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Spending habits and financial literacy based on gender on employees

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Abstract. The aim of the study was to investigate the financial behavior of employees regarding financial literacy and spending habits based on gender. The cluster sampling was used in this study and 60 employees consist of 30 male and 30 females were chosen and the analytical method used is different test of independent sample t-test for normally distributed data, while Mann-Whitney test for distributed data is not normal. The result showed that financial literacy behavior and spending habits between male and female employees were not different. Male and female employees had low level of financial literacy and they had tight spending habits the study also found that male and female employees did not have appropriate knowledge to manage their financial especially in managing investment and loan. This result in increasingly tight spending which caused they still have to deal with the monthly instalment payment in the long run.

1. Introduction

Financial literacy is closely related to financial management. Good financial literacy will have a good impact on financial management. Financial management that includes planning, management, and control of financial aspects into individual considerations in achieving financial prosperity. The spending habits is the habit of spending money. Spending habits will be creating consumptive behavior and problems in financial management.

Kenichiro Chinen & Endo Hideki expressed that each individual who has the ability to make the right decision regarding financial will not be on financial trouble in the future. They also showed healthy financial behavior and able to prioritize their needs, not their wants [1]. Financial literacy and bad financial management will affect the financial stress. If someone always felt that their income is not sufficient to meet their need, they should change their consumption and tailored to their income. One of the solution to balance the income and the spending is to separate need and want and the shifting individual attitude towards money. Individual who always think that money is everything will always be burdened with the question how they can live when they cannot get the money. Robert T. Kiyosaki dan. Sharon L. Lechter expressed that in conducting financial management requires financial knowledge (financial literacy). Financial literacy is a part of the mental intelligence associated with how to find solutions to financial problems [2]. Financial literacy is a part of the mental intelligence associated with how to find solutions to financial problems.



The aim of this study was to investigate the level of financial literacy and spending habits based on gender. C.D.B. Sceresberg (2013) express there is a strong difference between the financial literacy rates of men and women [3], while F. Margaretha, found that there was no significant difference between men and women [4]. Adrian Furham finds women are better in saving, so it can be said that women are strict in spending their money [5]. Different from previous studies, this study to investigate the financial behavior of employees regarding financial literacy and spending habits based on gender, and analyzes employees when receiving a monthly salary, whether they tend to spend their money for consumed such as spending money on daily needs, vacation, helping family members, or investing their money.

2. Literature review and hypotheses

2.1. Financial literacy

According to Robert dan Lechter, financial intelligent or financial literacy is part of an individual mental intelligent which related with the ability to find solutions regarding financial problems [2]. A. Lusardi, & Mitchell, O. S, defined financial literacy as knowledge regarding financial aspects and ability to apply such knowledge [6]. S.M. Danes & T.K. Hira argued that financial literacy as the knowledge to manage the financial aspects [7]. H. Chen & R.P. Volpe then expressed four aspects of financial literacy; general knowledge, savings, insurance, and suitable investment for individual financial management [8].

- Regarding the general knowledge of financial literacy H. Chen & R.P. Volpe found that female had less knowledge compare to male. This indicates that with less knowledge, female would have lower understanding about money, which was a limited resource and had to manage carefully [9].
- Saving aspect according to Zissimopoulos et.al as quoted by Fonseca et al. found that male had higher financial literacy regarding savings compare to female [10]. H. Chen & R.P. Volpe found the same finding that financial literacy of male significantly differs from the female [11]. Male had savings for future needs and had pension plan.
- Insurance aspect, H. Chen & R.P. Volpe found the preparation for protection plan was vital because everyone had the chances to experience unexpected problems (health, accident, illness). Furthermore, male found to have higher financial literacy when related with the selection of insurance instruments and how to correctly apply them [11].
- Investment aspect, Chen et al. showed that male have more knowledge. H. Chen & R.P. Volpe strengthen the notion that male would have courage than female when they have to decide an investment choice in capital market. [11]

H1 : There was no difference on spending habits between male and female.

2.2. Spending habits

Spending habits is a habit to spend the money. M.M. Cummins, et al. divide spending habits into three indicators [12]:

- Planning concept, refer to individual planto spend the money. Jason M. Carpenter M.& Marguerite Moore, argued that financially, male was more independent and confident in managing their money [13].
- Savings, the concept which refer to whether the individual has savings or not. Adrian Furnham found that female students had less comfort when dealing with debt and they prefer to put their money on savings compare to male student [5].
- Purchasing of essential goods concept refer to the habit of buying of necessities which according Sutrisno femlae had more saving habits than male.

H2 : There was no difference of financial literacy between male and female.

2.3. Consumption and investment

Financial planning is important for individual who has income. Good management of the income could lead to better planning of their financial need in the future. By studying the income allocation for male and female employees we could identify their preferences on consumption or investment. It also identified what kind of consumption and investment they preferred. According to N. Gregory Mankiw, consumption is expenditure of the household to buy goods and services. Goods can include durable goods, vehicles, food, and clothes while services include intangible goods such as education [14]. Generally, investment can be interpreted as to postpone the current consumption so it can be enjoyed in the future. Other definition of investment was to place capital or funds on some asset which expected to earn something or to increase its value in the future. Eduardus Tandelin described investment as the commitment to achieve a number of funds or resources for now with the intention of some benefit in the future [15]. Meanwhile, S. Senduk argued that investment products available in the market among others savings, deposits, property, gold, collectible goods, arts, foreign currency, obligation, and stocks [16].

3. Methodology

3.1. Sampling method

The cluster sampling was used in this study and 60 employees consist of 30 male and 30 females were chosen. Samples were taken from several department in Universitas Komputer Indonesia. The result data from the questionnaire were analyzed to see whether there were differences in spending habits and financial literacy between male and female, then analyzed their income allocation in this case the type of consumption and investment from the participants.

3.2. Measurement

- Gender, measured using nominal scale and differentiated into two groups, male and female.
- Spending habits measured using Likert scale (5 scales) from the highest point (5) as strongly agree and the lowest point (1) strongly disagree. The higher score of spending habits represent the individual tend to become tighter in spending the money. On the contrary, the lowest score reflect the individual was more loosely when managing the money. Spending habits categorized into two parts; 1-3 score reflect the loosely spending and the score above 3 to 5 considered as tight spending habits.
- To measure the financial literacy, we used 10 items. The score will categorized in three parts; between 0–40% which categorized as low financial knowledge, between >40%-60% categorized as moderate financial knowledge, and >60%-100% which categorized as high financial knowledge. Allocation of income is divided into two groups, there are consumption and investment. Then, the participants have been asked what kind of consumption investment they like, based on the options available in the questionnaire.

4. Results and discussion

4.1. Validity and reliability for 60 participants (Pilot Test)

We conduct a pilot test and distributed questionnaire to 60 participants and got the result as follow; 10 items on financial literacy and 12 items on spending habits will be used in this study. The reliability test showed the Cronbach's Alpha for financial literacy and spending habits were 0,796 and 0,869 respectively, which is higher than 0,600.

4.2. Normality test

Following the validity and reliability test, we conduct normality test using Kolmogorov-Smirnov. The result showed the significance value of financial literacy was 0,037 which was lower than 0.05. While the significance value of spending habits was 0.2 (>0.05). It was clear that the financial literacy data was not normally distributed so it can be used to test the differences of parametric average. On the

other hand, the spending habits data was normally distributed, which mean it can be used to test differences using parametric average.

4.3. Financial literacy of employees

There were four indicators regarding the financial literacy; general knowledge, savings and loans, insurance, and investment.

Table 1. Category financial literacy of employees.

No	Indicator of Financial Literacy	Female	Category	Male	Category
1.	General knowledge	48.33 %	Middle	42.50 %	Middle
2.	Savings and loans	31.50 %	Low	26.67 %	Low
3.	Insurance	45.00 %	Middle	38.33 %	Low
4.	Investment	26.67 %	Low	11.50 %	Low
	Avarage Score	37.88 %	Low	29.75 %	Low

Table 1. showed the average score for general knowledge of female was 37.88% which was higher than the male (29.75%). Both still considered in low category.

4.4. Spending habits based on gender

This will explain the spending habit of participants based on gender. There were three categories; planning, savings, and necessary buying.

Table 2. Category spending habits of employees.

Indicator of spending habits	Female	Category	Male	Category
Planning	3.71	Tight	3.61	Tight
Saving	4.03	Tight	3.93	Tight
Purchasing of essential goods	4.18	Tight	3.93	Tight
Avarage Score	3.97	Tight	3.82	Tight

Tabel 2 showed that female employees had tighter spending habits. This mean when planning to use the money, female tend to think deeper and longer regarding the benefit of their purchase.

4.5. Hypothesis testing

4.5.1. Financial literacy based on gender. Hypothesis testing conducted using non parametric test using 2 sample independent which randomly select using mann whitney average. Table 1. described the average score for financial literacy of female employees (37.88%) which was higher than the male score (29.75%). However, statistically, the significance value of financial literacy was 0.543 (> 0.05). Therefore, H1 was accepted, which mean that there were no differences between male and female employees regarding the financial literacy. Both had low level of financial literacy.

4.5.2. Spending habits based on gender. Hypothesis testing conducted using parametric average difference test because data was normally distributed, hence, the spending habit differences was test using t-Test. Table 2 showed the average score which indicate that female employees score was 3.97

which was better than male employees (3.82). Female's spending habits was tighter than male employees. Nevertheless, the significance value was 0.334 (> 0.05), H2 was accepted. There was no difference on spending habits between male and female employees.

4.6. Consumption patterns and investment of male and female employees

The result showed the consumption pattern of 30 female employees in spending their money. They spend their money to buy everyday items (69.79%), helping family members (11.51%), paying vehicle installment (11.51%), and to go on holiday (7.19%). They also put on the money on savings (60%), gold (2.22%), business (4.45%), housing mortgage (32.33%), and vehicle installment (26.22%). Meanwhile the male consumption exhibits quite different pattern; to buy everyday items (68.69%), helping family members (12.17%), vehicle installment (11.31%), and for holiday (7.83%). They also put some of their income in savings (57.7%), gold (5.77%), business (19.23%), and housing mortgage (17.3%).

The results discussed are about financial literacy and spending habits between men and women no significant difference. Low levels of employee financial literacy, caused by low levels of employee education. A. Capuano and Ramsay Ian argue that personal factors (intelligence or intellectual intelligence), social and economics can determine the financial literacy and financial behavior of a person [17]. This means that the higher a person's education level has the higher the financial literacy. The spending habits of both genders are equally tight, in consumption, they spend their money on daily needs, in investments they have savings, business, and home or vehicle purchases by loans. Their spending habits are very strict because they still have to deal with monthly installment payments in the long run.

5. Conclusion

There was no significant difference regarding financial literacy or financial knowledge and the spending habits between male and female employees. Male and female employees had low financial literacy. Both genders also develop tight spending habits. Low financial literacy indicate the need of financial education regarding how to develop financial planning to avoid unimportant buying (impulse buying) or to help them to understand the right investment decision to provide alternative income. Consumption patterns of male and female employees were quite the same. They tend to spend their income on everyday items. They also had investment allocation in terms of savings (both in bank account and gold). Besides, they also put some of their income into the business and to pay the housing mortgage.

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