# New Traders' Mood when using Trading Online Application in Universitas Multimedia Nusantara

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Abstract—trading online have a brief history of success all due to Internet. However, beginners find some difficulties to make profit. One of the reasons is their moods. This study is focused to explore their moods. Some moods are found has relation with the trading online. Avoiding loss in trading online, some moods should be controlled first before they start trading.

Index Terms— Trading Online, Foreign Exchange.

#### I. INTRODUCTION

The online commerce application is conducting stock transactions on the internet through various websites. For years, emerging companies have a brief success story due to the Internet. The online transaction processes of finance, including the purchase and sale of bonds, stocks and other investments, all come under online commerce [1].

A previous study shows that some moods impact on judgement accuracy and trading performance. Moods are divided into good, neutral, and bad moods. Traders in a neutral and bad mood can obtain more profits than traders in a good mood. Pleasant mood can reduce the accuracy of judgement, whilst unpleasant mood can increase the judgement accuracy. This problem occurs because traders in a pleasant mood review less information and make quicker decision [2].

This study examines user usability on trading online application on their moods. Moods refer to feelings that tend to be less intense than emotions and that often (though not always) lack a contextual stimulus. Most experts believe that emotions are more fleeting than moods. For example, if someone is rude to you, you will feel angry. That intense feeling or anger probably comes and goes fairly quickly, maybe even in a matter of seconds. When you are in a bad mood, you can feel bad for several hours [3].

User Moods are divided into four quadrants as shown on Fig 1, from Low Arousal to High Arousal, and from Displeasure to Pleasure. UWIST Mood Adjective Checklist (UMACL) is applied in this study [4]. The list contains some moods as followings: Hedonic Tone: Pleased, Cheerful, Optimistic,

Contented, Satisfied, Happy, Low-spirited, Dissatisfied, Gloomy, Depressed, Sad, and Sorry. Anger Items: Impatient, Annoyed, Angry, Irritated, and Grouchy. Tense Arousal Items: Stirred Up, Fearful, Anxious, Jittery, Tense, Stressed, Nervous, Calm, Restful, Relaxed, Unconcerned, Composed, Self-controlled, Peaceful, and Comfortable. Energetic Arousal: Active, Energetic, Industrious, Alert, Fortunate, Vigorous, Bright, Idle, Sleepy, Dull, Unenterprising, Quite, Sluggish, Tired, and Passive.

Users' moods become interesting for some previous Human Computer Interaction researchers. Rooij and Jones argued that there is a connection between moods and creativity in Human computer Interaction Study [5]. Visuri, Sarsenbayeva, Goncalves, Karapanos, and Jones found that users' moods have an association with the use of smartphone applications [6].

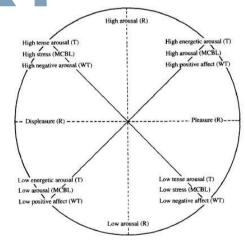


Fig 1. Structural Model of Moods [4]

For many traders, especially the less experienced, trading is marked by significant and persistent emotional responses to successes and setbacks. It is relevant to note the distinction between mood and emotion, since both were relevant to traders. Mood can be understood as a relatively diffuse emotional climate which persists over time and not anchored to specific

situations or cognitions. On the other hand, emotions typically have particular objects and increase behavioral response tendencies relevant to those objects [7]. Mood can influence the result of trading because decision making and risk taking can be influenced by mood on investors' trading behavior [8].

This study is focused on the exploration about new traders' moods before and after trading online session. So the problems that occur are followings:

- 1. Which moods do significantly change before and after trading session?
- Which moods do significantly change before and after trading session for traders who make profits?
- 3. Which moods do significantly change before and after trading session for losing traders?
- 4. Which moods do significantly correlated with the trading performance?

The purpose of this research is to find an important mood to consider for new traders to start trading online. By knowing the mood, new traders can maintain some mood before trading so that it can reduce the money lost after trading online.

### II. METHODOLOGY

## A. Data Collection Methods

25 new traders are randomly selected. Traders bring their smartphones. They are asked to download and install the trading software on their smartphones. Before trading, step by step how to trade online is explained using trading software to each trader for about 15 minutes. The software used in the study is iqoption. It is popular binary option trading software in Indonesia.

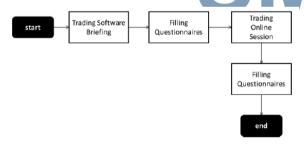


Fig 2. Data collection flow of process

To measure the moods of each Trader, a questionnaire is filled before and after the trading session. 5 Likert scales are applied in the Questionnaires from 5 that refer strongly agreed to 1 that refers strongly disagreeing. The questions are developed from UMACL list of moods.

Total trading online session is 30 minutes in the same room. The initial capital is \$1000. There is no training about trading strategy to win. Traders can use their own strategy to win.

## B. Data Analysis Methods

25 students answer the same questions on the questionnaire O1 before trading session as well as on questionnaire Q2 after trading session. Each questionnaire contains all UMACL moods. Those answers are processed by using SPSS to find some moods that are significantly different before and after trading session. Questionnaire are validated by using bivariate-correlation-Pearson. SPPS. two-tailed. p=0.05. test The Reliability shows Alpha Cronbach=0.8.

Afterwards, both Q1 and Q2 are split according to the result of trading session, either win or lose money. For the winners, SPSS are applied to find some moods that are significantly different before and after trading session. So do the unlucky traders.

Finally, answers from Q1 and Q2 are processed to find their correlation with the trading performance by using SPSS.

#### III. DISCUSSION

Data is gathered from 25 students who are selected as new Traders by using simple random sampling in Universitas Multimedia Nusantara. 34% of them are females and 66% are males. Their ages are between 18 and 22 as shown on Fig 3. These traders have never been trading before.

First we look at traders' mood before trading. The largest mean is found on Peaceful since the Traders have not started the trading session yet. However, the largest variance is found on stressed. It may happen because some Traders take it easily, but some others take it too serious.

On the other hand, from the result of descriptive statistics after trading, Traders are found pleased with mean=4.080, standard deviation=1.038, and variance 1.077. Most Beginners look happy when trading online for the first time. While other mood items are under 4. In addition, biggest variance is shown on stirred up and fortunate. Stirred up has mean=2.4, standard deviation=1.472, and variance=2.167. This is their first time to try a new experience so those new traders can feel stirred up. Fortunate has mean 3.0 and the same standard deviation and variance. At the time of trading at a certain time they win but o the other time they can loss too. The variance of fortunate becomes big because some Traders make profits and others are unlucky.

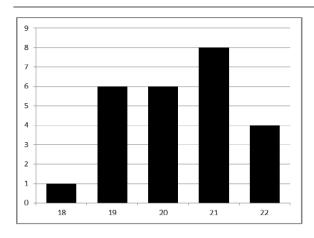


Fig 3. Traders' Ages

# A. Moods that significantly change before and after trading session

Moods before and after trading session are compared to find which moods have changed significantly by using Wilcoxon Signed Ranks Test. From this test, we find that pleased, depressed, dull, quite, sluggish, tired, and peaceful changes significantly.

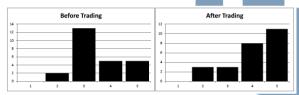


Fig 4. Pleased before and after trading

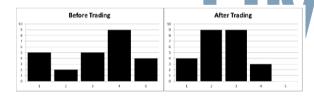


Fig 5. Depressed before and after trading

Most Traders are more pleased after trading as the right chart is skewed to the right side (Fig 4). Either they win or lose; trading online is a fun and exciting activity for them. As the trading activity pleases them, the depression is reduced significantly (Fig 5).



Fig 6. Dull before and after trading

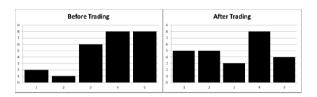


Fig 7. Quite before and after trading

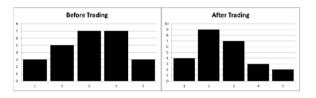


Fig 8. Sluggish before and after trading

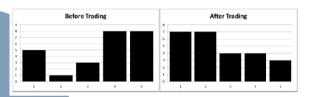


Fig 9. Tired before and after trading

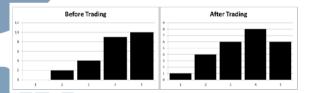


Fig 10. Peaceful before and after trading

As trading online is an excited activity, during trading session, Traders made noises so that moods of dull (Fig 6) are decreased, more traders become not quite (Fig 7), and sluggish (Fig 8) are also decreased significantly. This excitement also gives Traders some influences to reduce their feel of tired significantly (Fig 9). However, Traders' moods of peaceful change because influences of the trading results, which are win or loss (Fig 10).

# B. Moods that significantly change before and after trading session for traders who make profits

Here, we focus to explain significant changes on the winners' mood. As shown on table I above, there are five mood that are significantly change which are pleased, active, energetic, vigorous, and sluggish.

Table 1. Winning Traders' Moods

Mood	N	XBT	XAT	SBT	SAT	Neg Rank	Pos. Rank	Ties	Z	Asymp Sig.
Pleased	11	3.546	4.273	1.036	1.009	0	6	5	-2.271	0.023
Actived	11	3	3.909	1.414	1.221	1	7	3	-2.124	0.034
Energetic	11	2.636	3.636	1.748	1.433	0	6	5	-2.232	0.026
Vigorous	11	2.546	3.364	1.368	1.286	1	7	3	-2.111	0.035
Sluggish	11	3.182	2.364	1.328	1.027	7	0	4	-2.46	0.014

The positive ranks are increased on pleased, active, energetic, and vigorous. So the winners look more pleased, active, energetic, and vigorous after trading. But winners become less sluggish after trading. All positive moods such as pleased, active, energetic, and vigorous are changed to positive rank after trading and negative mood such as sluggish is changed negatively. In other words, to make a better result on trading online, traders should increase their positive moods and reduce their negative moods when they are trading.

## C. Moods that significantly change before and after trading session for losing traders?

Table 2. Losing Traders' Moods

Mood	N	XBT	XAT	SBT	SAT	Neg Rank	Pos. Rank	Ties	Z	Asymp Sig.
Self Controlled	14	3.6429	2.939	1.008	0.616	7	2	5	-1.997	0.046
Peaceful	14	4.214	3.286	0.802	1.069	8	1	5	-2.323	0.02
Sleepy	14	3.7857	2.714	1.424	1.267	10	3	1	-2.03	0.042
Quite	14	3.857	3.143	1.099	1.512	9	2	3	-2.178	0.029
Dull	14	3.5	2.786	1.605	1.311	9	2	3	-2.178	0.029
Tired	14	3.571	2.643	1.399	1.277	9	2	3	-2.292	0.022

Here, we focus to explain significant mood changes from losing Traders. As shown on the table above, some moods significantly changes for losing traders which are selfcontrolled, peaceful, sleepy, quite, dull, and tired.

Positive moods such as self-controlled and peaceful are not increased. Losing money makes new Traders untighten their self-controlled and their peaceful mood become reduced. However, negative moods such as sleepy, quite, dull, and tired are reduced too. Losing traders keep trying to make their money back. Subsequently, chasing money makes them not sleepy, not quite, not dull, and not tired.

Winning Traders made changes more on positive moods rather than negative moods. The direction is also correct. The positive moods are increased significantly, and the negative mood is reduced significantly. However, losing traders made changes more negative moods rather than positive moods. The direction is not entirely correct. Not only negative moods are reduced significantly, but some positive moods are also reduced.

# D. Moods that significantly correlated with the trading performance?

In this section, we discuss about the moods that have correlation with trading results. As shown on Table 3, there are four moods involved here, which are unconcerned, self-controlled, unenterprising, and sluggish.

Table 3. Correlated Moods with Trading Performance

Mood	Correlation
Unconcerned	Y = 5643.231 - 657.872X
Self-Controlled	Y = 5643.231 - 1009.035X
Unenterprising	Y = 5643.231 + 692.224X
Sluggish	Y = 5643.231 + 941.589X

Negative correlations are shown on Unconcerned and selfcontrolled. To won the trading online, Traders must reduce their unconcerned during the trading session. Concentration here is very important to be kept in better condition.

It is also strongly suggested for them to untighten strong control to themselves. If the traders are too tight in their selfcontrol, they will only make a small number of actions.

Positive regressions are shown on unenterprising. To win on trading online, they must increase their unenterprising so they can find more opportunities to win.

In addition, sluggish is quite interesting here because it is shown on significant changes of losing traders but it also have positive correlation with trading result. However, the direction is different. Loser Traders tend to reduce their mood of sluggish. But winners increase their mood of sluggish. To put a Buying or Selling order in trading only should not in rush. Even though the self-controlled are reduced, but the traders must be very sure to make the order.

### IV. SUMMARY

Generally, new traders bring their moods when they use trading online. Their moods consist of good moods and bad moods. New Traders must level up their positive moods and at the same time control their bad moods. Positive moods that are suggested to be managed include pleased and peaceful, active, energetic, vigorous, self-controlled. Whilst some negative moods that are suggested to be managed including depressed, dull, quite, sluggish, tired, sleepy, unconcerned, and unenterprising.

If the trading results can be ignored, we find that the trading online is a fun activity for new Traders. The number of positive moods that occur is less than bad moods. It enlarges some good moods significantly. Traders become more pleased and peaceful after trading since they enjoy their new experience trying the trading application. In addition, this activity can reduce some bad moods. The moods of depression, dull, quite, sluggish, and tired are significantly decreased.

Furthermore, if we connect the changes of Traders' moods with their trading results, there are only two types of results, either they make some profits or lose their money. There are some differences of mood changes between these two results.

For new Traders who win the trading session, the positive moods increase significantly whilst negative moods decrease significantly. New Traders become

more pleased, active, energetic, vigorous, but less sluggish.

For new traders who lose money at trading session, more bad moods change significantly rather than good moods. Both positive and negative moods are reduced. Bad moods that change significantly include sleepy, quite, dull, and tired. The positive moods that occur here are self-controlled and peaceful.

And finally, we find that some moods have a correlation with trading results including unconcerned, self-controlled, unenterprising, and sluggish. To win the trading session, new traders must reduce their unconcerned and self-controlled moods whilst they also must increase unenterprising and sluggish moods.

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