

# Impact Of Psychological, Situational, Social, And Physiological Factors Affecting Dual Process Ethical Decision Making With A Mediating Role Of Emotional Regulations In Canada

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## Abstract

**Introduction:** Ethical decision-making is crucial for measuring human behaviour, impacting relationships, personal choices, and professional conduct. In the process of dual-process theories, ethical decision-making is based on two distinct procedures (Warner et al., 2022). However, the impact of various psychological, social, situational, and physiological factors on dual-process ethical decision-making has been widely studied, specifically in Canada (Toti et al., 2021).

**Methods:** The data was collected from <sup>1</sup>384 respondents within the set criteria. The correlational and regression analysis tests were applied using Smart PLS software. This study is a primary quantitative study with the deductive approach. The validity and reliability of the data were measured using Cronbach Alpha, and the Average Variance was Extracted.

**Findings:** The results show that all the variables have the strongest correlation, with values of 0.912, 0.868, 0.844, and 0.898, respectively. It has been indicated that emotional regulation also plays a significant mediating role in impacting the EDM, with a value of 0.838.

**Conclusion:** It has been concluded that the hypothesis for the study is accepted as all the independent variables, namely psychological, situational, social and physiological factors, have a strong positive significant relationship with the dual process of ethical decision-making and have a significant impact.

**Keywords:** Psychological factor, physiological factor, social factor, situational factor, dual process ethical decision making and emotional regulation.

## Introduction

Ethical decision-making is crucial for measuring human behaviour, impacting relationships, personal choices, and professional conduct. In the process of dual-process theories, ethical decision-making is based upon two distinct procedures (Warner et al., 2022): the Automatic and Intuitive System 1 and the Controlled and Deliberative System 2. However, the impact of

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various psychological, social, situational, and physiological factors on dual-process ethical decision-making has been widely studied, specifically in Canada (Toti et al., 2021). It has been identified that psychological factors such as individual differences in personality traits, cognitive biases, and moral values play a significant role in shaping ethical decision-making. The best way to explain this is the high level of conscientiousness in individuals who are more engaged in ethical decision making due to the ability of them to prioritize things with responsibility and take accountability for it (Toti et al., 2021). Similarly, similarly the confirmation biasness; it can also impact the individual's ability and cognition to make ethical decisions and dilemmas.

Whereas another factor that impact the decision making is situational factor. For situational factor ethical decisions are made prodoundly with the impact of decision making. As for the sitational factor; the individual sense of anonymity often results in leading t bring a reduction in inhabition and increase the unethical behavior (Jabr, 2021). Additionally; the culturals norms, values and believes are the factors which plays a significant role in impacting ethical decision making (Jabr, 2021). Therefore; individuals are identified to be more likely to engage in unethical behavior; especially when they surrounded by the group of people practicing unethical behavior. Furthermore to prove this the social identify theory fits well; it states that individuals will be more likely to get impacted and will adopt wrong behaviors to get socially acceptd and will get influenced by people with wrong believes and morals (Jabr, 2021).

Furthermore' the physiological factors are the fourth component that affects the individuals ability to make ethical decisions. This also include stress and emotional arusals. Literatures have shown that people who have high levels of emotional arousals and stress are the ones who are more exposed to unethical and impulsive behvaiors. In addition to this; physiological factor such as extreme fatigue, sleep deprivation also impairs the ability to take and make decisions rationally and ethically (DeSteno et al., 2013). However, to sum all these; emotional regulations act as the mediating variable. As per the studies people often regulate their emotions in much better way when they are engage in more thinking regarding making decisions ethically(DeSteno et al., 2013). Moreover, the emotional regulations impact the perception towards rewards and risks; resulting in msking rational and pre informed decisions.

Despite; the significace of taking and making ethical decisions in multiple context; the Canadian organziations and individuals are still grappling with the challenges in making some informed decisions (Crivelli et al., 2024). There has been an intense and increasing complexities in ethical dilemmas that are coupled with all these factors namely psychological, situational, physiological and social factors. This has also led to people making implusive and unethical behavior. Further, anxiety and stress have exacerbates the challenges of emotional regulation in Canada. As the results; there has been an extreme need for comprehensive understading for the factors causing an impact on dual procedures of ethical thinking and decision making specifically in Canada and how emotional regulations can act as an mediting variable in between (Crivelli et al., 2024).

The scope for this limited to specifically Canada only. This is because the culture in Canada is diverse and strnly impact the collectivism, egalitarianism and individualism. To understand the impact of these cultural values and norms on ethical decision making provides the valuable insights for the organziations and people in Canada (Messervey et al.,

2022). Canada is also known as the home that is thriving for the business sector; where the multinational companies are operating worldwide. Therefore; there is an extreme need for effective ethical decision making in this particular context. This is to ensure that the companies are being navigated to complex ethical dilemmas and maintain their reputation and positive image in front of the world (Messervey et al., 2022).

Moreover; the healthcare systems are publically funded and are renowned for the quality and accessibility by the people. However this system is not immune to making ethical decisions and ethical dilemmas as particularly in context to resource allocation and making care decisions for the patients. Hence; it has made compulsory to understand these factors that will influence the ethical decision-making in making policies and practices with informed decisions (Fang et al., 2024). Canada also has a prolonged history of having a complex relationship with the indigenous peoples. This has led the country to face social and economic complexities. Hence; understanding the factors will impact the ethical thinking about these issues that can provide the insights on reconciliation and healing of indigenous people and make their decisions more ethical (Fang et al., 2024). Moreover, despite the significance of ethical decision making in Canada; there is still an under-researched area and more study can be done on this topic. The study aims to identify and fill the void area by exploring more about measuring impact of psychological, situational, social and physiological factors on the dual procedures of ethical decision making in Canada with a mediating role of emotional regulations (Fang et al., 2024).

The ethical decision making process is one of the complex procedures that provide balance in competing the values, principles and goals. In context to Canadian businesses; the managers who often face situations that requires them to make ethical decisions; this is quite a task. Researches have also shown that psychological factors such as emotional regulations, cognitive appraisal and moral identity often plays a crucial role in accessing and shaping decisions (Marchica et al., 2020). Marchica et al. (2020) suggests that cognitive factors, moral identity and emotional regulations will shape these decisions of individuals if they tend to think more and feel more regarding doing bad and good. The author also suggested the theory of dual process that is based upon intuitions and deliberations (Drndarević et al., 2021). It has been identified that emotional reactions, gut feelings and intuitions are driven due to intuitive procedures. While the rational analysis and moral principles act as a guide to deliberative procedures. However psychological factors influence these decisions of making ethical and rational decisions as association in these processes are not always direct and straightforward (Drndarević et al., 2021). Hence; it is proved that emotional regulations act as a mediating variable between the decision making and psychological factors. People having strong emotional regulations tend to make complex and quick decisions and are more optimistic and pessimistic in thinking deliberatively. (Drndarević et al., 2021). Hence, with this, the study generates the first two hypotheses of the study, i.e.

- **H1:** There is a positive association between psychological factors and dual process ethical decision-making with the mediating role of emotional regulation in Canada.
- **H2:** Psychological factors impact dual process ethical decision-making with a mediating role of emotional regulation in Canada.

The ethical decision making is one of the complex procedures that includes an association and interplay between the situational and psychological factors. The dual procedure of

ethical decision making model suggests; individuals will use their intuition and deliberativeness to make informed decisions (Korkut & Sinclair, 2020). The highlighted difference between these two factors is that intuitive systems will be more quicker and deliberative systems will be slower and will require more effort to make decisions. However, the study shows that situational factors influence the dominance of these systems (Korkut & Sinclair, 2020). It has been established that in Canada, due to their emphasis on cultural values, they are more focused on individualism, social norms, authority, and moral intensity, which can impact individuals and their decision-making process (Hamilton et al., 2019). For example, the study shows that individuals are more likely to engage in ethical behaviour when they perceive substantial moral obligations or are surrounded by people doing the same or acting ethically (Hamilton et al., 2019).

Similarly, emotional regulations mediate this entire process; the individuals will regulate their emotions effectively and engage in ethical and legal decision-making. For instance, the researchers show that people who regulate their emotions in response to ethical dilemmas make more ethical decisions, and people who do not care about ethical and moral values will make unethical decisions (Armstrong et al., 2020). Not only this, but situational factors also influence emotional regulations. For example, people exposed to the outrage of morals or indignations will more likely engage in emotional regulations and make ethical decisions. This generates the third and fourth hypotheses for the study;

- **H3:** There is a positive association between situational factors in dual process ethical decision-making with the emotional regulation's mediating role in Canada.
- **H4:** Situational factors impact dual process ethical decision-making with a mediating role of emotional regulation in Canada.

It has been researched that social factors significantly impact the decision-making process. In Canada, the multi-cultures and diversity shape social norms and values; the impact of these social factors on ethical or dual process decision-making is a crucial aspect to explore (Salinas-Quiroz et al., 2022). Studies have shown that norms, social identity, and moral community influence the balance between intuitive and deliberative processes in ethical decision-making. For example, people in a group that values integrity and honesty will be more likely to engage in deliberative thinking when facing ethical dilemmas. In contrast, people who value profit and efficiency will rely on intuitive thinking only (Salinas-Quiroz et al., 2022). Emotional regulations are also associated with these factors. For example, people who feel guilt and anxiety will engage in deliberative thinking as a way to manage their emotions.

Conversely, the individuals will effectively regulate their emotions and engage in intuitive thinking. Hence, the literature suggests that social factors are crucial in shaping individuals' decisions. Emotional regulations act as mediators in these relations as they can influence whether the individuals engage in deliberative and intuitive thinking (Armstrong et al., 2020). Therefore, this suggests the fifth and sixth hypotheses for the study;

- **H5:** There is a positive association between social factors and dual process ethical decision-making with the mediating role of emotional regulation in Canada.
- **H6:** There is an impact of social factors on dual process ethical decision making with a mediating role of emotional regulation in Canada.

Another significant factor in the ethical decision-making process is physiological factors such as stress, emotional arousal, and other arousal that influence the entire process. As per the

research, individuals under physiological or experiencing stress tend to have high emotional arousal and are more likely to rely upon their intuitive system; this can lead to individuals making impulsive and unethical decisions (Zhang et al., 2024). However, due to the cultural and societal average in Canada, emotional intelligence and empathy have been necessary, impacting the physiological factors of ethical decisions (Verhoef et al., 2021). It has been established that Canadian employees experiencing high levels of emotional arousal have more productive work behaviour. They are more likely to engage in productive work behaviours as they will more likely prefer to be recognized and feel a sense of appreciation and belonging (Zhu et al., 2024). They tend to attach their emotions to the organization and work as they feel emotionally happy or affected by the outcome.

On the other hand, there may be employees who have negative emotional arousals. Hence, they tend to have counterproductive work behaviours such as sabotaging others, stealing, and resisting work (Zhu et al., 2024). It has also been established that physiological stress can lead to decreased cognitive resources, impair decision-making abilities and increase the likelihood of unethical behaviours (Zhang et al., 2024). It has been established that people with control and the ability to manage and regulate their emotions in response to stress and challenging situations will have productive and ethical decision-making abilities. Therefore, in Canada, there has been a growing emphasis on mental health and well-being; understanding the role of emotional regulation in the dual process of ethical decision-making is essential. This concludes the study's seventh and eighth hypotheses, i.e.

- **H7:** There is a positive association between physiological factors and dual process ethical decision-making with a mediating role of emotional regulation in Canada.
- **H8:** There is an impact of physiological factors on dual process ethical decision-making with a mediating role of emotional regulation in Canada.

### **Research Gap**

Various studies have been conducted in the context of dual-process ethical decision-making and measuring the impact of psychological, situational, social, and physiological on organizational performance, but the effect of these factors on ethical decision-making is still an under-researched area, specifically in Canada (Warner et al., 2022). Hence, there is a need to investigate this research gap, specifically taking emotional regulations as a mediating variable.

Moreover, previous studies have also shown that factors mainly influence the dual ethical decision-making process, such as moral intuitions, social norms, cognitive reasoning, and emotional state and arousal. However, most of these studies were conducted in Western countries, with limited attention paid to the context of Canada (Verhoef et al., 2021). Therefore, this research will study the impact and association between social, physiological, psychological, and situational factors in Canada's dual process of ethical thinking.

Not only this, but as per Rhim et al. (2020), such as “How do Canadian Values and Collectivism affect the way individuals make ethical decisions?” and “How do cultural differences in emotional expression and regulation influence the role of emotional regulation in dual process ethical decision-making?” were conducted but there was a lack study on cultural and societal factors in Canada impacting the dual process ethical decision-making. Hence, this study will also fill this gap.

### Theoretical Framework

Social cognitive theory best fits the study model. This is because it explains how people can learn and perform behaviours along with decision-making processes through their observations, imitation and reinforcements (Wyer & Srull, 2014). The theory also aligns with the dual process model of ethical decision-making involving intuitive and deliberative processes. This theory also presents that values, attitude, beliefs and self efficacy are various factors that accounts for influencing the behavior of individuals. While the feedback, norms and enviornmental cues are the components of situational factors that impact the decisions. Moreover observational learning, the social influence and norms are the component of social factor impacting one's ability to make decisions. Last but not the least; the physiological factors and its components namely physiological arousals and emotional response also impact the ability to make decisions (Wyer & Srull, 2014). Further; the theory also revolves around the significance of emotional regulations in affecting the bhevaiors of people (Seni, 2020). As per this theory the people will adopt new behaviors only if they will have a positive relationship with their emotions. Moreover, the they is widely acceptable and applicable across different countries with different cultures, moral and believes; such as Canada. As for this study; the theory can be best applied for investigating factors that influence the ethical decision making process with the mediating role of emotional regulations (Seni, 2020). Lastly, applying this theory will also provide a comprehensive understanding of the complex factors affecting the dual ethical decision-making process (Seni, 2020).

### Conceptual Framework

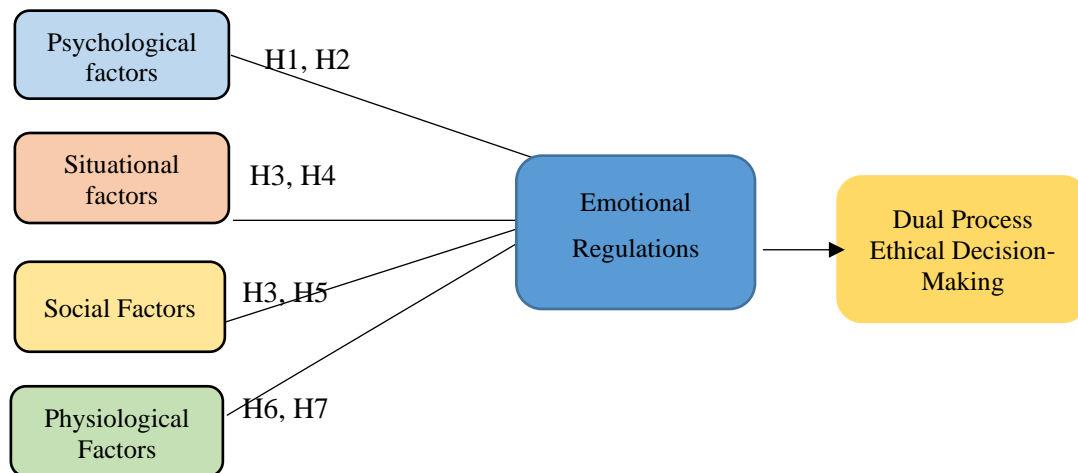


Figure 1: Conceptual Framework

### Materials and Methods

There are two different types of studies. Quantitative and qualitative approaches are used, with two different approaches, primary and secondary. A quantitative study generates the results in numerical form, and statistical tests and analysis are applied to the data to generate the numeric

results. Then, the results are analyzed and interpreted to generate final results. The qualitative study usually uses non-numeric data, where the thematic and content analysis is done, results are interpreted, and then the report is generated (Sekran & Bougie 2016). Since the study is mainly focused on collecting the numeric data and statistical analysis is being conducted on the data, this will be a quantitative study.

On the other hand, the primary study is where the new data set is collected via surveys and then used for further study. The data is first-hand and completely new, while the secondary study is based on collecting and analyzing pre-existing data. This will be a primary quantitative study since the data is being collected via survey (Sekran & Bougie 2016).

Deductive and inductive approaches are the two main approaches used in the study. The deductive study is about going specific from a general while the inductive study is about going general from a specific perspective. The deductive study also tests the pre-existing theory. It generates the research hypothesis, while the inductive study tests the new theory and narrows the research scope via the research question (Sekran & Bougie 2016). However, since this study tests the pre-existing theory of Social Cognition and develops a research hypothesis, it will take the deductive approach.

As for the tool being used in this study, that is the Online Questionnaire Survey. The survey was adopted to justify the constructs in the literature above. The correlational and regression analysis was conducted on the data to measure the relationship and impact between psychological, situational, social, and physiological factors on dual process ethical decision-making and the impact of mediating variables, i.e., emotional regulation. The tests for this study were applied with PLS software (Sekran & Bougie 2016).

The data was collected from 384 respondents. This is because, as per Sekran and Bougie (2016), when the population is known, but the population size exceeds 1 million, 384 respondents are the best fit for the study. In this similar case, random purposive sampling is also the best fit for the study. Hence, random purposive sampling was used for this study. Furthermore, the time horizon for this study will be cross-sectional as the data was collected once from every respondent in the same setting.

The criteria for the respondents were set already. The respondent's criteria were limited to their age bracket of 18 years old, and they should belong to the working class. Moreover, their eligibility criteria were also limited to being digitally active as the questionnaires were submitted online. The respondents who failed to meet the criteria were terminated, and another set of respondents was taken to match the criteria of 384 respondents. Therefore, the unit of analysis for this study was "Digitally Active Working Class."

As for the regression and correlation analysis, As per Sekran & Bougie (2016), it has been identified that the p-value for correlation analysis will stand statistically significant at the level of 0.05 or below 0.05. This means there is a 95% confidence in the generated result or the relationship being observed (Sekran & Bougie 2016). Furthermore, a value of 0.7 for correlational analysis will indicate a strong association between the variables; a 0.5 value will indicate a medium intensity of association, while a value less than 0.5 will indicate a weaker relationship between the variables. The value for regression; the model will stand significant at 0.000 (Sekran & Bougie 2016).

The consistency in the results after running the tests multiple times is known as reliability, while the results tallies with the realistic world is known as validity (Sekran & Bougie 2016).

Therefore, the reliability analysis was conducted using Cronbach Alpha and validity analysis were conducted via Average Variance Extracted.

Last but not least, the research also ensures ethical considerations. The names of the respondents were not asked at the time of data collection to ensure identity anonymity. The author also ensured that no personal data is used for other purposes. Last but not least, it was also ensured that the entire study was properly cited from well-published journal articles.

## Results

### Demographic Profile of Respondents

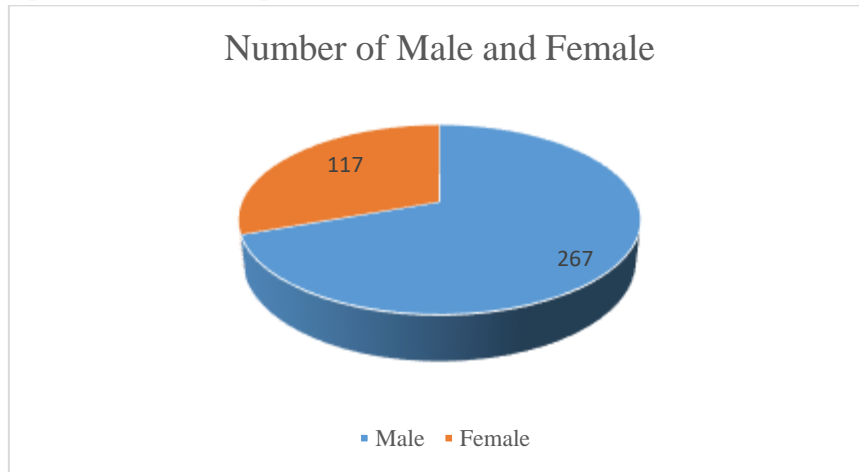


Figure 2 Gender

The figure 01 mentioned above is the graphical representation of table 01 mentioned under. The table and the figure shows the gender of the respondents who took part in the survey. Out of 384 respondents; 267 are male and 117. This proves the study by world economic forums that stated that 56% of the men and 44% of the women works within the same industry (Hyland et al., 2020). Despite women makes up 47% of the workforce globally. The results indicate the same; 70% of the working force was male, while 30% were female. The reason for this can be inequality and gender baseness where women are more likely to get employed in low-skilled and lower paying jobs (Hyland et al., 2020).

**Table 1 Demographics - Gender**

Gender	Number of Employees
Male	267
Female	117



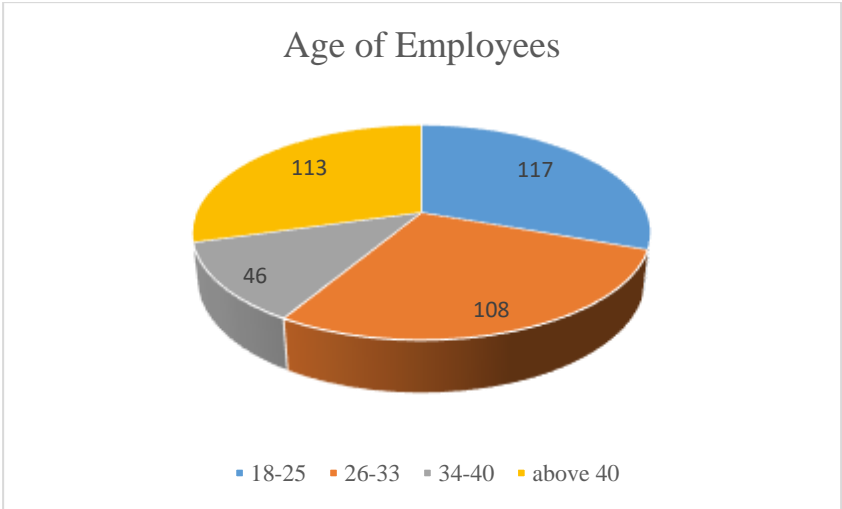


Figure 3 Age

The figure is the representation of Table 02 given below. The results articulate the age bracket of the employees they belong to. The results show that most of the employees are 18-25 years old, making up 30% of total respondents. 108 respondents belong to the age bracket of 26-33 years old, occupying 28% of the total respondents; 113 respondents making 29% of the respondents from the age bracket of above 40 while 46 respondents belong to the age bracket of 34-40 years old, i.e. 11% of the respondents from the similar workforce. The results can be based upon the fact that the reach of the questionnaire was highest to people in the age bracket of 18-25 years old, as they tend to be more digitally active than others (Saluja, 2022). Also, people aged 40 or above 40 are mostly nearer to their older ages and are more on social media and are largest adopters of FinTech than people of other age brackets (Saluja, 2022).

**Table 2 Demographics - Age**

Age Bracket	Number of Employees
18-25	117
26-23	108
34-50	46
Above 40	113

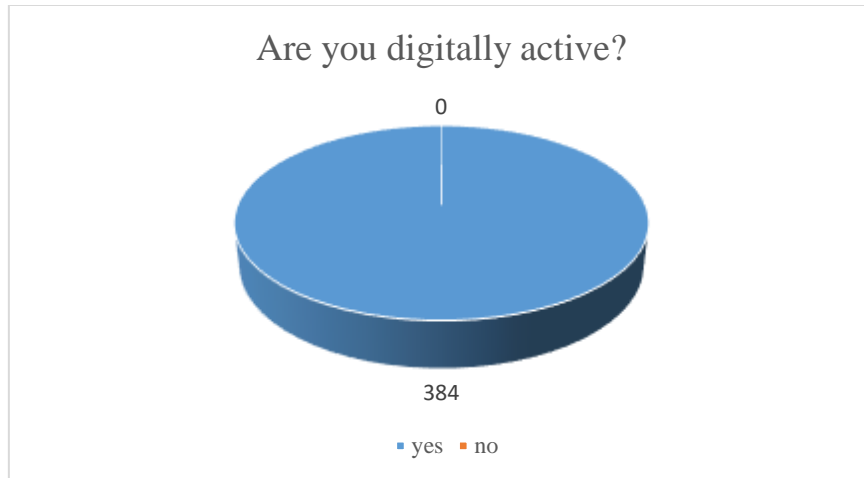


Figure 4 Digital Activity

The figure above represents the results in table 03 under. The results shows that there were 384 respondents out of which 384 respondents met the criteria of being digitally active.

**Table 3 Demographics - Digital Activity**

Yes/No	Number of Employees
Yes	384
No	2

Table 03: Yes/No

**Outer Loadings**

The table 04 under indicates the association and relationship between the variables. The readings with the values <0.5 were set to be rejected but the table shows that all the independent variables namely psychological factors, situational factor, social factor and physiological factors develops a significant association with the dependent variable namely dual process ethical decision making. For much wider perspective the results are combined under this table.

**Table 4 Outer Loadings**

	Dual Process Ethical Decision Making	Emotional regulations	Physiological Factor	Psychological Factor	Situational Factor	Social Factor
DPEDM1	0.801					
DPEDM2	0.837					
DPEDM3	0.833					
DPEDM4	0.828					
ER1		0.838				

ER2	0.874	
ER3	0.917	
ER4	0.900	
PF1		0.868
PF2		0.905
PF3		0.842
PhF1	0.912	
PhF2	0.931	
PhF3	0.895	
SF1		0.844
SF2		0.921
SF3		0.844
SoF1		0.898
SoF2		0.929
SoF3		0.897

The tables shows that DPED the dependent variable is strongly associated with independent variables (physiological, psychological, situational and social factors) with the values of 0.912, 0.868, 0.844 and 0.898 respectively. This indicates strong relationship as the values above 0.7 or equal are considered to have stronger relationship with the variables. Also; there is a strong relationship of mediating variable namely emotional regulation with value of 0.838 with independent and dependent variables. Out of all these independent variables; physiological factors has the stronger association with DPED with a value of 0.912. This is because; as per the neuroscientists and psychologists; physiological factors such as empathy, emotional arousals and moral disgusts plays a significant role in molding ethical decision making (Zhang et al., 2024). The studied have also using neuroimaging techniques that include magnetic resonance imaging to demonstrate the emotional centers of human brains. This includes amygdala and insula that are activated when people make ethical decisions. This therefore suggests that physiological responses than the cognitive process are more linked to EDM. This proves the findings that people having higher level of cortisol that is one of the stress hormones are more likely to make unethical decisions (Zhang et al., 2024).

The study also support the findings in terms of association between emotional regulation and independent variables. The results shows that emotional regulation has a profound impact and association on individual responses to situational factors, social dynamics, psychological factor and physiological dynamics. When individual as regulate their emotions effectively; they are better equipped to circumnavigate situations, managing stress and maintain the relationship. Conversely, the poor emotional regulation will lead to increased reactivity, depression and anxiety. Furthermore; the emotional regulation will also impact one's perception for the world in a way that they interpret and respond to social cues and shaping their interactions with other individuals. The effective emotional regulations will be essential in achieving emotion well-being, building of strong relationship and overcoming adversity.

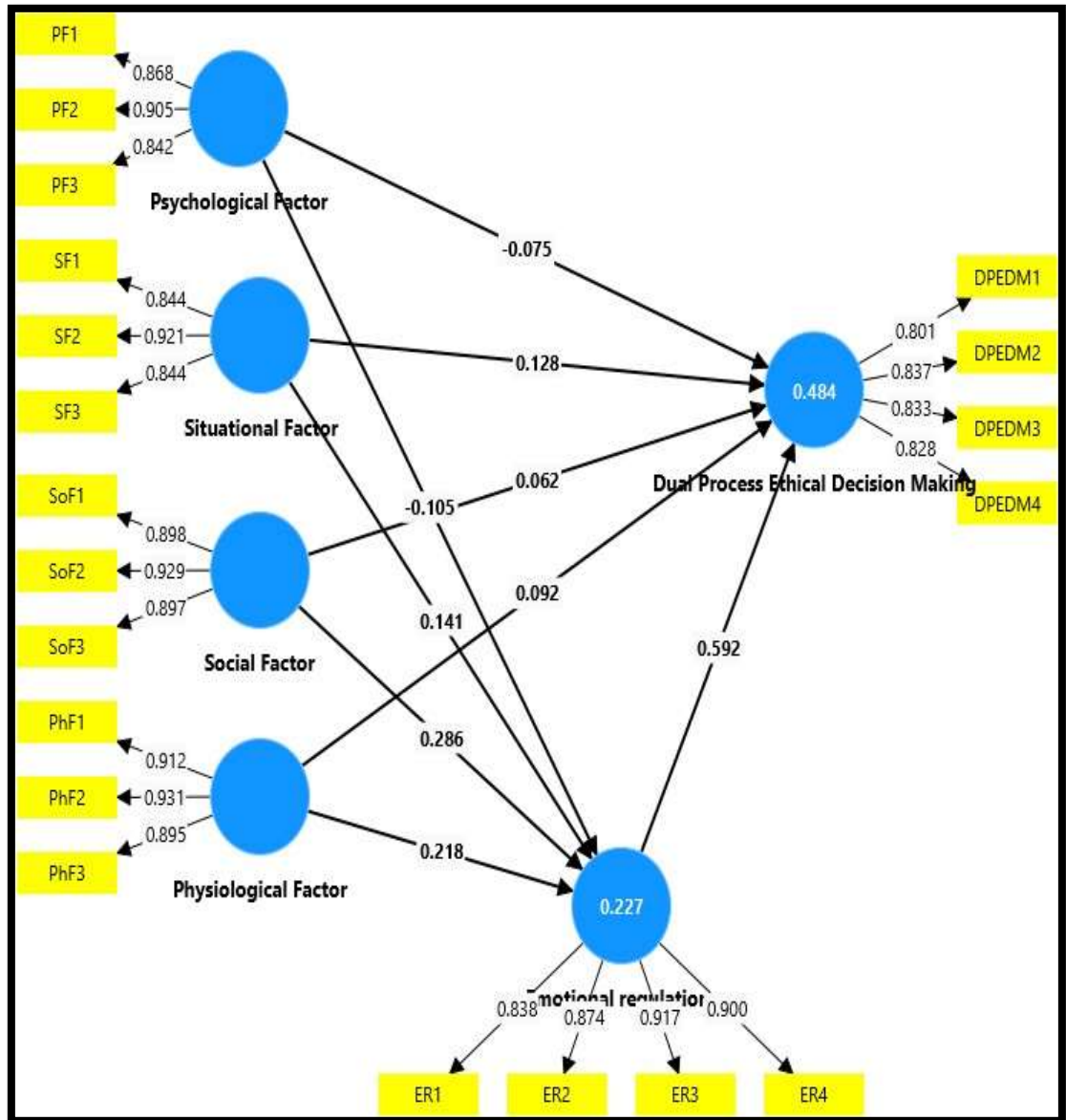


Figure 5 PLS-SEM Model

**Quality Criteria through R-square**

**Table 5 Quality Criteria Measurement**

	R-square	R-square adjusted
Dual Process Ethical Decision Making	0.484	0.477
Emotional regulations	0.227	0.219

The table 05 below shows the variance of the construct in the model for the study. The table reads that the independent variables together, explaining a variance of 0.477, 47.7% in the dependent variable. This indicates that the data fits the model as the quality criteria for R-Square suggests that the R-square is accepted at 0.25 or 25%. Hence, this proves that the construct taken in questionnaire are valid and shows the 47% of the confidence in the tool created.

**Construct Reliability and Convergent Validity**

**Table 6 Convergent Validity (Cronbach’s Alpha)**

	Cronbach's alpha
Dual Process Ethical Decision Making	0.843
Emotional regulations	0.905
Physiological Factor	0.900
Psychological Factor	0.842
Situational Factor	0.839
Social Factor	0.894

The table 06 shows the reliability of the construct (questionnaire) measured through Cronbach alpha. The reliability in between the ranges of 0.5-0.6 are considered moderately strong while the reliability above 0.7 is considered strongest. As per the results the reliability of the tool for each construct is more than 0.7 which is 0.834 for DPEDM, 0.905 for emotional regulation, 0.900 for physiological factor, 0.824 for psychological factor, 0.839 for situational factor and 0.894 for social factors. The reliability for each construct is highly strong but the reliability for physiological and emotional regulation is said to be strongest amongst all the variables.

**Table 7 Convergent Validity (AVE)**

	Average variance extracted (AVE)
Dual Process Ethical Decision Making	0.680
Emotional regulations	0.779
Physiological Factor	0.833
Psychological Factor	0.760
Situational Factor	0.757
Social Factor	0.825

**Table 07: Validity Construct**

Similarly table 07 shows the validity for the construct measured through Average Variance Extracted. The validity shows SPEDM construct has the validity of 0.680 which is 60% Emotional Regulation has a validity of 0.779 which is 79.9%, the validity for physiological factor is 0.833 which is 83.3% , 0.760 which is 76% for psychological factor and 0.757 and 0.825 for situational and social factors. Since the criteria for significant validity is that it should be at least 0.5 (Sekran & Bougie), the validity for each construct is significantly strong.

**P-value and T-statistics**

**Table 8 Path Coefficients**

	<b>Original sample (O)</b>	<b>Sample mean (M)</b>	<b>Standard deviation (STDEV)</b>	<b>T statistics ( O/STDEV )</b>	<b>P values</b>
Physiological factor -> Emotional regulations -> Dual Process Ethical Decision Making	0.129	0.127	0.054	2.377	0.017
Psychological factor -> Emotional regulations -> Dual Process Ethical Decision Making	-0.062	-0.059	0.048	1.310	0.190
Situational factor -> Emotional regulations -> Dual Process Ethical Decision Making	0.084	0.084	0.042	1.976	0.048
Social factor -> Emotional regulations -> Dual Process Ethical Decision Making	0.169	0.167	0.050	3.392	0.001

**Table 08: T-statistics and P-value**

Table 8 shows the p-value and T-statics measuring the impact and significance of the variables. The p-value for t-statistics tests shows that variable physiological factors, social factor and situational factor is statistically significant with the values of 0.01, 0.00 and 0.04. This is because the values below 0.05 is said to significant. While the value for psychological factor is insignificant as the values is estimated to be at 0.190 which is 0.05. Although the psychological factor has the major impact on EDM; but the value is insignificant; this can be due to excessive positive and same response for the construct.

The T-statistic values shows the impact and change in the variable as per the unit. The results shows that the one unit change in physiological factor will cause a 2.377 unit change in the Dual Process ethical decision making with a mediating role of emotional regulations. Similarly, a unit change in psychological factor will cause a change in Dual Process ethical decision making by 1.310 unit with the impact of mediating variable. Furthermore; the one unit change in situational factor will cause a 1.976 units change in Dual Process ethical decision making with mediating role of emotional regulations and the one unit change in social factor will bring a change of 3.393 units in dependent variable with a mediating role of emotional regulation. This shows that out of all the variables; as per this study and the results generated; social factor has the major impact on Ethical Dual Process Decision Making with mediating role of Emotional Regulation.

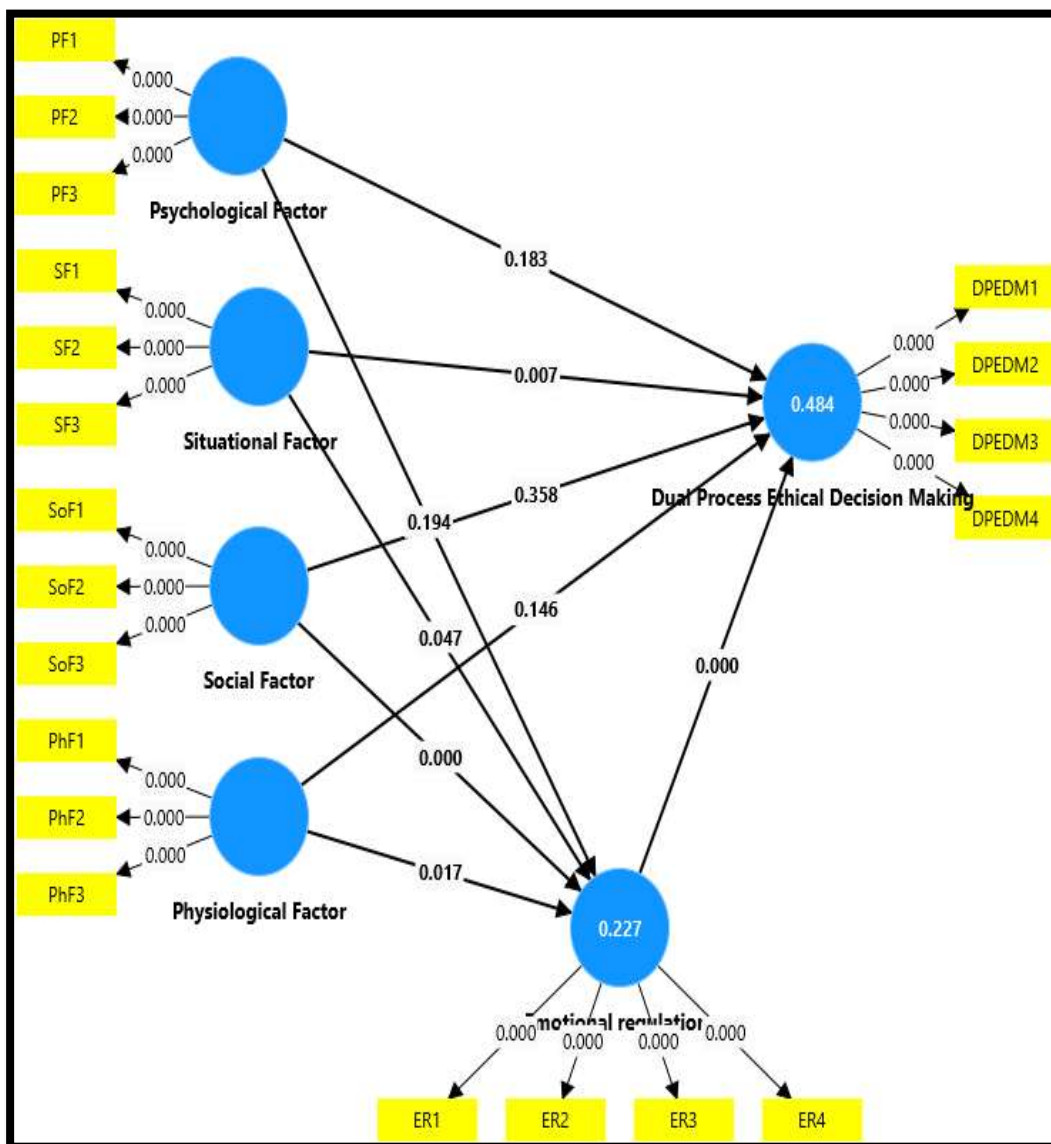


Figure 6 Structural Model

## Conclusions

It has been concluded that the hypothesis for the study are accepted as all the independent variables namely psychological, situational, social and physiological factors have a strong positive significant relationship with dual process of ethical decision making and have a significant impact as well. The results show all the variables have the strongest correlation with the values of 0.912, 0.868, 0.844 and 0.898 respectively. It has been indicated that emotional regulation also plays a significant mediating role in impacting the EDM with the value of 0.838. It has been established that out of all these variables physiological factors has the strongest correlation as well as impact on decision making with a change value unit of 2.377. Overall, all the model itself stand significant except the psychological factors. This created a lot of contradiction with Drndarević et al., (2021) who stated this factor influence the most but this can be due to the fact that due to the consistency in the responses; the values exceeded the limited criteria. The results support the findings of Zhang et al., (2024); that is hormones like cortisol, changes in heart rate and neurotransmitter like serotonin influences motivation and mood and can impact decision making process in Canada.

## Future Directions

It is recommended that this similar study can be conducted using external factors such as environmental factors impacting the decision making process. Moreover, study can also be done within the context of other countries as well. The mediating variable can also be changed conducting the same study such cognitive process, motivation and self-awareness. In addition to this; it is also recommended that the study can also imply other analysis and other tests such as regression and correlational analysis. The analysis can also be conducted using different software, such as SPSS.

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## **Appendix: Questionnaire**

### **Section 1: Demographics and Background Information**

- a. Age
  - 18-25
  - 26-33
  - 34-40
  - Above 40
- b. Gender
  - Male
  - Female
- c. Are you currently working?
  - Yes
  - No

**Scale: 1=SA, 2=A, 3=N, 4=D, 5=SD**

### **Section 2: Psychological Factors** (Ruedy & Schweitzer, 2010)

1. I have a high level of emotional intelligence such as self-awareness and self-regulation.
2. I have a high level of moral development. (e.g., Kohlberg's stages of moral development).
3. I have a high level of empathy towards others.

### **Section 3: Situational Factors** (Warner et al., 2022)

4. I rarely encounter stressful or high-pressure situations at work.
5. I have high level of autonomy and control in your work environment.

6. I have a high level of social support from colleagues and supervisors in your work environment.

#### **Section 4: Social Factors**

7. I have a high level of social connection with colleagues and friends.
8. I frequently engage in group activities or teamwork outside of work.
9. I have a high level of trust and respect you have for colleagues and supervisors.
10. I have involvement in community and social responsibility you engage in outside of work?

#### **Section 5: Physiological Factors** (Toti et al., 2021)

11. I have an excellent physical health and well-being?
12. I frequently experience stress-related symptoms such as headaches, fatigue, or insomnia.
13. I have an excellent sleep quality and duration?
14. I have an excellent physical activity level and exercise habits?

#### **Section 6: Emotional Regulation** (Ruedy & Schweitzer, 2010)

15. I frequently experience feelings of anxiety or worry in response to ethical dilemmas at work.
16. I have a highest ability to regulate your emotions in response to stress or uncertainty.
17. I frequently engage in relaxation techniques such as meditation or deep breathing.
18. I have excellent overall emotional well-being and resilience?

#### **Section 7: Dual Process Ethical Decision Making** (Warner et al., 2022)

19. When faced with an ethical dilemma at work, I frequently rely on intuition rather than careful analysis?
20. I have a high level of moral certainty you feel when making ethical decisions at work?
21. I frequently experience conflict between personal values and organizational expectations when making ethical decisions at work?
22. I have an excellent overall quality of ethical decision-making processes at work.