**THE IMPACT OF FRAMING EFFECT:**

**HOW FRAMING EFFECT AFFECTS**

**STUDENTS IN CHOOSING UNIVERSITY’S MAJOR**

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***Abstract***

*Many students in choosing higher education majors are not in accordance with their abilities and interests. This will have an impact on students in making decisions on the choice of majors. All students of the University of Riau as the population in this study, with 556 samples covering eight departments and three faculties using representative sampling technique with criteria for early students (semester 1 and semester 3). The results of the study prove that in terms of practicality and knowledge possessed by students to choose majors, such as motivation, excelling, enjoyable, easeness, preference will affect decision making (thinking process, and ambiguity). The decision to choose a major that is not in accordance with the major can have a negative effect on the student. This is something that students should pay attention to.*

**Keywords: Decision-Making, Framing Effect, Major, Students**

**Abstrak**

Banyak mahasiswa dalam memilih jurusan pendidikan tinggi tidak sesuai dengan kemampuan dan minatnya. Hal ini akan berdampak pada mahasiswa dalam mengambil keputusan pada pemilihan jurusan. Seluruh Mahasiswa Universitas Riau sebagai populasi dalam penelitian ini, dengan 556 sampel yang meliputi delapan jurusan dan tiga fakultas dengan menggunakan teknik representative sampling dengan kriteria mahasiswa awal (semester 1 dan semester 3). Hasil penelitian membuktikan bahwa dalam hal praktis dan pengetahuan yang dimiliki oleh mahasiswa untuk memilih jurusan, seperti motivasi, exelling, enjoyable, easiness, preference akan berpengaruh terhadap pengambilan keputusan (proses berpikir, dan ambiguitas). Keputusan dalam memliikh jurusan yang tidak sesuai dengan jurusan dapat memberikan efek negatif pada mahasiswa tersebut. hal ini yang harus menjadi perhatian oleh mahasiswa.

**Kata kunci: *Framing Effect*, Mahasiswa, Jurusan, Pengambilan Keputusan**

**INTRODUCTION**

Education has a crucial and strategic function, especially when it is linked to initiatives to increase human resource quality (HR).Because it is only through the development of high-quality human resources that true human dignity may be realized.Indonesian Higher Education, namely in 2015, a higher education system was established that included healthy universities capable of contributing to the nation's competitiveness by providing access, justice, and autonomy, as well as contributing to the nation's competitiveness by providing quality characteristics. The number of postsecondary institutions in Riau Province, as one of the educational centers in western Indonesia, has increased dramatically, including both government and private universities(van Elk, 2021).The rapid development of higher education in Riau is predicted to contribute significantly to development in a variety of industries, not only in Riau but throughout Western Indonesia. Furthermore, it is envisaged that universities in Riau will be able to participate and demonstrate their quality at a national level in the future (Chen, 2019); (Washo, 2021); (Kathleen et al., 2022). In the notion of life stages, the age of 15-24 years is an individual development stage at the exploration level, with developmental tasks in identifying interests, abilities, and pursuing career objectives, more especially in the choosing of areas to pursue (Sellitto, Neufang, Schweda, Weber, & Kalenscher, 2021); (Tomar et al., 2021); (Zubair, Wang, Iqbal, Awais, & Wang, 2020). It is difficult to choose a major that is right for you, and many students end up choosing the wrong one (Bartikowski & Berens, 2021); (Stanton & Roelich, 2021).

Indicated that the difficulty in deciding on majors stems from a projection of self-ability in identifying the field/department and this uncertainty manifests itself in challenges that cause people to delegate decision-making authority to others or postpone and avoid making judgments(Cravens et al., 2021); (Wischnewski, Alekseichuk, & Schutter, 2021), resulting in suboptimal decision-making(Rucker, Galinsky, & Magee, 2018); (Bolton, Raven, & Mintrom, 2021). One of the determinants of future career success is the significant decisions made. (Gosnell, 2018); (Maehle, Otte, Huijben, & de Vries, 2021); (Tsiga & Emes, 2021).Majoring decision making is a process of selecting from a variety of options related to one's personal growth, from school days through entering the workforce.Exploration of possible alternative decisions is one of the aspects of specializing in decision making(Hayen, Klein, & Salm, 2021); (Guo, 2022); (Steinel et al., 2022). (Dahani & Abdullah, 2020); (Siebert, Kunz, & Rolf, 2021). The student's perception of information can be influenced by major selection, and the audience will ponder about the information presented. Framing is the process of arranging messages in a logical order(De Beurs et al., 2019); (Ringhand & Vollrath, 2019); (Eberhardt, Brüggen, Post, & Hoet, 2021).

The information focused attention on certain events and then university and/or major the message in the area of meaning, according to framing theory(Wardley & Alberhasky, 2021).Framing is an essential issue since it has a lot of power, and the concept of framing may be applied to businesses.In essence, framing theory proposes a method for students to digest information (referred to as "frames") in order to affect their decisions(Hancock et al., 2022); (Stroe, Sirén, Parida, & Wincent, 2022).A frame is a concept that helps to arrange the structure of a message's meaning(Reitmann, Goedhuys, Grimm, & Nillesen, 2020); (Majer, Zhang, Zhang, Höhne, & Trötschel, 2022)(Masiliūnas & Nax, 2020); (Smedslund, 2021). The reality on the ground reveals that there is an issue with so many students choosing the wrong major(MacFarlane & Rocha, 2020) (Broberg, Daniel, & Persson, 2021); (Li et al., 2022) (Fernández-Llamazares, Western, Galvin, McElwee, & Cabeza, 2020); (Oostdijk, Van Zoonen, Ruijs, & Mollema, 2021).In the notion of life stages, the age of 15-24 years is an individual development stage at the exploration level(Remijn, Kalsbeek, Platteel, & Kindermann, 2022), with developmental tasks in identifying interests, abilities(Lian, Nettleton, Grange, & Dowrick, 2021), and pursuing career objectives(Kolobashkina & Alyushin, 2020), more especially in the choosing of areas to pursue(Fridman et al., 2018); (Rigtering, Weitzel, & Muehlfeld, 2019); (Sett, 2020); (Goukens & Klesse, 2022).It is difficult for students to choose a major that matches them, resulting in many students pursuing the wrong degree(Goodwin, Raffin, Jeffrey, & Smith, 2018); (Chi, Denton, & Gursoy, 2021); (Rodgers, Degbey, Söderbom, & Leijon, 2022).As a result, incorrect majors might influence a student's desire to change majors; an error in professional decision-making is one of the factors that played a significant part in students' decisions to change college majors(McCrudden, Marchand, & Schutz, 2021). Itcan be demonstrated that decision making on major selection, which is presented negatively, has a considerable influence on decision making in the interplay between framing and influencing the effectiveness of majors(Eitan et al., 2018); (Bjärstig, Mancheva, Zachrisson, Neumann, & Svensson, 2022).

**METHOD**

This is a qualitative study with framing effects as the independent variable and decision-making as the dependent variable. The participants in this study were University of Riau students, with a total of 556 responses representing eight majors and three faculties. Purposive sampling was used, in which respondents were chosen based on the desired characteristics, such as freshmen (year 1 or semester 1) and sophomores (year 2 or semester 3).The authors used a Likert scale to create the measuring instrument for both variables. A likert scale is a scale that is used to assess a students of views, and decision making of choosing major. Each scale has been put to the test in order to determine its validity and reliability in terms of decision-making and framing effect. *Procedure,* the participants were given a consent form to read and sign, as well as information about the research purpose and process. After that, participants were given the survey of interview in pairs and asked to rate each one on a 1–5 Likert scale on 15 statements with the factor of framing effect, they are Motivation, Excelling, Enjoyable, Easiness, Preference and factor of decision making (thinking and Ambiguity). To understand the item with the factors, the authors write survey protocol to make viewers easier to understand the research.

Table 1. Survey protocol

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Survey Item** | **Factor1**  **Motivation** | **Factor2**  **Excelling** | **Factor3**  **Easiness** | **Factor4**  **Preference** | **Factor5**  **Enjoyable** |
| **1.** | InterviewQuestion\_1 | **X** |  |  |  |  |
| **2.** | InterviewQuestion\_2 |  | **X** |  |  |  |
| **3.** | InterviewQuestion\_3 |  |  | **X** |  |  |
| **4.** | InterviewQuestion\_4 |  |  |  | **X** |  |
| **5.** | InterviewQuestion\_5 |  |  |  |  | **X** |
| **6.** | InterviewQuestion\_6 | **X** | **X** | **X** |  |  |
| **7.** | InterviewQuestion\_7 |  |  |  | **X** | **X** |
| **No.** | **Survey Item** | **Factor1**  **Thinking** | **Factor2**  **Ambiguity** |  | | |
| **1.** | InterviewQuestion\_1 | **X** |  |  |  |  |
| **2.** | InterviewQuestion\_2 | **X** |  |  |  |  |
| **3.** | InterviewQuestion\_3 | **X** |  |  |  |  |
| **4.** | InterviewQuestion\_4 | **X** |  |  |  |  |
| **5.** | InterviewQuestion\_5 |  | **X** |  |  |  |
| **6.** | InterviewQuestion\_6 |  | **X** |  |  |  |
| **7.** | InterviewQuestion\_7 |  | **X** |  |  |  |
| **8.** | InterviewQuestion\_8 |  | **X** |  |  |  |

**RESULT AND DISCUSSION**

**RESULT**

The way a decision is phrased or presented can have a big impact on how people make decisions. If two different but equivalent forms of the same information are provided and the effects of framing on learning preferences and performance were investigated in this study, especially more precisely, this research looked at how grades are framed in terms of gains or losses, and how that affects students' perceptions and learning.The respondent of this research is active students in Riau University with the total of respondent is 556 students from 8 majors and 3 faculties, the most respondent in this research is students who take education majors, while the least respondent from economy science (**Table 1**). The students who participated in this research are newcomer (year 1 or semester 1) and sophomore (year 2 or semester 3) (**Table 2**). The range age of respondent from 17 to 21 with the average respondents is 18 and 19.This decreases the impact of framing effects and improves uniformity across frames in a scenario. Newcomers only analyzed the quantitative differences between the two options offered

Table 2. sample of participants

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Major** | **Faculty** | **Students** |
| **1.** | Administrations | Social and Political Sciences | 86 |
| **2.** | International Relations | 98 |
| **3.** | Education Sciences | Education and Teacher Training | 112 |
| **4.** | Science Education | 73 |
| **5.** | Social Education | 64 |
| **6.** | Language Education | 41 |
| **7.** | Economy Science | Economy and Business | 37 |
| **8.** | Management | 45 |
| **Total** | | | **556** |

Table 3. Sample of Participants

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Newcomer** | **Sophomore** | **Major** |
| **1.** | 49 | 37 | Administrations |
| **2.** | 51 | 47 | International Relations |
| **3.** | 64 | 48 | Education Sciences |
| **4.** | 50 | 23 | Science Education |
| **5.** | 22 | 42 | Social Education |
| **6.** | 25 | 16 | Language Education |
| **7.** | 14 | 23 | Economy Science |
| **8.** | 36 | 9 | Management |

Table 4. Sample of Participants

|  |  |  |
| --- | --- | --- |
| **No.** | **Gender** | **Respondent** |
| **1.** | **Male** | 260 |
| **2.** | **Female** | 296 |

Furthermore, participants chose majors with a gained grading system over majors with a negative grading system. This real comparison of loss and gain grading systems indicated how framing any grading system in terms of expenditures might negatively effect main perceptions. Framing influenced students ’ motivation, but the data also demonstrated that framing influenced how well individuals expected to do in the major and their recommendation to take the department and/or subject in the faculty, study conducted. Demonstrating that framing the issue in terms of losses has a detrimental influence on results. Although there were main impacts of choice making for contextual variables and adding an additional and/or subject performance, there were no principal determinants of decision making for overall major and/or topic performance, As a result, while certain may have performed better or worse overall, the loss and gain conditions all followed a similar pattern. These findings, which show that the loss grading system led students to demonstrate worse, are in line with the research on framing effects. Recognizing the presence of framing in a communication, on the other hand, does not guarantee that the message's listener will choose to follow the framing's direction. Higher possibilities of being selected in a student's major, for instance, might well have decided to make them more aware of in between intent in the framed deceptions used in this study, but they could have chosen to ignore those framed cues and analyze the information from the more neutral position under different circumstances. Someone who detects someone else's framing tactics may become enraged by the attempted deception and resolve to react. This is an area where more research would have been really helpful..

Table 5, Item of Survey

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Item of survey** | **Answers (percentage %)** | | | | |
| **Very Disagree** | **Disagree** | **Neutral** | **Agree** | **Very Agree** |
| **1.** | The rate of acceptance in this major is 25% bigger than other majors | **3%** | **12%** | **23%** | **34%** | **28%** |
| **2.** | This major is 25% excelling than other majors | **5%** | **17%** | **20%** | **32%** | **26%** |
| **3.** | Studying in this major is 25% easies than studying in other majors | **10%** | **21%** | **27%** | **28%** | **14%** |
| **4.** | Many successful people graduate from this majors | **23%** | **29%** | **28%** | **14%** | **6%** |
| **5.** | Study in this major is enjoyable (friendly lecturer, and good facilities) | **10%** | **26%** | **28%** | **24%** | **12%** |
| **6.** | The average of alumni from this major have good GPA | **28%** | **34%** | **12%** | **23%** | **3%** |
| **7.** | The lecturers and major’s staff are friendly | **5%** | **20%** | **17%** | **26%** | **32%** |
| **8.** | I should think to enroll this major at the first place | **6%** | **11%** | **18%** | **21%** | **44%** |
| **9.** | There is few alternative way to enroll this major | **3%** | **12%** | **34%** | **28%** | **23%** |
| **10.** | Before enrolling this major, I should think about course and tuition fees | **5%** | **20%** | **17%** | **26%** | **32%** |
| **11.** | I should get recommendation from alumni to enroll this major | **14%** | **21%** | **27%** | **28%** | **10%** |
| **12.** | The subject in this major is less than other major and I should think about it | **12%** | **23%** | **34%** | **28%** | **3%** |
| **13.** | The rate of acceptance in this major is less than 50% and many people failed in this major | **26%** | **32%** | **20%** | **17%** | **5%** |
| **14.** | The major is excelling but the tuition fee is so expensive | **5%** | **26%** | **32%** | **20%** | **17%** |
| **15.** | The facilities are so enjoyable, but the staff is not friendly. | **3%** | **12%** | **28%** | **23%** | **34%** |

**DISCUSSION**

Another possibility is that students have considerably fewer resources at their disposal and are hence more prone to choose less cognitively demanding strategies when making major judgments. Students usually rely on easily available understanding, or frames, whether or not such a material is applicable to the situation at hand (King et al., 2018); (Hochachka, 2019); (Grover & Furnham, 2021); (Otterbring & Festila, 2022). The notion aids in the development of a frame analysis understanding among social movements(Columbus, Münich, & Gerpott, 2020); (Tal & Kerret, 2020); (D’Acci, 2021); (Schwartz, 2021), as well as in the construction of educational opinion, where manipulation plays a key part in framing impacts on decision-making in selecting universities major opinion surveys that are framed to produce a positive answer to the group that commissioned the poll (Marchetti, Di Dio, Manzi, & Massaro, 2020); (Reese et al., 2020); (Otterbring, Festila, & Folwarczny, 2021a); (Gollust, Nelson, & Purtle, 2022). It has been stated that the usage of the approach is tarnishing the credibility of political polls. This framing effect is a psychological phenomenon in which people select items based on if they do have favourable or unfavourable connotations (del Río Carral, Volpato, Michoud, Phan, & Gatica-Pérez, 2021); (Otterbring, Festila, & Folwarczny, 2021b); (Kniestedt, Lefter, Lukosch, & Brazier, 2022).When choosing a university degree, students tend to shun risk when provided with a positive framing, but embrace risks when presented with a negative frame. In the scenario, the terms "gain" and "loss" are used to describe the results. Among the most important decision-making biases has been repeatedly proved to be the framing effect. In general, the vulnerability to framing effects increases with age (Matracchi & Sadeghi habibabad, 2022). When deciding on a university major and disciplines, age differences are very crucial. When confronted with it in a university major, however, the framing effect seems to vanish. Speaking a non-native language, according to one idea, produces more emotional and cognitive distance than speaking one's own tongue.

The academic performance of a university is also reviewed more manually than the academic performance of a student. This leads to increased introspection, which can affect decision-making and lead to more systematic choices, particularly when choosing a university major(Takagaki & Krug, 2020); (Bollini, Campus, & Gori, 2021). As a newcomer to university, framing effects in decision-making become greater and this is partly due to the fact that qualitative reasoning improves with age(Markanday & Galarraga, 2021); (Svensson et al., 2022). While sophomores are more inclined to make judgments based on quantitative qualities, Newcomer students are more likely to reason qualitatively, picking a certain choice in a win frame and a hazardous one in a failure frame regardless of probabilities, such as the possibility of a result (Mesa-Vázquez, Rodriguez-Lara, & Urbano, 2021); (Wilson & van der Velden, 2022). However, adolescents' qualitative thinking, and hence their vulnerability to framing effects, is still stronger than adults', and teenagers are more prone to take the risky choice both in the gain or loss frames of something like a given scenario than adults (Jeno, Dettweiler, & Grytnes, 2020); (LaMere, Mäntyniemi, & Haapasaari, 2020). One explanation for students' proclivity for dangerous decisions is that they possess actual knowledge with negative consequences and hence depend too much on conscious risk and benefit assessments, focusing on minute details and quantitative analysis. However, these findings show that people's responses to framing differ significantly. According to recent studies, a student's major may be able to explain a little of that difference (van Esch, Cui, & Jain, 2021); (van der Westhuizen, Arens, Greiff, Fischbach, & Niepel, 2022).Unfortunately, at least from the perspective of employers, The data might not always reflect the ideal relationship between GPA and attribute framing sensitivity. As previously stated, companies use GPA as a predictor of many of the positive attributes they seek in a candidate(Mızrak, Bouffard, Libby, Boorman, & Ranganath, 2021); (Pluchinotta, Salvia, & Zimmermann, 2022).Employers assess candidates for interviews by using decision-making in picking a university major.They reward new recruits who have a higher major and are more involved in decision-making (Valzolgher et al., 2020); (Wang, Zhang, & Tong, 2022)

**Framing Effect on Decision-Making in Psychology Perspective**

People's opinions of psychology courses were influenced by a loss-framed majoring system, which resulted in lower performance in the actual psychology discipline.This study adds to the body of knowledge on the effects of framing on educational decision-making by demonstrating that frames can have a variety of consequences for people's views and actions (Julian, Keinath, Marchette, & Epstein, 2018); (Ngo, Poortvliet, & Klerkx, 2022). Findings and ideas from decision-making literature are seldom applied to education, particularly when it comes to the best educational methods and variables that might influence students' preferences and frames while choosing a major (Bökman, Andersson, Sörqvist, & Ahonen-Jonnarth, 2021); (Hukkinen et al., 2022). In addition to improvements, it's conceivable that the present study's findings are explained by students' experience with a certain degree. While this is possible, 10 undergraduate students were questioned to test their understanding of various grading systems (Greijdanus et al., 2020); (Muths & Hossack, 2022).

Students were questioned about their familiarity with and to various majoring methods, and although everyone had taken classes that used pure gain majoring systems, 80percent of the total had taken classes that used framing effect evaluation method or a combination of the two. As a result, the vast majority of our sample was familiar with both types of framing when it came to university selection(Lucas, Rosenbaum, Isenberg, Martin, & Schreyer, 2021); (Benschop, Nuijten, Hilhorst, & Keil, 2022). Findings and ideas from decision-making research are seldom applied to education, particularly when it comes to the best instructional practices and elements that impact students' decisions and performance at university. The framing effects examined in this research were influenced by personal concepts and ideas that were being taught and learnt at the time. While comparable framing effects may occur in other fields though too, some areas that employ different teaching methodologies, such as hands-on education in laboratories, are more susceptible to framing effects. or a focus on remembering formulae and methods, may provide distinct outcomes (Ashwell & Murray, 2020). This is something that needs to be looked at more. In line with the study's aim, the review reveals our results in 2 different ways. Students with better major choice and decision-making scores were When utilizing a positive framing, pupils who are far less academically skilled were more receptive and responsive to fundamental informational cues (Riva, 2020). On the other hand, a negative interpretation of the findings suggests that students with stronger decision-making abilities were more sensitive to framing's biasing effects(Reyna, Broniatowski, & Edelson, 2021). Although it may be upsetting to some, It's strangely comforting to know that both kids who excel and students who struggle in the classroom may benefit from these ideas.

**CONCLUSION**

In terms of practical, applicable knowledge, our findings demonstrate that students with better academic qualifications should not anticipate more objective, impartial conclusions, at particular not just when the decisions include framed attributes. This information is also valuable because it demonstrates that employers should develop decision-making methods that account for and defend against framed signal biases. Given all of the positive characteristics linked having better major standing, it seems from the result of this research that one thing companies cannot expect from these students is that they are less sensitive to framing effects. Furthermore, from an academic sense, these findings offer significant knowledge for the classroom. When educating kids about making decisions and the qualities necessary to make appropriate and desired judgment, we should not presume that the best and brightest are automatically the most prejudiced or impartial.

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