="checkbox"/>	<input type="checkbox"/>
7. I spend more money/too much money	<input type="checkbox"/>	<input type="checkbox"/>
8. I take more risks in my daily life (in my work and/or other activities)	<input type="checkbox"/>	<input type="checkbox"/>
9. I plan more activities or projects	<input type="checkbox"/>	<input type="checkbox"/>
10. I have more ideas, I am more creative	<input type="checkbox"/>	<input type="checkbox"/>
11. I am less shy or inhibited	<input type="checkbox"/>	<input type="checkbox"/>
12. I wear more colorful and more extravagant clothes/make-up	<input type="checkbox"/>	<input type="checkbox"/>
13. I want to meet or actually do meet more people	<input type="checkbox"/>	<input type="checkbox"/>
14. I am more interested in sex and/or I am more sexually active	<input type="checkbox"/>	<input type="checkbox"/>
15. I talk more	<input type="checkbox"/>	<input type="checkbox"/>
16. I think faster	<input type="checkbox"/>	<input type="checkbox"/>
17. I make more jokes or puns when I am talking	<input type="checkbox"/>	<input type="checkbox"/>
18. I am more easily distracted	<input type="checkbox"/>	<input type="checkbox"/>
19. I engage in lots of new things	<input type="checkbox"/>	<input type="checkbox"/>

In such a state:

- | | | |
|--|--------------------------|--------------------------|
| 20. My thoughts jump from topic to topic | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. I do things more quickly and/or more easily | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. I am more impatient and/or get irritable more easily | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. I can be exhausting or irritating for others | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. I get into more quarrels | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. My mood is higher, more optimistic | <input type="checkbox"/> | <input type="checkbox"/> |

4) Impact of your “highs” on various aspects of your life:

	Mixed (both positive and negative)	Positive	Negative	No impact (neither positive nor negative)
Family life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5) How did people close to you react to or comment on your “highs”?

(Please mark only ONE of the following)

Positively (encouraging or supportive)	Neutral (neither positively nor negatively)	Negatively (concerned, annoyed, irritated, critical)	Mixed (both positively and negatively)	No reaction (e.g. did not comment)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6a) How long was your longest ever “high”?

(Please mark only ONE of the following)

- | | |
|-----------------------------------|---|
| <input type="checkbox"/> 1 day | <input type="checkbox"/> 1-3 weeks |
| <input type="checkbox"/> 2-3 days | <input type="checkbox"/> 1 month or longer |
| <input type="checkbox"/> 4-6 days | <input type="checkbox"/> I can’t judge/don’t know |

6b) As a rule (i.e. on the average) how long do your “highs” last?

(Please mark only ONE of the following)

- | | |
|-----------------------------------|---|
| <input type="checkbox"/> 1 day | <input type="checkbox"/> 1-3 weeks |
| <input type="checkbox"/> 2-3 days | <input type="checkbox"/> 1 month or longer |
| <input type="checkbox"/> 4-6 days | <input type="checkbox"/> I can’t judge/don’t know |

7) Have you experienced such “highs” in the past twelve months?

Yes No

8) If yes, please estimate how many days you spent in “highs” during the last twelve months: Taken all together, about

days.

Two final questions about your temperament:

9) Would you describe yourself as someone who by nature is up and down: at one time over the moon, at another down in the dumps?

Yes No

10) Do your emotions shift quite suddenly at times?

Yes No

- 6. Saya mengemudi lebih kencang (mengebut) atau mengambil lebih banyak risiko saat mengemudi
- 7. Saya menghabiskan uang lebih banyak atau terlalu banyak (belanja)
- 8. Saya mengambil lebih banyak bahaya (resiko) dalam kehidupan sehari-hari (dalam pekerjaan saya atau aktivitas lainnya)
- 9. Saya membuat banyak rencana atau proyek
- 10. Saya memiliki lebih banyak ide atau gagasan dan lebih kreatif
- 11. Saya merasa lebih berani (tidak merasa malu-malu)
- 12. Saya memakai pakaian/make-up yang lebih berwarna dan lebih menonjol
- 13. Saya ingin bertemu atau bertemu dengan lebih banyak orang
- 14. Saya lebih tertarik dengan pembicaraan atau bacaan bertema seksual atau melakukan aktivitas seksual secara lebih aktif
- 15. Saya lebih banyak berbicara
- 16. Saya berpikir lebih cepat
- 17. Saya lebih banyak membuat lelucon atau permainan kata-kata saat saya berbicara
- 18. Saya lebih mudah terganggu
- 19. Saya terlibat dalam banyak hal baru
- 20. Pikiran saya melompat-lompat dari satu topik ke topik yang lain
- 21. Saya melakukan hal-hal lebih cepat dan / atau lebih mudah
- 22. Saya lebih tidak sabar dan / atau mudah marah
- 23. Boleh jadi saya melelahkan atau menjengkelkan bagi orang lain
- 24. Saya jadi lebih sering bertengkar
- 25. Suasana hati saya lebih bagus - lebih optimis

4. Dampak dari keadaan “tinggi” Anda tersebut terhadap berbagai aspek kehidupan Anda:

	Campuran (positif dan negatif)	Positif	Negatif	Tidak ada dampak (baik positif maupun negatif)
Kehidupan keluarga	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kehidupan sosial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pekerjaan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waktu luang	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Bagaimana reaksi atau komentar orang-orang terdekat Anda saat Anda mengalami keadaan “tinggi” tersebut? (Tandai hanya SATU dari yang berikut)

Positif (mendukung)	Netral (tidak positif maupun negatif)	Negatif (terganggu, jengkel, khawatir, mengkritik)	Campuran (positif dan negatif)	Tidak ada reaksi (misalnya tidak menanggapi atau berkomentar)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6a. Berapa lama keadaan “tinggi” anda yang paling panjang?

(pilih salah SATU)

- | | |
|--|---|
| <input type="checkbox"/> 1 hari | <input type="checkbox"/> 1 sampai 3 minggu |
| <input type="checkbox"/> 2 sampai 3 hari | <input type="checkbox"/> 1 bulan atau lebih lama |
| <input type="checkbox"/> 4 sampai 6 hari | <input type="checkbox"/> tidak tahu/tidak bisa menentukan |

6b. Sebagai dasar (dengan kata lain secara rata-rata) berapa lama keadaan “tinggi” Anda berlangsung?

(pilih salah SATU)

- | | |
|--|---|
| <input type="checkbox"/> 1 hari | <input type="checkbox"/> 1 sampai 3 minggu |
| <input type="checkbox"/> 2 sampai 3 hari | <input type="checkbox"/> 1 bulan atau lebih lama |
| <input type="checkbox"/> 4 sampai 6 hari | <input type="checkbox"/> tidak tahu/tidak bisa menentukan |

7. Pernahkan Anda mengalami keadaan “tinggi” tersebut dalam 12 bulan terakhir? Ya Tidak

8. Jika pernah, bisakah Anda memperkirakan berapa hari Anda mengalami keadaan “tinggi” tersebut selama dua belas bulan terakhir: Jika diambil secara keseluruhan, sekitar hari

Dua pertanyaan terakhir tentang temperamen Anda:

9. Dapatkah Anda mengatakan diri Anda adalah seseorang yang emosinya secara alami naik turun: pada suatu waktu sangat gembira, di waktu yang lain sangat sedih? Ya Tidak

10. Apakah emosi Anda dapat berubah tiba-tiba sewaktu-waktu? Ya Tidak