THE VALIDITY EXPLORATION OF GENERAL PROCRASTINATION SCALE (LAY, 1986)

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Abstract

Procrastination is defined as the act of "putting off or delaying an action to a later time."(Bachrach, 2012).

Measuring procrastination is important for better understanding of this so common habit, but also, for diagnosing and therapy of it.

Lay (1986) matched procrastination with traits, big 5 theory, perfectionism, anxiety, agitation, dejection, and self-discrepancy etc. His scale General Procrastination Scale (GPS) consists of 20 items. Responses across items are summed to obtain a single score, and according to the instructions of GPS, the scale is one-factor only scale, with Cronbach alpha of 0,82 (Lay, 1986) and a retest reliability of 0,80 (Ferrari, 1989).

The purpose of this research is to explore psychometric characteristics of procrastination scale by Lay (1986). For this purpose, the scale was applied to 480 undergraduate students. Results of this study confirmed the evidence of high reliability of scale (α= 0.876). Factorial analysis at first showed five factors that were not interpretable but rotated factorial analysis by employing Equamaxrotation with Kaiser's Normalization, showed clearer structure. According to this, there are 5 components of this scale: Factor 1. **Good planning**: items 8, 14, 15, 18, and 20. Factor 2. **Delaying**: items 5,9,11,12 and 19. Factor 3. **Doing things in last minute**: items 16 and 17. Factor4. **Good time management:** items 3,4,6 and 13. Factor 5: **Poor time management**: items 1,2,7 and 10.

Key words: Procrastination, validity, reliability, factorial analysis.

Introduction

We can say that procrastination is defined as putting off, delaying tasks or postponing activities as a psychological term in dictionaries generally. People who postpone can change important activities to the less important activities. They prefer to delay crucial activities to complete for a later time. Also, people who procrastinate don't have any logical reason to postpone or to put activities off. However, they prefer to complete activities which aren't crucial to do. Even though doing less crucial actions or activities give them some disadvantages, they don't fulfill main duty or task (Saulsman& Nathan, 2008). If a person procrastinates, he/she can postpone with thousands of reasons. People who procrastinate generally wait until last time to complete a task unnecessarily.

On the other hand, procrastination is connected with the personality of a person, habit and ability. According to Steel (2010), there is a relationship between personality traits and procrastination such as dimension of conscientiousness of the Big Five instrument. Conscientiousness is negatively correlated with procrastination in terms that if a person have a a high level of conscientiousness, he/she is less prone to procrastinate because a person with high level of conscientiousness has also a high level of controlling their impulses, diligence, sense of commitment, respect, continuity, and well time management. We can say that people who have a high level of conscientiousness are hard-working at their occupation

(Whitbourne, 2012).

Procrastination is also almost common human characteristic. However, procrastination gives bad outcome to people's life. People who procrastinate can be fired or they can lose communication with their family and friends because they have a problem to finish their duty or tasks on time or they don't fulfill their responsibilities. "The tendency to procrastinate also undermines their self-confidence, convincing them that they are lazy or worthless." (Haederle, 1992).

Nowadays, there is no person who doesn't know procrastination from its own experience. It isn't based on how well at using of time a person is or how dutiful person is. We could say that everybody has the tendency of procrastination, but not all people are procrastinators, just as we can say for every psychological trait.

When a person prefers to put things off or delay his/her duties instead of completing his or her assignments or tasks it can cause negative effects on many aspects of a person's life. Procrastination can affect a person's accomplishments badly (Cherry, 2014). In today's life, most people procrastinate, but according to research "20 percent of U.S. men and women are chronic procrastinators." Those people generally postpone in their home, work school and relationship. Also for these 20 percent of people choose procrastination as their lifestyle (Ferrari, 2010). Also, for Ferrari, people who are in the 20 percent are more prone to have clinical depression or phobias. Those people don't like to complete hard tasks instead they knowingly look for the turnoff. People who procrastinate doing things

better when they have lots of things to do, but it is just a reason for them to procrastinate more.

In the literature, we can find the following negative effects of procrastination:

- *Higher levels of consumption of alcohol* affect people in a negative way that procrastination suggests it, between those people who drink already. Procrastinators drink more than they tend to appearance of generalized problems in self-regulation (Cherry, 2014).

- *Destroy Health and Immune System*: Procrastination can affect some important health problems to occur; it is a behavioral style that may increase defensiveness to sickness and several negative health outcomes (Pychyl, 2008). For many reasons, procrastination is not good for people's health. But delaying something develops higher levels of stress and all those stress hormones release through people's body, tiring it out faster. And this situation put people at risk for inappropriate health because they are just as likely to postpone seeking treatment for medical problems as they are to postpone everything else. In addition, procrastination makes their immune system weak. They cannot sleep properly at night (Marano, 2003). College students who procrastinate have a poor immune system so they have more colds and flu and also they have more gastrointestinal problems (Cherry, 2014).

- Harm teamwork, private relationship and/or social relationship- as

a procrastinator, people delay something all the time, but on the other hand, they have their responsibility. They can make other people disappointed that who believe in them such as their friends, family, co-workers and fellow students. If they continue to delay and turn in a project late or submit until last minute, they can lose their relationship with loved one, friends, or co-workers.

- The igher level of stress: all procrastination occurs at an emotional level, not a logical level. However, people are more inclined to fear what is first concern and people's emotions have not enough to plan for the future. For this reason, people easily delay something because they feel very nervous or tired in order to complete the tasks. However, in long-term this delaying makes them more distress and worried, but at this time their emotions do not think it at all. There is a finding of stress level and procrastination. Students who were procrastinators are stated less sickness and lower distress levels than non-procrastinators. When procrastinators reported higher levels of stress and sickness, this altered dramatically by the end of the term (Cherry, 2014).

- *More Discomfort:* On the disadvantages, procrastination can also produce distinct kind of discomfort. Generally, the more people delay more they might sense guilty or ashamed of their attitudes. They may feel more worried, because a task is getting worse and more overburdened the longer they delay it. They may show

hopeless, as the longer they do not try it more they consider they cannot handle it (Saulsman& Nathan, 2008).

- **Affects mental health:** Procrastination can have a very negative impact on people's physiological wellbeing. People's relationship with their friends and their family can be affected negatively because of procrastination so that situation can harm their mental health. In addition, they can feel upset, anxiousness and uncomfortable, when they delay anything.

- **Insomnia:** People who are systematically procrastinators can also delay their sleep. People who procrastinate are more likely to have sleep disorders. In other case, people who procrastinate generally have many things to do, but they cannot organize to complete it which is their problem. For this reason, going to bed while they have many things to do so in that case, they detect nervously and worry about these unfinished things. As a result, they are not able to sleep properly and effectively. Insomnia can be an issue for those people. However, people fear about life and all its complications and deal with them. They can sleep well if they do this. The most appropriate way to deal with insomnia caused by procrastination is controlling one's life and trying to stop delaying. If still, these people cannot achieve to procrastinate, they need to get help and support (Saulsman& Nathan, 2008).

When it comes about the origin of the procrastination, we could say that nurture is dominant. "People who procrastinate are not born as procrastinators. Procrastination is a kind of learned in the family. It is one of response to an authoritarian parenting style." When parents control their children all the time harshly, those children cannot have the skills to manage themselves (Marano,2003).

If people postpone something consciously because it is logical to put off some duties, in this situation they are not procrastinating or putting something off. The reason to procrastinate is that they have other things to do more important or they wait for the best moment to finish their task. "Procrastination is when people planned or felt that they should have done the thing earlier, and then delayed anyway. In short, it is putting off despite expecting to be worse off." (Steel, 2010).

Since procrastination is a common trait, but also considering the fact that being procrastinator can cause many unwanted effects in daily life, as the goal of this research, we wanted to explore the construct of procrastination, and psychometric characteristics of the widely used scale for measuring of procrastination. The final intention would be being able to measure procrastination and to distinct procrastinators from people who are not.

Purpose of the Research

The purpose of this research is to explore psychometric characteristics of

procrastination scale by Lay (1986), as well as to explore the construct of procrastination among students.

Methodology

Participants

The sample consisted out of 480 students from different universities. The participants were enlisted from Thr Faculty of Arts and Social Sciences, Faculty of Economics and Business Management, and Faculty of Engineering and Natural Sciences, such as Medical school and Pharmacy school. We used the heterogeneous sample in order to explore factorial structure in the most convenient way.

Gender structure of the sample can be seen from table 1.

Table 1: Distribution of gender among the participants of the research

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	227	47,3	47,3	47,3
	female	253	52,7	52,7	100,0
	Total	480	100,0	100,0	

Instruments

In this study, General Procrastination Scale was used (Lay, 1986).

Clarry Lay, PhD, is the author of this questionnaire, the professor of psychology at York University in Toronto. Lay made lots of research about procrastination. He matched procrastination with traits, big 5 theory,

perfectionism, anxiety, agitation, dejection, and self-discrepancy etc. In his research, General procrastination scale consists of 20 items. Responses across items are summed to obtain a single score. The scale has a Cronbach alpha of 0,82 (Lay, 1986) and a retest reliability of 0,80 (Ferrari, 1989) Points are given based on five points where 1 means extremely uncharacteristic and 5 states extremely characteristics. The 5 point item (1=low, 5=high) version of the scale was used since it yields higher item variance and high scores reflect procrastinators behavior. This version was found effective at measuring characteristics of procrastinators across a variety of situations. For example, Lay (1986) reported construct validity information such that GP scores were related to disorganization, tardiness, and independent of the need for achievement, energy level and self-esteem (Ferrari, 1992). The GPS has been evidenced to be a reliable and valid measure with several relevant constructs. GPS can be conducted on both adults and adolescents. There isn't any required time set to complete GPS, but it is estimated that 10-15 minutes will be enough to complete the test because test questions are easy and understandable. There is an instruction at the beginning of the test about how to respond questions. Participants are requested to answer questions regarding how they feel these days by including the day of application of GPS.

The standardization and related studies of GPS were conducted by Lay (1986). This paper considered three studies designed to examine procrastinators behavior. In Study I, a general form (G) of a true-false *procrastination* scale was created. This form was based on an earlier version of the scale

containing parallel forms A and B. Procrastination was positively related to measures of disorganization and independent of *need-achievement, energy level*, and *self-esteem*. High scorers on the *procrastination* scale were more likely to return their completed inventory late. Procrastination was unrelated to grade-point average ($R = -10$). In Study II, subjects completed Form G of the *procrastination* scale and a variation of Little's (1983) Personal Projects Questionnaire. Based on ratings of their personal projects, procrastinators and non-procrastinators were distinguished in a number of ways, foremost being the non-procrastinator's more positive response to the project dimension of stress and the procrastinator's greater sensitivity to how enjoyable the project was in terms of time spent. In Study III, after completing a personality inventory, air-passengers awaiting their flight departure were asked to take an envelope with them and to mail it back on a designated date. Procrastinators were less accurate in doing so than were non-procrastinators. Various aspects of procrastinatory behavior were discussed, including a reconsideration of the defining of the construct.

1.5 Procedure and Research Design;

The research is made on a convenient sample of students. Students were informed that their participation was voluntary and confidential. All students were ensured that their results will be used only for the scientific purpose and any of the private information will not be shared with a third person. All completed questionnaires were then collected by a researcher. For the analysis of data SPSS is used.

Results and discussion

Item Analyse of Procrastination Scale

*Table 2.*Descriptive statistics of all items of the scale

Descriptive Statistics

	N	Min	Max	Mean	Std. Dev
I often find myself performing tasks that I had intended to do days before	480	1.00	5.00	3.2438	1.82906
I do not do assignments until just before they are to be handed in	480	1.00	5.00	3.0646	1.29315
When I am finished with a library book, I return it right away regardless of the date it is due	480	1.00	5.00	2.6083	1.41448
When it is time to get up in the morning, I most often get right out of bed	480	1.00	5.00	2.9375	1.48768
A letter may sit for days after I write it before mailing it	480	1.00	5.00	2.3292	1.22431
I generally return phone calls promptly	480	1.00	5.00	2.3417	1.30357
Even with jobs that require little else except sitting down and doing them, I find they seldom get done for days	480	1.00	5.00	2.9542	1.20800
I usually make decisions as soon as possible	480	1.00	5.00	2.4417	1.21092
I generally delay before starting on work I have to do	480	1.00	5.00	2.9229	1.26800
I usually have to rush to complete a task on time	480	1.00	5.00	3.3979	1.21662
When preparing to go out, I am seldom caught having to do something at the last minute	480	1.00	5.00	2.7479	1.33720
In preparing for some deadline, I often waste time by doing other things	480	1.00	5.00	3.3229	1.21142
I prefer to leave early for an appointment	480	1.00	5.00	2.3063	1.29877
I usually start an assignment shortly after it is assigned	480	1.00	5.00	2.8063	1.20799
I often have a task finished sooner than necessary	480	1.00	5.00	2.7229	1.17396
I always seem to end up shopping for birthday or Christmas gifts at the last minute	480	1.00	5.00	2.9458	1.27984
I usually buy even an essential item at the last minute	480	1.00	5.00	2.8417	1.27114
I usually accomplish all the things I plan to do in a day	480	1.00	5.00	2.6271	1.18643
I am continually saying I will do it tomorrow	480	1.00	5.00	3.1521	1.29870
I usually take care of all the tasks I have to do before I settle down and relax for the evening	480	1.00	5.00	2.3167	1.20183
Valid N (listwise)	480				

From the table above, we can see that total range of all items is as maximal as possible (from 1 to 5). The theoretical mean for all items is 3, and as we can see, all items Means do fall into the range from 2 to 4, so if we take as a criterion of discriminativity the range and the means of the items, we can say that discriminativity of all items is satisfying,

Table 2. Item-total statistics for all items

Item-Total Statistics

		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1	I often find myself performing tasks that I had intended to do days before	52.7875	101.270	-.122	.199	.736
2	I do not do assignments until just before they are to be handed in	52.9042	90.195	.321	.185	.699
3	When I am finished with a library book, I return it right away regardless of the date it is due	53.3604	91.099	.246	.130	.706
4	When it is time to get up in the morning, I most often get right out of bed	53.0313	89.972	.268	.127	.704
5	A letter may sit for days after I write it before mailing it	53.6396	90.803	.319	.169	.699
6	I generally return phone calls promptly	53.6271	93.182	.193	.119	.710
7	Even with jobs that require little else except sitting down and doing them, I find they seldom get done for days	53.0146	92.344	.256	.190	.705
8	I usually make decisions as soon as possible	53.5271	91.507	.293	.179	.701

9	I generally delay before starting on work I have to do	53.0458	88.027	.425	.304	.689
10	I usually have to rush to complete a task on time	52.5708	94.383	.164	.174	.712
11	When preparing to go out, I am seldom caught having to do something at the last minute	53.2208	99.571	-.060	.134	.734
12	In preparing for some deadline, I often waste time by doing other things	52.6458	90.045	.358	.328	.696
13	I prefer to leave early for an appointment	53.6625	92.629	.217	.167	.708
14	I usually start an assignment shortly after it is assigned	53.1625	87.105	.496	.400	.683
15	I often have a task finished sooner than necessary	53.2458	87.827	.479	.445	.686
16	I always seem to end up shopping for birthday or Christmas gifts at the last minute	53.0229	93.158	.201	.221	.710
17	I usually buy even an essential item at the last minute	53.1271	87.481	.448	.375	.687
18	I usually accomplish all the things I plan to do in a day	53.3417	89.136	.411	.301	.691
19	I am continually saying I will do it tomorrow	52.8167	86.889	.462	.411	.685
20	I usually take care of all the tasks I have to do before I settle down and relax for the evening	53.6521	91.050	.316	.225	.699

Although discriminativity of items is satisfying, the item-total correlations of all items are not that good. Items 1,3,4,6,7,8,10,11,13, and 16 (grey), have item-total correlations that are below the given limit of 0.3, and those that have extremely problematic item-total correlations are items 1

and 11, and those items will be additionally checked during the further psychometrical testing.

In addition, those items (1 and 11), if deleted, the reliability of the instrument would be increased, so as the conclusion, we might say that those items should be revised in a manner that they should be replaced with other items, or improved considering the content of items itself.

The Reliability of Procrastination Scale

Table 4: Reliability of Procrastination Scale

Reliability Statistics	
Cronbach's Alpha	N of Items
.713	20

According to Cronbach's alpha reliability, our result was 0.713 which is slightly below the limit of 0.8, but still acceptable, considering that other researchers report on different reliability coefficients, such as α= 0,82 (Lay, 1986) and a retest reliability of 0,80 (Ferrari, 1989b).

Validity of Procrastination Scale

Most of the previous studies on this questionnaire (Lay's Procrastination scale) were consistent about the fact that this is unidimensional scale as Lay (1986) initially proposed and which was confirmed by some researchers (Bustinza, Cema, García, Díaz-Morales, & Ferrari, 2005; Díaz-Morales et al., 2006). But recently we can find some studies that imply on the fact that this scale might be multidimensional, actually two-dimensional, as it was found in Turkish sample (Ferrari, Özer, & Demir, 2009), and those factors were Negative aspects of arousal delays and Positive aspects of

arousal delays. While in Italian sample (Mariani & Ferrari, 2012, according to Argiropoulou M. I. and Ferrari, J. R. 2015), it was found that it is two-dimensional with factors: Tendency to postpone tasks (6 items) and Getting tasks done on time (7 items).

Argiropoulou M. I. and Ferrari, J. R. (2015) found that this scale could be two-dimensional, and they explained two factors: Delay and Procrastination domains.

Other scales that measure procrastination offer a different solution based on their factorial analysis results. Yockey and Kralowec (2015, according to Harrington, 2005), mentioned that procrastination has two dimensions: "frequency of procrastination," which measures how often students procrastinate on various academic tasks, and "reasons for procrastination.

In this research, the initial factorial analysis extracted five factors, that totally explained 48,22% of the variance, but this matrix was not interpretable, so we tried the other possible solutions when it comes about the exploration of the validity.

Table 5: Validity of Procrastination Scale

Table 8: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,826	19,128	19,128	3,826	19,128	19,128
2	2,276	11,382	30,510	2,276	11,382	30,510
3	1,227	6,137	36,647	1,227	6,137	36,647
4	1,205	6,027	42,673	1,205	6,027	42,673
5	1,110	5,551	48,224	1,110	5,551	48,224

Extraction Method: Principal Component Analysis.

The most interpretable solution was when the number of factors was fixed to five, and with Equamax rotation with Kaiser's normalisation. The rotated

matrix can be seen in table 6.

Table 6: Factor analysis with rotation included of the Procrastination Scale

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
I often find myself performing tasks that I had intended to do days before	-,164	-,252	,024	-,047	,691
I do not do assignments until just before they are to be handed in	,343	,148	,312	-,141	,369
When I am finished with a library book, I return it right away regardless of the date it is due	,042	,013	,091	,624	,055
When it is time to get up in the morning, I most often get right out of bed	,167	,021	,117	,497	,013
A letter may sit for days after I write it before mailing it	,347	,362	,225	-,056	-,116
I generally return phone calls promptly	,072	,098	-,062	,580	-,141
Even with jobs that require little else except sitting down and doing them, I find they seldom get done for days	,159	,442	,037	-,066	,481
I usually make decisions as soon as possible	,467	,212	-,122	,232	-,084
I generally delay before starting on work I have to do	,344	,504	,300	-,056	,080
I usually have to rush to complete a task on time	-,049	,233	,024	,046	,692
When preparing to go out, I am seldom caught having to do something at the last minute	,333	-,676	,140	-,069	-,042
In preparing for some deadline, I often waste time by doing other things	,080	,655	,276	,041	,138
I prefer to leave early for an appointment	,158	-,104	,012	,627	-,030
I usually start an assignment shortly after it is assigned	,543	,196	,190	,340	-,024
I often have a task finished sooner than necessary	,615	,171	,124	,342	-,131
I always seem to end up shopping for birthday or Christmas gifts at the last minute	-,154	-,006	,785	,041	-,020
I usually buy even an essential item at the last minute	,101	,144	,787	,120	,111
I usually accomplish all the things I plan to do in a day	,703	,033	,087	,117	-,027
I am continually saying I will do it tomorrow	,144	,534	,498	,109	,104
I usually take care of all the tasks I have to do before I settle down and relax for the evening	,616	-,175	-,036	,214	,142

Extraction Method: Principal Component Analysis.
Rotation Method: Equamax with Kaiser Normalization.
a. Rotation converged in 9 iterations.

Based on this table, we can say that their procrastination is not unidimensional trait, or, that this scale is not unidimensional, but multidimensional, and that it measures (consists out of the) five factors, which, based on the content of the items could be grouped and named as follows:

- *component 1:* good planning,
- *component 2:* delaying
- *component 3:* doing things in last minute
- *component 4*: well time management
- *component 5:* poor time management.

Component 1 consists of the five items, and they could be named as **good planning.**

Table 7.a. Factor I: Good planning

NO	Item	r
8	I usually make decisions as soon as possible	0.467
14	I usually start an assignment shortly after it is assigned.	0.543
15	I often have a task finished sooner than necessary.	0.615
18	I usually accomplish all the things I plan to do in a day.	0,703
20	I usually take care of all the tasks I have to do before I settle down and relax for the evening.	0,616

Component 2 consists of the five items, and they could be named as **delaying.**

Table 7.b. Factor II: Delaying

NO	Item	r
5	A letter may sit for days after I write it before mailing it	0,362
9	I generally delay before starting on work I have to do.	0,504
11	When preparing to go out, I am seldom caught having to do something at the last minute.	0,676
12	In preparing for some deadline, I often waste time by doing other things.	0,655
19	I am continually saying I will do it tomorrow.	0,534

Component 3 consists of the two items, and they could be named as **doing things in the last minute.**

Table 7.c. Factor III: Doing things in last minute

NO	Item	r
16	I always seem to end up shopping for birthday or Christmas gifts at the last minute	0,785
17	I usually buy even an essential item at the last minute	0,787

Component 4 consists of the four items, and they could be named as **good time management.**

Table 7.d Factor IV: Good time management

NO	Item	r
3	When I am finished with a library book, I return it right away regardless of the date it is due.	0,624
4	When it is time to get up in the morning, I most often get right out of bed	0,497
6	I generally return phone calls promptly	0,580
13	I prefer to leave early for an appointment	0,627

Component 5 consists of the four items, and they could be named as **poor time management.**

Table 7.c. Factor V: Poor time management

NO	Item	r
1	I often find myself performing tasks that I had intended to do days before	0,691
2	I do not do assignments until just before they are to be handed in	0,369
7	Even with jobs that require little else except sitting down and doing them, I find they seldom get done for days	0,481
10	I usually have to rush to complete a task on time	0,692

In comparison to other research findings, we can say that our factorial analysis does not match to any other which raises the question about the validity of this instrument. In the conclusion, we can say that the validity of this instrument needs to be checked further with the regard of the cultural background of the sample.

Conclusions

General procrastination scale by Lay is the scale for measuring procrastination, which was developed for that purpose only, and the initial

research (Lay, 1986) on this scale provided the information that scale is reliable and valid, and that it fulfills all psychometrical criteria about all parameters.

Based on these research findings, we can conclude that:

- Discriminative power of items is satisfying when it comes about the criteria of the total range of all items and analysis of the means of the items.

- Item-total correlations for items 1,3,4,6,7,8,10,11,13, and 16 are below the given criteria, but the item-total correlations are extremely low for items 1 and 11 which implies that those items should be revised or even excluded from the final version of the instrument, even more since the reliability of the instrument is increased if those items are excluded.

- Reliability of the instrument is 0.713, which is satisfying, but still, it is below the criteria of 0.8, which means that some items should be revised and that item-reliability should be increased in general.

- The validity of the instrument is checked by employing a factorial analysis, which showed the existence of the five factors, and that was the only interpretable solution. The five factors are grouped and named as: good planning, delaying, doing things in the last minute, well time management, poor time management.
- The validity of the scale should be further explored and the scale should be standardized for each population separately because it is evident that there are national differences not only in descriptive statistics measures but in a number of factors and possible interpretations of the results.

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PERCEPTION OF ECONOMICS UNDERGRADUATE ON NON-USAGE OF UNIVERSITY'S ICT PLATFORM IN TEACHING ECONOMICS IN UNIVERSITY OF ILORIN

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Abstract

This study investigated the perception of economics undergraduate on non-usage of the university's ICT platform in teaching economics at the University of Ilorin. Descriptive research of survey type was adopted in this study. The population of this study consists of all Economics undergraduate in the departments of Economic and Economics Education (of the social sciences education department) which is estimated at 937 students. A sample of 278 respondents was drawn randomly in this study. A Researcher's Designed questionnaire with psychometric properties of content validity and 0.71r was used to elicit the needed. Data collected were analyzed with descriptive statistics of frequency counts, percentages, means, and standard deviation while the hypotheses formulated were tested using inferential statistics of t-test and ANOVA at 0.05 alpha levels. The study revealed that lecturer's philosophy, lack of appropriate skills, incompatible classroom environment, limited lecture hours and non-satisfaction with ICT results, among others are perceived as reasons for non-usage of ICT platforms for teaching economics. The study, therefore, recommended that the use of visual Google classroom at all levels of the teaching by the university administration should be encouraged.

Keywords: *Perception, Reasons, ICT Platforms and Non-Usage.*

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Introduction

The emergence of technologies for learning, conversation media and smart interface, Open Educational Resources (or Massively Open Online Courses) and increased awareness of "New Generation" have been demanding traditional education and learning systems to be more open, flexible, and customized to what students want to expect. Using ICT in education has been widely accepted as an effective way of challenging such changes attributed to technological advances, societal paradigm shift, and internationalization. It is based on the strong belief that the potential of ICT would bring positive impacts to teaching and learning by providing students and teachers with flexibility, accessibility, more opportunities for participation and collaboration, and more outcomes.

Now is the right time to respond to a simple but critically important question, "what should be done to fully exploit valuable resources for better education in the future?" It would be to use all resources in a smart way to maximize their potentials to meet the different perspectives on ICT from stakeholders: teachers, students, and academic institutions. It is in response to this that the University of Ilorin under the leadership of Professor Abdulganiyu Ambali, decided to make available to all students of the instruction for four years a tablet. This is considered to be very portable, internet access and also subscribe to the Google Apps platform where both lecturers and students are accommodated to effectively carry out their teaching and learning the process. But one question anybody will ask today is how well are lecturers exploring this platform to teach their students?

This is because changes in technology, demography, and internationalization are driving education system to evolve to an open flexible education (or learning) environment which provides learners with quality services encompassing formal, informal, and non-formal education.

To this regard the "Learning for the Future (LFF)" project recently initiated by UNESCO IITE is a comprehensive approach to integrate ICT in education, renew pedagogy, and enhance learning now and the future, which ensures teachers and students effective use of technologies and resources in strengthening the four pillars of learning for the 21st century: learning to know, learning to do, learning to be, and learning to live together.

ICTs have the potential to accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change (Davis and Tearle, 1999; Lemke and Coughlin, 1998; cited by Yusuf, 2005). In a rapidly changing world, basic education is essential for an individual to be able to access and apply information. Such ability must find include ICTs in the global village.

Conventional teaching has emphasized content. For many years the course has been written around textbooks. Teachers have taught through lectures and presentations interspersed with tutorials and learning activities designed to consolidate and rehearse the content. Contemporary settings are now favoring curricula that promote competency and performance. Curricula are starting to emphasize capabilities and to be concerned more with how the information will be used than with what the information is. Contemporary ICTs are able to provide strong support for all these requirements and there are now many outstanding examples of world class settings for competency and performance-based curricula that make sound use of the affordances of these technologies (Oliver, 2000). The use of information and communication technologies can help revitalize teachers and students. This can help to improve and develop the quality of education by providing curricular support in difficult subject areas. To achieve these objectives, teachers need to be involved in collaborative projects and the development of intervention change strategies, which

would include teaching partnerships with ICT as a tool. According to Zhao and Cziko (2001), three conditions are necessary for teachers to introduce and use ICT in their classrooms or teaching: teachers should believe in the effectiveness of technology, teachers should believe that the use of technology will not cause any disturbances, and finally teachers should believe that they have control over technology.   However, research studies show that most teachers do not make use of the potential of ICT to contribute to the quality of learning environments, although they value this potential quite significantly (Smeets, 2005). Harris (2002) conducted case studies in three primary and three secondary schools, which focused on innovative pedagogical practices involving ICT. Harris (2002) concludes that the benefits of ICT will be gained "…when confident teachers are willing to explore new opportunities for changing their classroom practices by using ICT. As a consequence, the use of ICT will not only enhance learning environments but also prepare the next generation for future lives and careers (Wheeler, 2001). The changed pool of teachers will come changed responsibilities and skill sets for future teaching involving high levels of ICT and the need for more facilitative than didactic teaching roles (Littlejohn et al., 2002).

According to Cabero (2001), «the flexibilization time-space accounted for by the use of ICT in teaching and learning processes contributes to increasing the interaction and reception of information. Such possibilities suggest changes in the communication models and the teaching and learning methods used by teachers, giving way to new scenarios which favor both individual and collaborative learning". The use of ICT in educational settings, by itself, acts as a catalyst for change in this domain. ICTs by their very nature are tools that encourage and support independent learning. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers as information sources and cognitive tools (Reeves & Jonassen, 1996), the influence of the technology on supporting how students learn will continue to increase.

In the past, the conventional process of teaching has revolved around teachers planning and leading students through a series of instructional sequences to achieve the desired learning outcome. Typically these forms of teaching have revolved around the planned transmission of a body of knowledge followed by some forms of interaction with the content as a means to consolidate the knowledge acquisition. Contemporary learning theory is based on the notion that learning is an active process of constructing knowledge rather than acquiring knowledge and that instruction is the process by which this knowledge construction is supported rather than a process of knowledge transmission (Duffy & Cunningham, 1996). In this domain, learning is viewed as the construction of meaning rather than as the memorization of facts (Lebow, 1993; Jonassen & Reeves, 1996). Learning approaches using contemporary ICTs provide many opportunities for constructivist learning through their provision and support for resource-based, student-centered settings and by enabling learning to be related to context and to practice (Berge, 1998; Barron, 1998). Students enjoy learning, and the independent inquiry which innovative and appropriate use of ICT can foster. They begin to acquire the important of 21st-century skills which they will need in their future lives.

Many variables may account for reason lecturers find it difficult to adopt the use of ICT for their lecturers in higher institutions, some which are: government, environmental, lecturers, students and lastly parents various (Zhao & Cziko, 2001). In the work of Susman (1998) it was revealed that Lecturers' variable factors influence their attitude and use of ICT in teaching negatively. Tedla (2012) and Tay, Lim, Lim and Ling-Koh (2012) confirm that lecturers use ICT tools in order to make the lessons more interesting and engage learners according to learners' potentials. Also in the study conducted by Flecknoe (2002), the finding revealed 67.5% of respondents' perceptive teachers' level of teaching experience determines the extent to which lecturer uses modern technologies in delivering instructions in the classroom. For instance, it was an acclaimed number

of years of classroom experience reduce certain teachers' beliefs because experienced lecturers were more likely to believe that classrooms should be lecturers' centered and that learning did not always need to be fun". Teachers' age, their level of computer experience and they are lent of years spent at pre-service was and perceived as having serious influence ICT integration (Teo, 2008).

If students are asked to comment on the state or quality of teaching they received without the use of ITC platform provided by the school to them despite their assess to Tablet Portable Computer and Wi-Fi, they are likely to differ in their reasons for avoidance of ICT by their lecturers. This is because the *International Encyclopedia of Social Sciences*, (1992) defines perception as the process by which one comes to know and think about others and their work, characteristics, qualities, roles and functions in the society. It adds that when several individuals confront an object or a thing in their environment, the input of information that impinges on their respective sense organs (e.g. eyes and ears) is the same for every individual, though they may perceive it differently. In Hornby's (1991) view, perception is believed to be the ability to show understanding and insight, to be able to notice and have discernment about a situation. Similarly, Miller and McCracken (1988) posit that perception is the ability of a person to know about his environment through the use of his sense organs which must be very active. Various explanations can be offered as to why the individuals perceive the same thing differently, even when they are confronted with the same stimulus. *The Encyclopedia Britannica* (1997) identifies some variables as responsible for differences in the perceptual functioning of an individual, age, status, gender, among others.

The gender of an individual is considered an important factor that influence perception in not–usage of University ICT platform in the teaching of economics in the University of Ilorin, due to the differences which male and female members of these areas experienced. The positions an individual occupies in the society also influence their perception of

issues and situation (status).

Perception is the mental function of giving significance to stimuli such as shapes, color, movement, taste, sounds, touch, smells, pains, pressures and feeling. Perceptions give rise to individual behavioral responses to particular situations.

Statement of the Problems

The study has shown that an estimated percentage of University lecturers do not explore the ICT platforms available for them, in order to make teaching and learning more meaningful. This cut across all the faculties and departments, with exception of few departments. This became a source of concern to the school administration which calls for a meeting held with the academic staff of the university trying to create awareness of facilities available to on the university ICTs platform for effective teaching and learning process. Thus, series of workshops, training and re-training of the academic staff of the university by the Centre for Research Development and In-House (*Credit*) on the use of some of the facilities made available for lecturers on the internet such as Google App classroom. Also, the Institute of Education organized a Training workshop titled "*Migration of M.Ed. Sandwich programme to E-learning Platform.*" All these aimed at exposing lecturers to the integrate ICTs platform available for them to use in class. But up till now students portable tablets have not been put into proper use since lecturers are not taking them up on how best to use it for learning possess. Report of economics undergraduate affirm that out of many courses undergraduate undertakes in the department only two has ever explored ICT to teach STATA software and sharing of software textbooks for two microeconomics courses briefly. A cursory look at the table of the performance of economics undergraduate revealed thus:

Table 2: Performance of Economics Undergraduates over three Academic Sessions

Academic Session	% Passed	% Failed
2013/2014	84.95	15.05
2014/2015	88.27	11.73
2015/2016	92. 86	7.14

Source: Data Base of University of Ilorin 2017

The above table shows a positive trend of the performance of students over the three academic sessions of the introduction of Portable Tablet Pc for students. This shows that despite non-usage of University ICTs platform economics undergraduates have been performing very well. But in order to compete favorably with global best practices, there is a need for a paradigm shift. Not only to better performance but also to make learning more flexible. In lieu of this, the paper seeks the perception of Undergraduate Economics students on non-usage of University ICT platforms for teaching Economics courses.

Purpose of the Study

The main purpose of this study was to investigate the perception of undergraduate Economics of non-usage of the university's ICT platform in teaching economics at the University of Ilorin. Specifically the study:

1.   Examine the perception of undergraduate economics on non-usage of the university's ICT platform in teaching economics at the University of Ilorin.

2.   Ascertain whether there is a difference in the perception of undergraduate economics on non-usage of university's ICT platform in teaching economics at the University of Ilorin on the basis of gender.

3.   Ascertain whether there is a difference in the perception of

undergraduate economics on   non-usage   of   university's   ICT platform in teaching economics at the University of Ilorin on   t h e basis of the level of their education.

Research Questions

The following questions were raised to guide the study.

1.   What is the perception of undergraduate economics on non-usage of the university's ICT   platform in teaching economics at the University of Ilorin?

 2.   Is there a difference in the perception of undergraduate economics on non-usage of the university's ICT platform in teaching economics at the University of Ilorin on the basis of gender?

 3.   Is there a difference in the perception of undergraduate economics on non-usage of the university's ICT platform in teaching economics at the University of Ilorin on the basis of level?

 Research Hypotheses

The following formulated hypotheses were tested in this study.

Ho_1 There is no significant difference in the perception of male and female undergraduate economics on non-usage of university's ICT platform in teaching economics at the   University of Ilorin.

Ho_2 There is no significant difference in the perception of undergraduate economics on non-usage of university's ICT platform in teaching economics in University of Ilorin on the   basis of the level of their education.

Methodology

        Descriptive research of a survey method was employed in the study. The choice of the descriptive survey was in line with Akuezuilo and Agu (2003), who maintained that it is concerned with a gathering of information on peoples' opinion. The population for the study consists of all Undergraduates' of Business and Social Sciences faculty while the target population was the Economics Department, Faculty of Business and Social Sciences, University of Ilorin. Purposive sampling technique was

used to select the Economics Department which comprises of 937 students. Proportionate sampling technique was used to draw 278 respondents based on the required sample size as stipulated in The Research Advisors (2006) table for sample selection. See table below:

Table 2: Sample Size Selection of Economic and Economics Education Students

Level	Population	Sample Selected
100	283	84
200	194	58
300	203	60
400	257	76
Total	**937**	**278**

Source: (Faculty of Education and Faculty of Social Sciences' IT Office, 2017)

The instrument used for the collection of data was a researcher-designed questionnaire, which was tagged "Perception of Undergraduate on Non-usage of ICT Platform in Teaching Economics Questionnaire (PUNIPTEQ) with psychometric properties of contents validity and reliability index of 0.71. The questionnaire was divided into two sections 'A' and 'B'. Section 'A' contains demographic information of the respondents like Gender and Educational Level while section B consists of items that elicit information on perception of economics undergraduates on non-usage of ICT in Teaching Economics. The questionnaire was structured on four points Likert-type scale as thus: SA- Strongly Agree; A- Agree; D- Disagree; SD- Strongly Disagree. The coding of the questionnaire was SA = 4; A = 3; D = 2; and SD = 1. The data collected were analyzed with the use of descriptive statistics of frequency count, percentage, mean and frequency count answer the only research question, while the two hypotheses formulated, was tested using t-test (t) and ANOVA (F) inferential statistics at 0.05 level of significance.

Results

Research Question One: What is the perception of economics undergraduate on non-usage of university's ICT platform in teaching economics in University of Ilorin?

Table 3: Responses on the perception of non-usage of ICT platform in teaching economics

	Items	SA (%)	A (%)	D (%)	SD (%)	Std.	Mean
	The irregular power supply is considered as one of the reasons why some economics lecturers do not use ICT platform for teaching.	71 (25.5%)	112 (40.3%)	52 (18.7%)	43 (15.5%)	1.00	2.76
	Lack of awareness of economic lecturers about available ICT platforms in the university contributes to non-usage of ICT platform for teaching.	24 (8.6%)	79 (28.4%)	129 (46.4%)	46 (16.5%)	0.84	2.29
	The process of setting up ICT platform for lectures is time-consuming to some senior lecturers.	49 (17.6%)	147 (52.9%)	70 (25.2%)	12 (4.3%)	0.76	2.84
	Fluctuation in the university's WiFi's connection jeopardizes lecturers' interest in using ICT platform for teaching.	81 (29.1%)	127 (45.7%)	51 (18.3%)	19 (6.8%)	0.87	2.97
	Incompatible classroom environments to cater for needs of instructors contribute to non-usage of ICT platform for teaching.	72 (25.9%)	147 (52.9%)	44 (15.8%)	15 (5.4%)	0.80	2.99
	Insufficient equipment also hampers usage of ICT platform for teaching among economics lecturers.	90 (32.4%)	136 (48.9%)	40 (14.4%)	12 (4.3%)	0.80	3.09
	Lack of appropriate skills and knowledge in using computers hindered integration of ICT platforms for teachings among lecturers.	71 (25.5%)	131 (47.1%)	58 (20.9%)	18 (6.5%)	0.85	2.92
	Lecturers' philosophy regarding appropriate teaching methods determined whether and how they used ICT platforms for teaching.	85 (30.6%)	136 (48.9%)	47 (16.9%)	10 (3.6%)	0.79	3.07
	Inadequate staff development opportunities hinder some lecturers from using ICT platforms for teaching and learning purpose.	54 (19.4%)	139 (50.0%)	74 (26.6%)	11 (4.0%)	0.77	2.85

Some economics lecturers are not satisfied with the result of the usage ICT platform in teaching economics.	50 (18.0%)	120 (43.2%)	87 (31.2%)	21 (7.6%)	1.39	2.78
Students attitude towards plagiarizing answers through the internet may discourage frequent integration of ICT into lecturing	49 (17.6%)	147 (52.9%)	61 (21.9%)	21 (7.6%)	0.81	2.81
The increase in the level of absence in the classroom by sharing courseware on Google drive hampers usage of ICT platform for teaching.	76 (27.3%)	121 (43.5%)	62 (22.3%)	19 (6.8%)	0.88	2.91
Insufficient lecture hours may not allow the lecturer to cover the content when using ICT platform for lecture	67 (24.1%)	116 (41.7%)	68 (24.5%)	27 (9.7%)	0.92	2.80
Students using ICT platform mostly for leisure purposes may hinder the interest of lecturer for embedding ICT into Teaching	41 (14.7%)	108 (38.8%)	93 (33.5%)	36 (12.9%)	0.90	2.55
Total						

Source: Field Survey, 2017. ***Mean ≥2.5 = Agreed, Mean< 2.5 = Disagreed***

Responses from table 3 showed that the mean of all the items is ≥ 2.5, which means that the respondents perceptive all the items as reasons for non-usage of University ICT platform by lecturers on Economics Department.

Hypotheses One: There is no significant difference between the perception of male and female   economics undergraduate on non-usage of university's ICT platform in teaching
economics in University of Ilorin.

Table 4: t-test of Respondents

Gender	N	Mean	Std. D	t- cal	df	p-value	Decision
Male	148	39.69	4.82				
				0.468	276	0.640	Do Not Reject
Female	130	39.42	4.87				

P>0.05

Table 4 reveals that t-value is 0.46 with significant probability value (P-value) of 0.64. Since the probability value, P-value = 0.64 > 0.05 alpha level, the null hypothesis is therefore not rejected. This implies that no significant difference existed in the perception of economics undergraduate on the basis of their gender.

Hypothesis Two

H_{o2}: There is no significant difference in perception of undergraduate economics students on   non-usage of university's ICT platform in teaching economics in University of Ilorin   based on level

Table 5: ANOVA table respondents perception based on level

	Sum of Squares	df	Mean Square	F	Sig.	Decision
Between Groups	495.628	3	165.209			
Within Groups	5992.574	274	21.871	7.554	.000	Significant
Total	6488.201	277				

P<0.05 level

Table 5   shows that F-value is 7.55 with significant probability value (P-value) of 0.00. Since the probability value, P-value = 0.00 < 0.05 alpha level, the null hypothesis is rejected. This implies that significant difference existed in the perception of undergraduate economics students on non-usage of university's ICT platform in teaching economics in University of Ilorin across all levels. This was evident in the Post- Hoc Test where variance existed in the different groups of respondents that are, the Economic undergraduate of 100, 200, 300 and 400 levels respectively.

Discussion of Findings

This study has investigated the perception of undergraduate economics students on non-usage of ICT platform for teaching economic in the University of Ilorin. This study has revealed the perception of the student about non-usage of ICT platforms for teaching among which is inadequate power supply as perceived by the majority of students. Also, students believed that process of setting up ICT platform for lectures is time-consuming to some senior lecturers. Furthermore, the opinion of students signifies the fact that fluctuation in the university's Wi-Fi connection jeopardizes lecturers' interest in using ICT platform for teaching and those incompatible classroom environments make it impossible for utilization of ICT in some situations by lecturers. This finding corroborates that of Lewis and Smith (2002) which revealed the barriers for ICT adoption as follows: limited equipment in the school/ classroom, inadequate skills, minimal support from the school administration, time constraints and the teacher's own lack of interest and belief in the effectiveness of ICT.

Lack of appropriate skills and knowledge in using computers is another factor that was found out to be the hindering integration of ICT platforms for teachings among lecturers, students also perceived lecturers' philosophy regarding appropriate teaching methods determined whether and how they integrate ICT platforms into their teaching. This is in line with Agbamu (2004) whose study revealed that lack of appropriate skills in the use of ICT is one of the determinants of lecturer failure to integrate ICT into their teaching. Also, Ololube, Umunadi and Kpolovie (2014); Kpolovie and Obilor (2013) study's shared the same result by revealed that in Nigeria today, lecturers non-usage ICT services for reasons such as lack of interest, lack of awareness, outrageous rate of service, poor quality of internet service and epileptic power supply. The study also revealed that students' attitude towards plagiarizing answers through the internet may discourage frequent integration of ICT into lecturing while in the same vein, it was brought to a height that increases the level of absence in the

classroom by sharing courseware on Google drive hamper usage of ICT platform for teaching.

The finding of the study also found that there was no significant difference in the perception of economic undergraduates on non-usage of university ICT platform by their lecturers on the basis of gender. This means that the respondents perceived reasons for non-usage the same way. This could be because all the respondents were exposed to the same teaching and learning situation which could influence them to believe, behave, or feel the same way about issues and challenges. This is confirming the findings of Hall and Langton (2006) who found out that the situation which an individual is exposed to can determine or influence his/her level of perception either positively or otherwise. Thus, this could account for why there was no significant difference in their perception.

While significant difference existed in the economic undergraduate›s perception on the basis of their educational level. This difference could be as a result of the grouping which respondents belong (100, 200, 300 and 400 levels) as well as the characteristics of each group of respondents. This finding is in agreement with the finding of Samar, Azimi and Dadvand (2007) on socioeconomic status and class perception. Their study reveals that differences existed in the perception of people in the society on the basis of their socioeconomic status, even if they are exposed to the same condition.

Conclusion and Recommendations

In conclusion, how economics undergraduates perceived the non-usage of University ICTs platform for effective teaching do not differ on the basis of their gender but differ on the basis of their educational level (100,200,300 and 400 level). The following recommendations were drawn:

1.   Lecturers should try as much as possible to integrate every relevant university ICTs to maximum use to teach.

2.   The university administration should entry into Memorandum of

Understanding (MoU) with software package producers for have access to more software for lecturers to use.

3.   There should be adequate provision of facilities and equipment that will enhance using of ICT for teaching economics in University of Ilorin.

4.   Encourage the use of visual Google classroom at all levels of the teaching by the university administration.

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