Business Students' Delayed Gratification and Its Impact on Ethical Perception

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Research has shown that delayed gratification among college students has a positive impact on a variety of outcomes such as adjustment to college, academic success and quality of life. This study links college students' delayed gratification with ethical perception. A survey was developed and administered to a sample of 370 business students in a large U.S. University. Ethical perception was measured using three different scenarios: business ethics, personal ethics and accounting earnings management. The results showed that business students who scored high on delayed gratification had higher ethical awareness of appropriate ethical behavior in all scenarios compared to those with lower delayed gratification. The study adds to the literature by showing that delayed gratification is an important variable in the general and business ethics literature.

Keywords: delayed gratification, earnings management, business ethics

LITERATURE REVIEW

Business Students and Ethics

Ethics is defined as "the moral principle that governs a person's behavior or how an activity is conducted" (Sorunke et al., 2014, p.61). Significant research investigated the ethics of U.S. Business students. Some studies focused on the increased level of cheating about business students (e.g., Burton et al., 2011) and the high level of sophistication of such cheating (e.g., Hollis, 2018). Mangan (2006) found a significant relationship between cheating in college and a lower level of ethical behavior in the workplace. Kidwell (2001) showed that business education was not improving students' ethics and that many business students expected managers to cheat to get ahead of the competition. Other studies focused on ethics perception among business students and compared these students to non-business majors. Friere (2014) found that business majors were more likely to cheat on exams compared to non-business majors. In addition, only 64% of business students viewed cheating in college as unethical (Bernardi et al., 2016). Weber and Elm (2018) also found that nonbusiness students had higher moral reasoning levels compared to business students. Longitudinal studies were also conducted to examine moral reasoning changes over time. Although McKinzie et al. (2022) reported some positive results showing that business students' ethics have improved from 1985 to 2020, other studies such as Weber and Elm (2018) found that Millennial business students had lower moral reasoning levels compared to Baby Boomers and Generation X. These concerning results provide the motivation for the current study to examine the ethical perception of business students. The current study compares students' ethical perception based on major and age. Weber and Elm

(2018) also found that business students' intelligence, as measured by their GPA, was positively related to their moral reasoning level. The current study attempts to confirm this relationship.

Earnings Management

The practice of Earnings Management represents an ethical challenge in the accounting profession. defined Earnings management was defined as "the intentional manipulation of accounting numbers to achieve a strategic purpose" (Healy and Wallen, 1999, p.367). Dichev et al. (2013) found that earnings management is relatively common among companies and McEnroe (2010) found that auditors will not police earnings management actions if they do not violate Generally Accepted Accounting Principles (GAAP).

Significant research attempted to investigate the reasons managers engage in earnings management considering its negative long-term effect on financial performance (Jensen, 2005). Elias (2004) attributed earnings management behavior in certain organizations to the negative ethical culture in such organizations. Teoh et al. (1998) provided early evidence that some managers use earnings management to increase compensation, and/or delay debt covenant defaults. Later evidence pointed to managerial opportunistic behavior to maximize utility as the reason for earnings management (Belski et al., 2008). The authors also found that earnings management behavior that was intended to benefit the firm was viewed as more ethical compared to behavior that benefited the manager (Belski et al., 2008). Tian and Peterson (2016) attributed earnings management to the pressure faced by managers under a reward structure that provides personal incentives such as job retention, raises and promotion. Septiari and Maruli (2017) supported the effect of pressure on managers' earnings management behavior. Call (2019) explained that earnings management behavior benefits current shareholders at the expense of future shareholders. Coram et al. (2022) expanded on this theory and explained that earnings management shields current shareholders from the costs of missing market expectations at the expense of future shareholders.

Psychological Determinants of Earnings Management

Research attempted to investigate individual factors that can influence earnings management behavior. This research was motivated by the upper-echelons theory that earnings quality was a reflection of executives' experience, values and personalities (Hambrick and Mason, 1984). Elias (2002) found that managers exhibiting higher levels of social responsibility, focus on long-term gains and idealism perceived earnings management actions as unethical compared to those with lower social responsibility, focus on short-term gains and relativism. Buchholz et al. (2020) found that CEOs exhibiting higher levels of narcissism were more likely driven by self-serving behavior and more likely to engage in earnings management compared to those with lower levels of narcissism. Lapointe-Antunes et al. (2022) found that CFOs perceived as less honest engaged in higher levels of earnings management. Harris et al. (2022) argued that organizations facing pressure to manage earnings may hire executives with dark personality traits who are willing to push ethical boundaries. More concerning findings were reported by Himes et al. (2021) who found a negative relationship between the dark triad personality traits and ethical attitudes among business students.

The current study expands previous research on psychological determinants of ethical perception of unethical behavior, including earnings management, by examining the variable of delayed gratification as potentially related to such perception.

Delayed Gratification

Delayed gratification is a personality characteristic that shows a person's willingness to postpone immediate needs in order to achieve a greater return in the future (Funder and Block, 1989). A common example is denying oneself the pleasure of spending money immediately in favor of investment and a greater reward in the future (Funder and Block, 1989, p.1041). Significant research found that delayed gratification has numerous advantages in social, academic and professional environments. At the social level, Dollinger (2012) argued that delayed gratification was positively associated with altruism since high-delay individuals believe there will be positive payback in the future from such altruism. Hoerger et al.

(2011) found that delayed gratification was associated with a higher social competence and psychological health, while immediate gratification was associated with risky sexual behavior and substance abuse. Xu and Yin (2020) found that delayed gratification was associated with career and life satisfaction. Yanaoka et al. (2022) concluded that resisting immediate temptations in favor or later rewards predicted socioemotional competence and health among children in Japan. In academic environments, students who are willing to delay gratification are focused on academic goals that are temporally remote (Bembenutty and Karabenick, 1998). Delayed gratification in College was a characteristic of skilled learners who have high self-efficacy and use effective learning strategies (Bembenutty, 2009). Bembenutty (2010) argued that college students willing to delay gratification were more rational in making employment decisions and career choices. At the professional level, individuals with higher levels of delayed gratification had higher organizational commitment, work involvement and organizational participation (Bembenutty, 2009). Shields and Chen (2023) found a negative relationship between delayed gratification and burnout.

Very little research has examined the ethical consequences of delayed gratification. In an early study, McCuddy and Peery (1996) theorized that individuals who expected immediate gratification may behave unethically to satisfy their needs. The authors found a positive relationship between a person's level of delayed gratification and their own ethical propensity, perception of others' ethics, and the absence of cheating (McCuddy and Peery, 1996). The current study adds to the literature by examining delayed gratification among business students using business, personal and accounting ethical situations.

RESEARCH DESIGN

Sample Selection

The sample for this study consists of business students enrolled in a variety of business classes at an AACSB-Accredited U.S. public University. Only junior, senior and graduate students were selected in this study. This allows for more accurate measurement of ethical perception since such students would have been exposed to ethics instruction in business which is a College-wide learning objective. A questionnaire was developed and administered to students during class time and anonymity was guaranteed. Participation in the survey was voluntary and students who did not wish to participate were allowed to leave the classroom. A usable sample size of 370 students was obtained after disregarding surveys with missing responses. The sample consisted of 102 Juniors, 198 seniors and 70 graduate students. Regarding major, the majority of students were accounting majors (151) followed by Management (72) and Marketing majors (50) with the smallest category consisting of non-business majors (20). The students had an average GPA of 3.1/4.00.

Study Measures and Hypotheses Development

In order to measure ethical perception, different case studies were used in order to capture differences between personal, business and accounting ethical perception. Two short cases developed by Brown et al. (2010) were used in the current survey. The first case dealt with a small business owner who ordered and received 10 computers but was only billed for 9 computers. The owner had to make a decision whether to pay the invoice for 9 computers or inform the supplier and offer to pay for the extra computer. The survey respondent was asked to indicate the likelihood that they will be ask the supplier to make a payment for the unbilled computer on a scale of 1(highly unlikely) to 7(highly likely). Based on previous research, the following hypothesis is tested:

H1: *Students scoring high on delayed gratification are more likely to behave ethically in a business setting compared to those who score low on delayed gratification.*

The second case dealt with a personal dilemma of someone who found an envelope with cash and the owner's contact information. The survey respondent was asked about the likelihood of contacting the owner to return the envelope on a scale of 1(highly unlikely) to 7(highly likely). Based on previous research, the following hypothesis is tested:

H2: *Students scoring high on delayed gratification are more likely to behave ethically in a personal setting compared to those who score low on delayed gratification.*

The next case dealt specifically with an earnings management scenario. The case developed by Johnson et al. (2012) was used in the current study. It dealt with an automobile dealer manager who decided to manipulate revenues and expenses for his dealership over time in order to increase his compensation, which represented unethical behavior. However, there were two versions of the case: One version resulted in the dealership being more profitable (positive company consequences) as a result of the unethical behavior and the other version resulted in the dealership suffering a decline in profitability (negative company consequences) as a result of the unethical behavior. Johnson et al. (2012) created these two scenarios based on Hunt and Vasquez-Parraga (1993) who found that organizational consequences of unethical actions could affect an individual's ethical judgement about the unethical behavior. Specifically, the following hypothesis is tested:

H3: *Business students will judge unethical behavior as more ethical when it results in positive consequences for the organization compared to the same unethical behavior that results in negative consequences for the organization.*

Survey participants were randomly assigned to one of the two cases. Each respondent was asked to rate the ethics of the manager's actions on a scale of 1 (highly ethical) to 7(highly unethical). There were 183 respondents to Case 1 (positive company consequences) and 187 respondents to Case 2 (negative company consequences).

In order to measure the psychological variable of delayed gratification, the measure developed by Hoerger et al. (2011) was used in this study. The authors examined five domains of delayed gratification: Food (focus on healthy eating), physical pleasures (control physical desires), social interactions (consider how behavior affects others), money (focus on saving) and achievement (focus on long-term goals). Hoerger et al. (2011) originally developed a total of 35 statements to measure delayed gratification but eventually reduced their questionnaire to 10 statements to improve reliability. These 10 statements are used in the current study (two statements for each delayed gratification domain). Hoerger et al. (2011) reported good reliability of each domain ranging from .69-.89 and internal consistency of .77 with test-retest reliability of .76. Each participant recorded their agreement/disagreement with each delayed gratification statement on a scale of 1(strongly disagree) to 7(strongly agree).

STUDY RESULTS AND DISCUSSION

The first step in data analysis is to calculate descriptive statistics regarding each ethics case as well as delayed gratification. The results are reported in Table 1.

TABLE 1
DESCRIPTIVE STATISTICS (N=370)

	Mean	Standard Deviation
Business Ethics*	5.26	1.98
Personal Ethics *	4.36	1.41
Earnings Management** (favorable consequences)	5.70	1.44
Earnings Management** (unfavorable consequences)	4.93	1.42
Delayed Gratification***		
Food	4.36	1.41
Physical	4.36	1.12
Social	5.84	1.17
Money	5.89	1.13
Achievement	5.83	1.24
Total Delayed Gratification	5.25	0.73
GPA	3.10	0.44

*Measured on a scale of 1(Highly unlikely) to 7(Highly likely)
Higher scores mean the respondent was more likely to behave ethically

** Measured on a scale of 1(Highly ethical) to 7(Highly unethical)
Higher scores mean the respondent viewed the case as more unethical

*** Measured on a scale of 1(Strongly disagree) to 7(Strongly agree)
Higher scores mean the respondent was more willing to delay gratification

An Analysis of Variance was conducted to examine differences between different cases. The results showed that business students were much more likely to behave ethically in a business ethics situation regarding correcting a billing error (Mean 5.26) compared to a personal ethics situation regarding returning someone's cash (Mean 4.36)($p<.01$). Regarding earnings management cases, business students viewed earnings management with favorable company consequences as much more unethical (Mean 5.70) compared to earnings management with unfavorable company consequences (Mean 4.93)($p<.01$). Therefore, H3 is rejected in this study. These results contradict previous findings by Belski et al. (2008).

An analysis of demographic differences revealed that age was the only statistically significant factor related to ethical perception and only in the business ethics case. Nontraditional students (over 25 years old) were much more likely to perceive the business ethics situation regarding a billing error as more unethical compared to traditional-age students (under 25 years old)($p<.05$).

Regarding delayed gratification, business students were most likely to delay social interactions (Mean 5.84), money (Mean 5.89) and achievement (Mean 5.83) and least likely to delay gratification regarding food (Mean 4.36) and physical desires (Mean 4.36). Overall delayed gratification had a mean of 5.25/7.00 which indicates slight to moderate delayed gratification.

The next analysis involved using Pearson correlation analysis to relate delayed gratification to the ethical perception in business, personal and earnings management actions. The results are presented in Table 2.

TABLE 2
RELATIONSHIP BETWEEN DELAYED GRATIFICATION AND ETHICAL PERCEPTION

	Business Ethics	Personal Ethics	Earnings Management (Favorable)	Earnings Management (Unfavorable)
Food	.08*	.09**		
Physical Desires	.18***	.15***	.19***	.22***
Social Interactions	.22***	.20***	.24***	.15**
Money	.10**	.11**	.20***	
Achievement	.21***	.15***	.10*	
Delayed Gratification	.26***	.23***	.22***	.16**
GPA	.08*			.09*
***** p<.01 ** p<.05 * p<.10**				

(Only Significant Correlations are Reported)

The results indicate that business students who were willing to delay food, physical desires, social interactions, money, and achievement were more likely to behave ethically in the business and personal cases compared to business students who were not willing to delay gratification. Therefore H1 and H2 are supported. Since there were different perceptions regarding earnings management actions, depending on whether they were favorable to the company or not, a separate analysis was conducted for each earnings management case. Regarding the case with a favorable outcome, business students willing to delay gratification (except food) were more likely to perceive this action as unethical compared to business students with lower delay of gratification. Regarding the case with an unfavorable outcome, business students willing to delay physical desires and social interactions were more likely to perceive this action as unethical compared to those not willing to delay gratification.

Correlation analysis was also conducted between GPA and ethical perception. There was a weak statistically significant relationship between higher GPA and the likelihood of ethical behavior in the business ethics case as well as the unethical perception of the earnings management case with an unfavorable outcome. These results confirm the results achieved by Weber and Elm (2018) regarding intelligence and ethical perception but only in certain situations.

CONCLUSION AND LIMITATIONS

The current study found a statistically significant relationship between delayed gratification and the likelihood of ethical behavior in business and personal situations. In addition, it found that business students willing to delay gratification viewed earnings management actions as more unethical compared to those not willing to delay gratification. These results provide guidance to business ethics instructors when analyzing the causes for unethical business behavior, especially earnings management. They showed that focusing on the long-term horizon can have positive ethical outcomes in business situations and hopefully decrease the likelihood of managing earnings. The results also showed that business students were much more likely to see earnings management actions that benefited the company as more unethical than those that were detrimental to the company. Since the normal objective of managing earnings is to provide positive consequences to the company (Belski et al., 2008), it appears possible to focus students' attention to unethical behavior in such situations.

The current study surveyed a sample of students in a large public University on the West Coast. The results may not be generalized to all business students in the U.S. Future research may examine the effect of other demographic factors such as individual/family income and first-generation college status on delayed gratification and ethical perception.

REFERENCES

Belski, W.H., Beams, J.D., & Brozovsky, J.A. (2008). Ethical judgements in accounting: An examination on the ethics of managed earnings. *Journal of Global Business Issues*, *2*(2), 59–68.

Bembenutty, H. (2009). Academic delay of gratification, self-efficacy, and time management among academically unprepared college students. *Psychological Reports*, *104*, 613–623.

Bembenutty, H. (2010). Homework completion: The role of self-efficacy, delay of gratification, and self-regulatory processes. *International Journal of Educational & Psychological Assessment*, *6*(1), 1–20.

Bembenutty, H., & Karabenick, S.A. (1998). Academic delay of gratification. *Learning and Individual Differences*, *10*, 329–346.

Bernardi, R.A., Landry, A.C., Landry, E.E., Buonafede, M.R., & Berardi, M.E. (2016). What actions can be taken to increase whistle-blowing in the classroom? *Accounting Education*, *25*(1), 88–106.

Brown, T.A., Sautter, J.A., Littvay, L., Sautter, A.C., & Bearnes, B. (2010). Ethics and personality: Empathy and narcissism as moderators of ethical decision making in business students. *Journal of Education for Business*, *85*, 203–208.

Buchholz, F., Lopatta, K., & Maas, K. (2020). The deliberate engagement of narcissistic CEOs in earnings management. *Journal of Business Ethics*, *167*(4), 663–686.

Burton, J.H., Talpade, S., & Haynes, J. (2011). Religiosity and test-taking ethics among business school students. *Journal of Academic & Business Ethics*, *4*, 1–8.

Call, J.E. (2019). A challenge to business leaders to end earnings management. *Journal of Accounting and Finance*, *19*(4), 55–76.

Coram, P., Fredrickson, J.R., & Pinnuck, M. (2022, December). Earnings management: Who do managers consider and what is the relative importance of ethics? *Australian Journal of Management*, pp. 1–34.

Dichev, I.D., Graham, J.R., Harvey, C.R., & Rajgobal, S. (2013). Earnings quality: Evidence from the field. *Journal of Accounting & Economics*, *56*, 1–33.

Dollinger, M.J. (2012). Delayed gratification. *Business Horizons*, *55*, 101–103.

Elias, R.Z. (2002). Determinants of earnings management ethics among accountants. *Journal of Business Ethics*, *40*(1), 33–45.

Elias, R.Z. (2004). The impact of corporate ethical values on perceptions of earnings management. *Managerial Auditing Journal*, *19*(1), 84–98.

Friere, C. (2014). Academic misconduct among Portuguese economics and business undergraduate students: A comparative analysis with other major students. *Journal of Academic Ethics*, *12*(1), 43–63.

Funder, D.C., & Block, J. (1989). The role of ego-control, ego-resiliency, and IQ in delay of gratification in adolescence. *Journal of Personality and Social Psychology*, *57*(6), 1041–1050.

Hambrick, D.C. & Mason, P.A. (1984). Upper-echelons: The organization as a reflection of its top managers. *The Academy of Management Review*, *9*(2), 193–206.

Harris, L.L., Jackson, S.B., Owens, J., & Seybert, N. (2022). Recruiting dark personalities for earnings management. *Journal of Business Ethics*, *178*(1), 193–218.

Healy, P.M., & Wahlen, J.M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, *13*(4), 365–383.

Himes, B.M., Olson-Buchannan, J.B., & Elson, D. (2021). Relationship between ethical attitudes and the dark triad: Differences among college majors. *Journal of Psychology*, *155*(8), 695–716.
Hoerger, M., Quirk, S.W., & Weed, N.C. (2011). Development and validation of the delaying gratification inventory. *Psychological Assessment*, *23*, 725–738.
Hollis, L.P. (2018). Ghost students and the new wave of online cheating for community college students. *New Directions for Community Colleges*, (183), 25–34.
Hunt, S., & Vasquez-Parraga. (1993). Organizational consequences, marketing ethics, and sales force supervision. *Journal of Marketing Research*, *30*(1), 78–90.
Jensen, M.C. (2005). Agency costs of overvalued equity. *Financial Management*, *34*(1), 5–19.
Johnson, E.N., Fleischman, G.M., Valentine, S., & Walker, K.B. (2012). Managers' ethical evaluations of earnings management and its consequences. *Contemporary Accounting Research*, *29*(3), 910–927.
Kidwell, L. (2001). Student honor codes as a tool for teaching professional ethics. *Journal of Business Ethics*, *29*(1–2), 45–49.
Lapointe-Antunes, P., Veenstra, K., Brown, K., & Li, H. (2022). Welcome to the gray zone: Shades of honesty and earnings management. *Journal of Business Ethics*, *177*(1), 125–149.
Mangan, K. (2006). Survey finds widespread cheating in MBA programs. *The Chronicle of Higher Education*, *53*(6), 44.
McCuddy, M.K., & Peery, B.L. (1996). Selected individual differences and collegians' ethical beliefs. *Journal of Business Ethics*, *15*, 261–272.
McEnroe, J.E. (2010). Public accountants' perceptions of the acceptability of earnings management practices through the employment of GAAP in the post-SOX period. *The Journal of Applied Business Research*, *26*(1), 59–72.
McKinzie, K., Chen, A., Rubach, M., & Carson, M. (2022). A longitudinal study of perceived ethics among business students. *Journal of Leadership, Accountability and Ethics*, *19*(4), 82–97.
Septiari, D., & Maruli, M. (2017). Earnings management behavior: The pressure on behavior performance. *Asian Journal of Business & Accounting*, *10*(2), 137–163.
Shields, B.L., & Chen, C.P. (2023, March). Does delayed gratification come at the cost of work-life conflict and burnout? *Current Psychology*, pp. 1–22.
Sorounke, O.A., Omotoso, A.F., Azeez, M.F., & Alamu, N.E. (2014). Ethical issues in financial reporting and theories that rive them: A discourse. *International Journal of Business and Common Market Studies*, *11*(1&2), 59–69.
Teoh, S.H., Welch, I., & Wong, T.J. (1998). Earnings management and the underperformance of seasoned equity offerings. *Journal of Financial Economics*, *50*(1), 63–99.
Tian, Q., & Peterson, D.K. (2016). The effects of ethical pressure and power distance orientation on unethical pro-organizational behavior: The case of earnings management. *Business Ethics: A European Review*, *25*(2), 159–171.
Weber, J., & Elm, D.R. (2018). Exploring and comparing cognitive moral reasoning of millennials and across multiple generations. *Business and Society Review*, *123*(3), 415–458.
Xu, H., & Yin, M. (2020). The roles of time discounting and delay of gratification in career outcomes. *Journal of Counseling Psychology*, *67*(6), 747–754.
Yanaoaka, K., Michaelson, L.E., Guild, R.M., Dostart, G., Yonehiro, J., Saito, S., & Munakata, Y. (2022). Cultures crossing: The power of habit in delaying gratification. *Psychological Science*, *33*(7), 1172–1181.