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When Right Feels Wrong: Cognitive Biases and the Slide Towards Moral Relativism

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Abstract

The present study examined how cognitive biases contribute to Unintentional Moral Relativism (UMR)—the inadvertent misapplication of moral standards despite an individual's intent to act ethically. Using a between-group quasi-experimental design, three experiments were conducted with 70 undergraduate psychology students from a public university in Islamabad to investigate the contrast effect, framing effect, and numerosity bias in moral judgment. Participants evaluated ethically ambiguous scenarios under different priming and presentation conditions. Although group differences across the three phases were statistically insignificant, significant within-group differences emerged when justifications were introduced, indicating that the number of reasons provided influenced perceived ethicality. These findings suggest that contextual and cognitive factors subtly shape moral evaluations, even in cultures emphasising moral absolutes. The study highlights the need for cross-cultural exploration of cognitive biases in ethical decision-making and the development of indigenous theories to better understand moral reasoning in non-Western contexts.

Keywords: Moral Relativism, Cognitive Biases, Quasi-experimental Study, Priming, Ethics.



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Introduction

The systematic study of moral principles that govern human conduct is known as ethics, which addresses questions about what individuals should or should not do and explores the reasoning behind their respective moral judgments (Resnik, 2011). These morals pertain to the personal beliefs and values that guide an individual's behaviour concerning what is right and wrong (Arafat, 2024) and involve the practices, beliefs, and values that guide behaviour and decision-making (Harman, 2000).

Two major philosophical positions have characterised the debate on morality since time immemorial, namely moral relativism and moral absolutism. While moral relativism suggests that moral principles are not absolute but rather are shaped by cultural, societal, or individual perspectives (Tännsjö, 2007), moral absolutism holds that certain actions are intrinsically right or wrong, regardless of context or consequences (Karimi, 2011). Rai and Holyoak (2013) suggest that both holding and being exposed to these different moral perspectives have an impact on moral intentions as well as moral behaviours. However, several personal (like age, sex, education, occupation, etc.) and psychological (level of moral development, locus of control, and need for cognition) factors influence moral judgments (O'Fallon & Butterfield, 2005).

Sparks and Pan (2010) have identified a few key characteristics of moral judgements and maintained that ethical judgements are actually forms of evaluative judgments, singular and comparative in nature, involve heuristics and systematic information processing and vary by degree and fall along a continuum of intensity. It must be noted that these moral judgements and decision-making are a key component of social cognition, and moral decisions are rarely made in isolation. Because they require integrating emotional reactions, social norms, empathic concern, and abstract principles (Greene & Haidt, 2002). Hence, morality is a deeply social and dynamic cognitive function, and prone to human biases and errors.

People find it hard to believe that their judgments (and especially moral judgments) can be prone to relativistic sway. This is especially the case for those who adhere to a religion, as they typically believe in moral absolutes and use them to guide and inform their decisions (Kellaris, 2010). Research suggests that people apply ethical criteria and standards, which serve as a moral compass to guide ethical decisions upon which they act (Hunt & Vitell, 1986). However, evidence also shows that ethical judgments can vary circumstantially (Kellaris et al., 1996) and are subject to the magnetic pull of situational factors (Kellaris et al., 1994). These factors skew judgment and can lead to bad decisions and regrettable outcomes.

Among these cognitive errors pertaining to moral judgment and decision making, unintentional Moral Relativism (UMR) is of particular significance. It is a judgment process where an ethical standard, believed to be absolute or universal, is accidentally misapplied. It happens when a person intends to follow the standard, but changing circumstances affect its application without the person's awareness and result in an unintended misapplication (Boyle et al., 1998).

Research has indicated that certain schemas, priming processes and heuristics can become the source of UMR. People generally hold a large number of schemas, and the ones that are activated and influence thought and action depend on the situation as well as the strength of schemas.

Additionally, they may be activated consciously or unconsciously by stimuli in one's environment (James et al., 2004).

Similarly, through the process of priming, when environmental cues subconsciously activate certain moral frameworks, hence shifting judgments without conscious awareness can also take place (Shariff & Norenzayan, 2007). Likewise, in the context of the numerosity heuristic, people often rely upon the number of items presented rather than evaluating the quality of the content (Pelham et al., 1994). Moreover, in the anchoring and adjustment heuristic, individuals start with an initial reference point (anchor) — often an arbitrary or irrelevant value — and then adjust from that point to reach a final judgment (Tversky & Kahneman, 1974).

Literature Review

In a meta-analytic study highlighting the effects of behavioural and non-behavioural primes on overt behavioural outcomes, Dan et al. (2023) found an effect size of moderate level on both behavioural and non-behavioural primes, which remained stable across diverse methodologies and adjustments for possible inclusion/publication biases. However, findings indicated that decreasing the value of behaviour weakened the effect on only behavioural primes.

Similarly, Pulfrey et al. (2018) investigated whether students' observance of group loyalty benevolence values predicted the acceptance of cheating with in-group peers and concluded that it did so, but only towards collective cheating. Further, based on final year examinations, adherence to benevolence values predicted moral disengagement toward group cheating positively, while individual cheating behaviour was inversely. Moreover, group cheating behaviour was also found to be predicted by being a reliable peer and having power and influence. Correspondingly, analysis of the dyads of participants revealed that those who knew one another cheated more than those who did not. Also, when participants knew each other, observance of power values was found to be a positive predictor of cheating behaviour. Hence, it can be argued that, based on benevolence values, in-group loyalty can explain collective cheating behaviour.

Likewise, another study probed whether feeling powerful can implicate immoral decision-making and cheating and found that when participants were more confident about their felt power, they cheated more; however, low confidence in the same situation did not affect cheating behaviour (Toader et al., 2024).

Contextualising the theory of planned behaviour, research aimed to study the interaction between negative emotions and attitudes towards plagiarism in university students (Tindall et al., 2021). Results indicated that intentions to plagiarise were predicted by negative affect, with perceived norms acting as a mediator. Moreover, perceived norms and intentions also predicted plagiarism behaviour.

Similarly, another research explored the possibility of whether tests, being difficult learning tasks in contrast to reading, would enable participants to deem the learning environment more negative, causing more stress and hence increasing the likelihood of engaging in and justifying the hypothetical cheating behaviour (Wenzel & Reinhard, 2020). Test situations were evaluated more negatively by the participants than reading control situations, which in turn linked to increased

hypothetical cheating and justifications. However, no direct effects of learning situations were found to impact hypothetical cheating or justifications.

Also, Wu et al. (2020) designed a study to see if participants would cheat during exam-related situations if primed with legal penalties or not. Findings discovered no difference across both primed and control groups in the number of participants who cheated. This study highlights that instead of priming legal consequences in relation to honesty, there were some other psychological phenomena that decreased cheating behaviour, as cited by previous literature.

Moreover, Bindra and Pearce (2022) experimented to study if primes could affect behaviour in a market for credence commodities and found that those presented with an honesty prime condition experienced a 5.5% increase in taxi fares, relative to a baseline demonstrating overpricing rather than overtreatment. However, the primes of dishonesty and a competitor condition had zero bearing on taxi fares. Therefore, it was concluded that the impact of primes on behaviour would likely be small in contrast to information asymmetries.

Similarly, in a study, Fida et al. (2021) postulated that actual behaviour of the participants would be predicted by implicit moral disengagement (IMD) positively; however, explicit moral disengagement (EMD) would predict self-reported behaviour when the participants would be asked to make on-the-spot decisions without any consequential impact for their misconduct. Findings showed that only IMD correlated with the actual misconduct.

Correspondingly, a study explored the interactive effect of financial priming, psychological distance (PD), and financial reporting responsibility (FRR) on the recognition of financial misreporting (FM) as an ethical issue (Hunt et al., 2022). Findings revealed that there is a lower probability that the financially primed individuals without any former FRR would recognise psychologically distant FM as a moral issue. However, financially primed participating professionals with FRR regarded psychologically distant FM to be more unethical.

Furthermore, Schauster et al. (2021) aimed to examine how participants' professional identity influenced their moral reasoning. Though professional identity did not predict moral reasoning, an interaction effect between gender and identity priming was observed.

Similarly, assuming that introducing morality symbols like angels, heaven, or saints in advertisements could enhance consumer indulgence, the researchers found that immorality symbols increased actual consumer indulgent behaviour (Ilicic et al., 2021). Moreover, rebelliousness was found to influence indulgent intention while ruling out the image-message congruence.

Likewise, to investigate whether religiously inclined participants differ on the appraisal of ethically reprehensible cognitions and behaviours in contrast to non-religious individuals, Tsikandilakis et al. (2022) showed masked images for moral impropriety. Results indicated high responsivity to masked immoral images by religious individuals. Moreover, the variances in appraisal and bodily reactions were reported for those immoral images only, which were perceived consciously. Hence, it was concluded that while religiosity increased conscious perceptual and biological responsivity for discerning ethical impropriety, it also includes increased vulnerability to the misperception of immoral behaviour.

Another study aimed to explore how the honesty-humility trait and ethical cueing impacted cheating behaviour and discovered that those who scored high on the honesty-humility trait were less likely to cheat than low scorers (Kleinlogel et al., 2017). Also, high scorers on the honesty-humility trait did not cheat much across situation-based primes; meanwhile, low scorers cheated more when immoral primes were presented to them.

Correspondingly, to investigate the impact of heuristic bias in mathematics teachers by engaging an exemplar of a negative prime and comparing the ability to overcome it, Jiang et al. (2022) found that the proportional heuristic bias affected all participants, and demonstrated cognitive inhibition when problem solving involved non-proportional queries. Further, experienced instructors displayed a stronger tendency to overuse proportionality.

Lastly, based on a systematic review of the experimental studies investigating moral framing, Brugman (2024) concluded that several conditions must be taken into account in this regard that includes how morality has been conceptualized, what are the differences in the frame valence, the nature of outcomes, the multimodal manipulations employed in the experiments and the choice of non-moral groups as controls; all play a significant effect on the results of experimental studies.

The Rationale of the Study

As evident from the review of the literature, almost all of the cited scholarship was conducted on individuals from predominantly Western countries, suggesting a potential W.E.I.R.D. (white, educated, industrialised, rich and democratic) sample (Henrich et al., 2010), hence indicating a research gap for native investigation. Furthermore, the studies conducted within the domain of psychology in Pakistan revealed that the psychology of ethics/morals is among the least investigated domains of psychology (Kamrani et al., 2022). Additionally, questionnaire-based correlational studies are dominant, with minimal use of experimental designs, which is why this study will be a pertinent addition to the research scholarship.

Research Methodology

Research Design and Plan

A between-group quasi-experimental design was used to investigate various pitfalls that lead to Unintentional Moral Relativism (URM). The study comprised three phases; in phase 1, the contrast effect was investigated, in phase 2, the framing effect was observed, and in phase 3, the numerosity effect was studied.

Sample

A sample of 70 final-year, undergraduate-level students from a federal public sector university in Islamabad was recruited through a non-probability convenience sampling technique. The sample was further divided into two groups ($n_1 = 32$, $M_{age} = 22.28$, $SD_{age} = 1.11$; $n_2 = 38$, $M_{age} = 22.61$, $SD_{age} = 1.03$).

Ethical Considerations

Variables	<i>f</i>	%	M	SD	Variables	<i>f</i>	%	M	SD
Group 1 (n = 32)					Group 2 (n = 38)				
Age			22.28	1.11	Age			22.61	1.03
Religiosity*			6.32	1.55	Religiosity*			6.16	1.33
Socioeconomic Status*			6.25	1.08	Socioeconomic Status*			6.26	1.16
Gender					Gender				
Women	28	87.5			Women	30	78.9		
Men	4	12.5			Men	8	21.1		
Ethnicity					Ethnicity				
Punjabi	16	50			Punjabi	19	50		
Pashtun	4	12.5			Pashtun	9	23.7		
Kashmiri	2	6.2			Kashmiri	4	10.5		
Hazarawal	2	6.2			Hazarawal	3	7.9		
Gilgiti	2	6.2			Others	3	7.9		
Muhajir	2	6.2							
Others	4	12.5							

Strict adherence to APA-mandated research ethics was observed throughout the research process. All participants were briefed about the nature of the study, and their formal consent was taken both for participation and for sharing the findings anonymously, only for research and academic purposes. Data was kept and processed in password-protected devices with complete anonymity. All the participants were final semester students of the BS degree in psychology, who were given credit for research participation in their course on Peace Psychology. At the end of the experiment, a debriefing session was conducted to explain the details of the study, and participants were given the right to withdraw their data, if they wanted to, after this session. However, no one withdrew their research participation.

Table 1: *Sociodemographic Characteristics of the Study Participants (N = 70)*

Note. *Both religiosity and socioeconomic status were taken as continuous variables with a range of ratings (1-10).

Table 1 shows the distribution of the sample based on age, gender, religiosity, socioeconomic status, and ethnicity. The average age across both samples was between 22 – 23 years, and both

samples were predominantly female, i.e. over 78%. Half the sample (50%) for both groups was Punjabi. Self-reported religiosity and socioeconomic status were around 6 for both groups.

Phase 1 – The Contrast Effect

While there are several sources of unintentional moral relativism, the contrast effect is one of the most common judgmental biases in this regard. The theory of adaptation level by Helson (1959) argues that a contrast effect transpires when exposure to an earlier experience or event forms a standpoint to weigh a current incident or experience. Therefore, regardless of one's intent to apply an absolute standard, moral decisions can vary as per the standpoint developed earlier (Boyle et al., 1998).

Objectives

1. To study the contrast effect across the groups of emerging adults.
2. To investigate the potential differences between the participants who were primed with either a negative or a positive exemplar.

Hypotheses

1. There would be significant differences in ratings of ethics-related scenarios across both groups.
2. Those who were primed with a negative exemplar would rate higher on the ethics-related scenario than those who were primed with a positive exemplar.

Procedure

In Phase 1, we aimed to study the contrast effect, and participants were approached with a basic research concept after taking their formal consent. A scenario indicating grey-area ethics, adapted from Kleiser et al. (2003), was shared with the participants of both groups. Before taking their ratings on a scale of ethics for this scenario, news based on a recent homicide in Lahore (an exemplar of unethical or negative behaviour) was shared with group 1, whereas group 2 was requested to read an account of the life of renowned philanthropist Abdul Sattar Edhi (an exemplar of ethical or positive behaviour). The word count, font size and style of both exemplars were kept similar. After participants had read both scenarios, they were asked to attempt three multiple-choice questions (MCQs) regarding the exemplars they had just read. They would not be scored as their purpose is just to distract them from the ethics-related scenario briefly. Then, by sharing a 10-point Likert-type rating scale, where 10 represented 'ethical' and 1 represented 'unethical', all participants were asked to rate the priming scenario according to their opinion. This was followed by a data analysis and interpretation process, as findings were discussed in the light of research scholarship.

Results

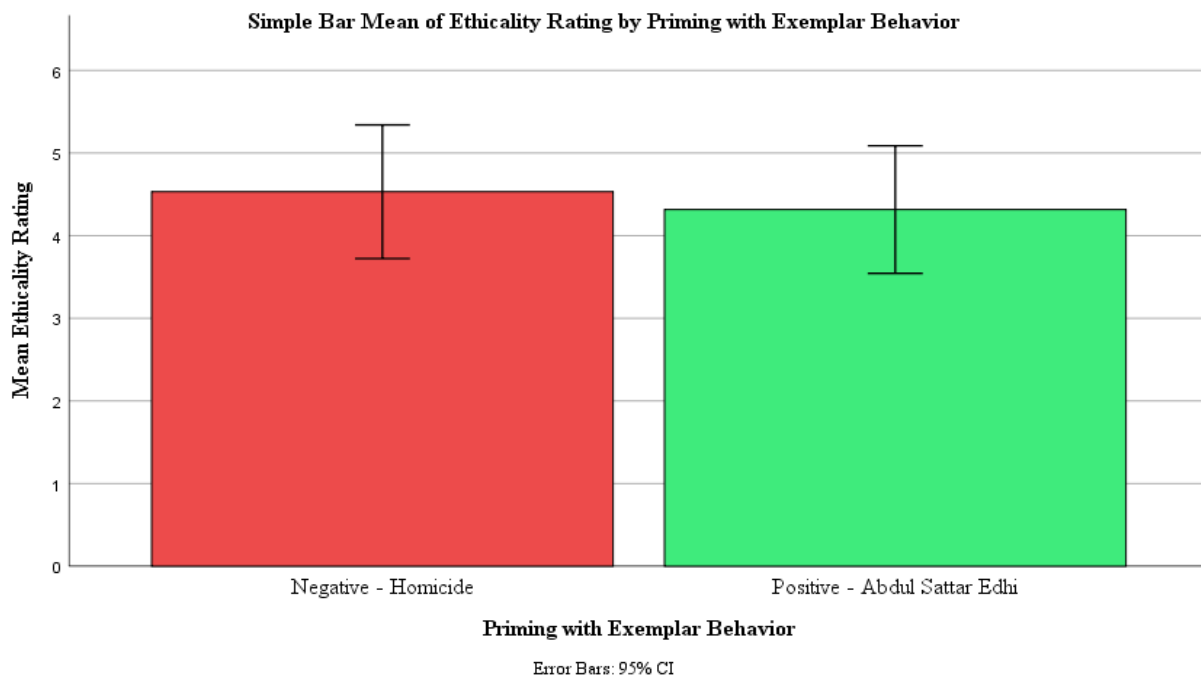
Table 2: *Independent Samples t-test of Students' Ethicality Rating (N = 70)*

	Group 1 (n = 32)		Group 2 (n = 38)		t (68)	p	Cohen's d
	M	SD	M	SD			
Ethicality Rating	4.53	2.24	4.32	2.34	.390	.698	0.09

Table 2 illustrates the mean differences in the ethicality rating of the controversial business practice across the two groups. Group 1, primed with an exemplar of unethical behaviour, rated the practice as more ethical (M = 4.53, SD = 2.24) compared to group 2, which was primed with an exemplar of virtuous behaviour (M = 4.32, SD = 2.34). However, the results were not statistically significant. Therefore, both hypotheses, i.e. significant differences in rating of the business practice across the two groups and higher ethicality rating for the group primed with a negative exemplar of behaviour compared to the group primed with a positive exemplar, are rejected.

Chart 1

Simple Bar Chart of Mean Ethicality Rating for the Groups Primed with Negative and Positive Exemplar Behaviour



The bar chart shows that there is only a slight difference, i.e. 0.21 points in the ethicality ratings of the controversial business practice between the two groups.

Phase 2 – The Framing Effect

Another source of judgmental bias that can affect our decision-making process was indicated by Tversky and Kahneman in 1981 and is known as the framing effect. It arises when an option is presented or framed in such a manner that makes it seem subjectively more appealing. The analogy of looking at the half-empty glass or the half-full glass depicts this very effect. While the half-full glass description indicates one stands to gain, the half-empty glass indicates what one stands to miss or lose. No wonder people are more attracted towards gains than losses.

Objectives

1. To study the framing effect across the groups of emerging adults.
2. To investigate the potential differences in the choices of plans the participants would make across groups.

Hypotheses

1. Participants in group 1 would choose the controversial Plan A over Plan B.
2. Participants in group 2 would choose the controversial Plan B over Plan A.

Procedure

In Study 2, we aimed to study the framing effect and, based on the demonstration developed by Tversky and Kahneman (1981), both groups were provided with a scenario based on laying off employees. Group 1 was given the choice of two plans (A and B), in which Plan A was controversial. Group 2 was also given a choice between two plans (A and B), in which Plan B was controversial. Then they were asked to make a choice and chose a plan they deemed was ethical. This was followed by a data analysis and interpretation process, as findings were discussed in the light of research scholarship.

Results

Table 3: Frequencies and Chi-square results for Plans framed in terms of Gains and Losses ($N = 70$)

Source	Plan A		Plan B		X^2
	n	%	n	%	
Gains ($n = 32$)	14	43.8	18	56.2	.092
Losses ($n = 38$)	18	47.4	20	52.6	

Table 6 gives the chi-square test of independence. Results suggest an insignificant association between version (i.e. gains vs. losses) and plan choice (A and B) with $X^2(1, N = 70) = .092$, $p = .813$, $\phi = -.036$. The findings are nonetheless important in that they reveal that despite the choice options being equivalent within both groups, 43.8% subjects in group 1 and 52.6% subjects in group 2 chose the controversial plan, which was framed in more positive terms.

Chart 2

Simple Clustered Bar Chart of Version of Plans by Choice Options for the Two Groups

Clustered bar chart shows that more subjects chose the ethical version of the plan in the gain-framed condition, i.e. 56.2% whereas in the loss-framed condition, more subjects chose the controversial plan, i.e. 52.6% despite the fact that both choice options were equivalent.

Phase 3 – The Numerosity Bias

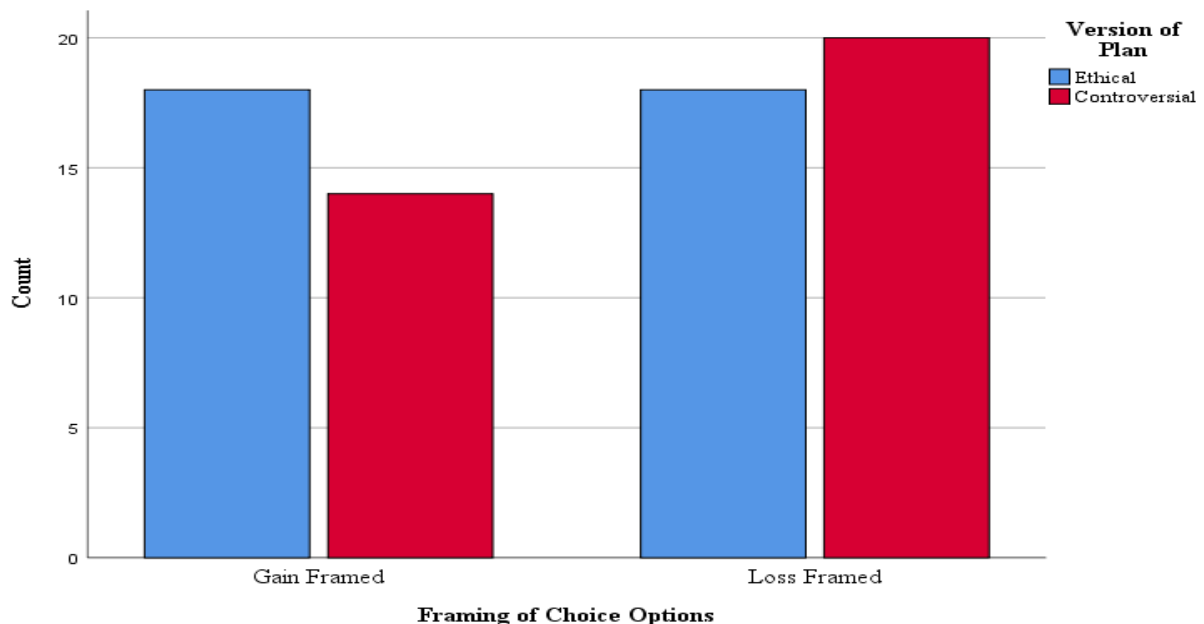
Another source of causing unintentional moral relativism is grounded in the propensity to use decision heuristics, also regarded as rules of thumb that simplify the process of decision-making. Such heuristics come in handy when either the individual has to make a spontaneous judgement or when the intricacy of the choice exhausts their mental resources. In such situations, one simply counts the number of items given to them rather than assessing the contents of the situation or the merits of the event. Hence, it is recognised as the numerosity effect (Pelham et al., 1994).

Objectives

1. To study the numerosity effect across the groups of emerging adults.
2. To investigate the potential differences between the ethical ratings of the groups based on the number of justifications presented.
3. To explore the differences between the groups on their ethical ratings across study 1 and study 3.

Hypotheses

1. Participants in group 2 would rate the scenario higher on the ethical rating scale than group 1.
2. There would be significant differences in the ethical ratings of both groups across study 1 and study 3.



Procedure

In Study 3, we aimed to study the numerosity effect and asked participants to read the adapted scenario initially developed by Kleiser et al. (2003). In 2008, Sweeney and Kellaris added justifications to Kleiser et al. (2003) scenario, which were used in the presented study as well. While three justifications were shared with group 1, group 2 was presented with all 12 justifications. Participants were then asked to rate the scenario on a 10-point Likert-type rating scale, where 10 represented 'ethical' and 1 represented 'unethical'. This was followed by a data analysis and interpretation process, as findings were discussed in the light of research scholarship.

Results

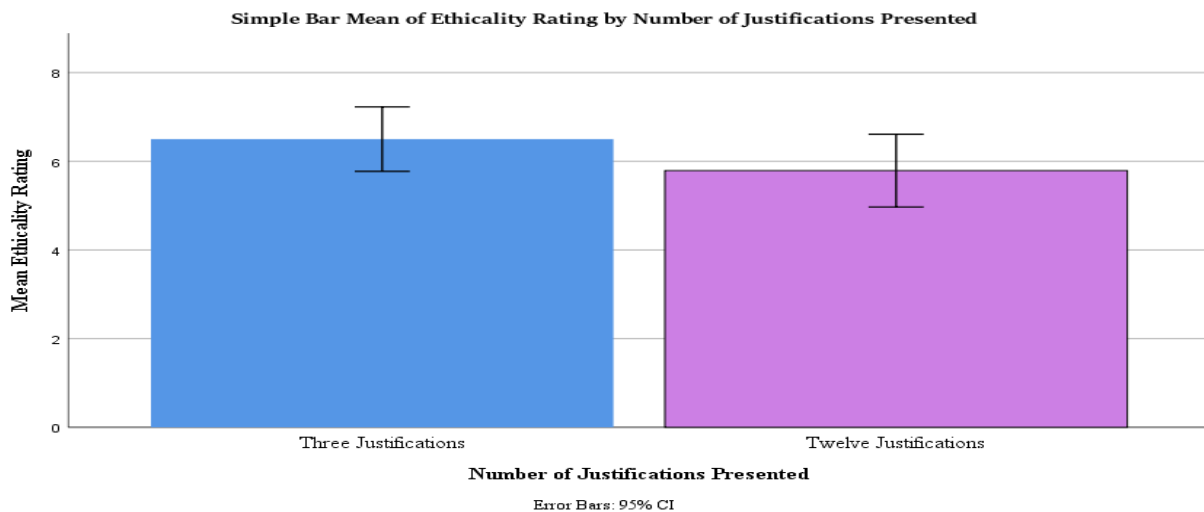
Table 4: *Independent Samples t-test of Students' Ethicality Rating after Different Number of Justifications Provided (N = 70)*

	Group 1 (n = 32)		Group 2 (n = 38)		t (68)	p	Cohen's d
	M	SD	M	SD			
Ethicality Rating	6.50	2.02	5.79	2.49	1.29	.158	0.31

Table 4 shows the mean ethicality ratings of the controversial business practice for the two groups after they were provided with justifications for the act. Group 1 was given three justifications, whereas group 2 was given twelve reasons. Group 1 rated the practice more ethical (M = 6.50, SD = 2.02), and group 2 rated it less ethical (M = 5.79, SD = 2.49). The results were, however, not statistically significant. Therefore, hypothesis 1 is rejected.

Chart 3

Simple Bar Chart of Mean Ethicality Rating for the Groups Presented with Different Number of Justifications for Controversial Practice



The bar chart shows the mean ethicality ratings across the two groups for the controversial business practice after being given justifying reasons. The ethicality ratings for group 1 were higher than those of group 2.

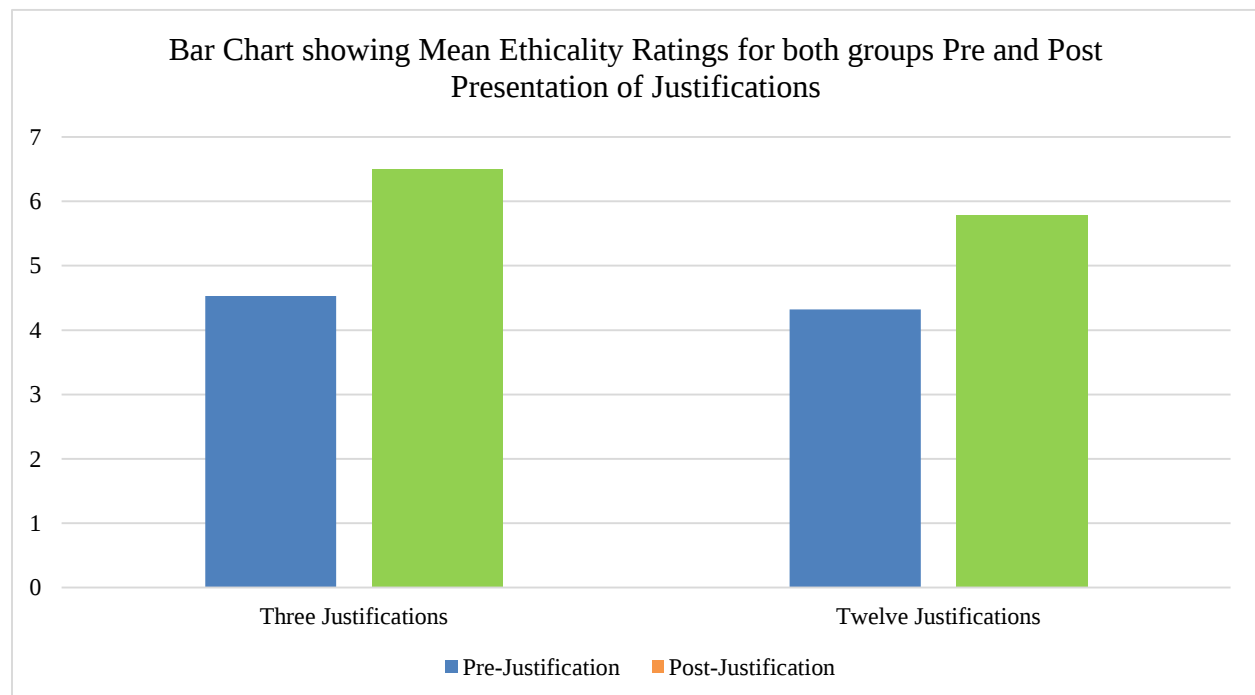
Table 5: *Paired Samples t-test Ethicality Ratings of Group 1 and Group 2 before and after Justifications were provided (N = 70)*

	Pre-justification		Post-justification		t	p	Cohen's d
	M	SD	M	SD			
Group 1 (n = 32)	4.53	2.24	6.50	2.02	- 6.65	.000** *	0.92
Group 2 (n = 38)	4.32	2.35	5.79	2.49	- 3.91	.000** *	0.61

The table illustrates differences in the means of the two groups following the presentation of reasons that justified the controversial business practice. The results were statistically significant and reveal that for both groups, ethicality ratings increased, regardless of the number of justifications provided. Therefore, hypothesis 1 is accepted. However, the ethicality ratings of group 1, given three justifications, increased more compared to the ethicality ratings of group 2, which gave twelve justifications. This finding is contradictory to hypothesis 2.

Chart 4

Clustered Bar Chart of Mean Ethicality Ratings for both Groups, Pre and Post Presentation of Justifications



The chart reflects an increase in the ethicality ratings of both groups after they were presented with reasons justifying the controversial business practice they had rated in study 1. The initial ethicality ratings for both groups did not differ much. But post presentation of justifications, group 1 rated the same act as more ethical than group 2.

Discussion

The present study intended to investigate the effects of priming on the moral decision-making of emerging adults. By adopting a quasi-experimental approach and between-groups design, three studies were devised to explore the sources of unintentional moral relativism, including the contrast effect, the framing effect and the numerosity effect. In study 1, it was hypothesised that there would be significant differences in the contrast effect across the sampled groups. Also, it was assumed that the participants who were primed with a negative exemplar would rate higher on the ethics-related scenario, while those who were primed with a positive exemplar would rate lower on the ethics-related scenario. However, both assumptions were found to be insignificant after the statistical analysis.

Similarly, study 2 was presumed to find significant differences in the framing effect, with group 1 preferring controversial Plan A and group 2 choosing controversial Plan B. However, the statistical analysis once again showed insignificant results in this regard. Moreover, in study 3, it was posited that both groups would have significant differences in the numerosity effect, with group 2 rating the ethics-based scenario higher than group 1, but these assumptions did not emerge as significant. However, as we had utilised the same ethics-based scenario in studies 1 and 2, we went for an additional hypothesis testing the significant group differences between the ratings of study 1 and study 3. Interestingly, these findings indicated significant differences, highlighting the fact that providing justifications, no matter if they are three or 12 in number, does change the perception of the participants as they change their ratings. Similar findings were reported by Sweeney and Kellaris (2008) in their study on the numerosity effect as well.

To better comprehend the statistical insignificance of our findings, it is pertinent to look into several factors. One, research indicates the presence of cultural differences in ethics as there are varying moral cognitions-based cultural patterns of Western, individualistic cultures and the Easterners' collectivistic culture (Bentahila et al., 2021). This may be a reason for our participants had culturally varied moral judgments and reasoning than the mainstream Western samples. Additionally, the diversity of personal history, religious beliefs, and institutional rules like kinship structure and economic conditions can also contribute towards the development of an indigenous moral system stressing unique moral orientations.

Two, the situationist perspective in psychology can also act as a contributory factor for our insignificant findings because, at times, the environmental and contextual conditions as well as personality factors, moderate the morality-based behavioural outcomes (Forsyth, 1992).

Three methodological justifications can serve as a basis for the insignificance of differences across the groups. As it was an experimental study, there can be measurement biases, issues with statistical power, or potential design flaws can contribute to justifying our findings.

Lastly, interpretative bias can also cause insignificance of results, as there is a possibility that our participants had considered the given scenarios ambiguous, leading them to analyse and interpret them negatively (Hirsch et al., 2016).

Limitations & Suggestions

Though we made all the logistical arrangements for the smooth running of the experiments, on the day of the experiment with group 2, we experienced an electricity outage, which might have created a slight discomfort for the participants, as there was no way to keep the room temperature comfortable. Moreover, time constraints and unexpected situational circumstances, the experiment was run when the Indo-Pak political landscape was brimming with a possible all-out war situation, might further impact the way participants responded to the experimental manipulations. In future, with better logistics and time-related resources, similar studies can be conducted to rule out such confounding and extraneous variables.

While we adapted the scenarios presented to the participants to our sociocultural dynamics, the underlying theorisation of the contrast effect, the framing effect and the numerosity effect was still based on Western contexts and scholarship. Future studies can take the initiative of conducting qualitative studies to first establish relevant, indigenous theories of unintentional moral relativism and related constructs, followed by quantitative studies including experimental research.

Moreover, time and resource constraints further limit our sample diversity, which can be improved in new studies for increased generalizability of the findings. Similarly, future studies can also attempt to conduct true experiments instead of quasi-experimental studies.

Even though the insignificant results are also empirical findings but as the sample size was relatively small, they cannot be generalised. This once again brings us back to the point of recruiting much larger samples so that the external validity can be increased.

Funding Statement

It was a self-funded project and did not seek any external funding.

Conflict of Interest

The authors do not have any conflicts of interest to declare.

Ethical Standards Statement

The study was conducted after getting institutional approval, and after strict observance of APA-mandated ethical considerations. Informed consent for research participation and publishing was duly taken from all the participants, who were also debriefed about the study in the end.

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References

- Arafat, M. Y. (2024). Research ethics: Meaning and principles. *International Journal of Academic Multidisciplinary Research*, 8(1), 139-144. <https://dx.doi.org/10.2139/ssrn.4887943>
- Bentahila, L., Fontaine, R., & Pennequin, V. (2021). Universality and cultural diversity in moral reasoning and judgment. *Frontiers in Psychology*, 12, 764360. <https://doi.org/10.3389/fpsyg.2021.764360>
- Bindra, P. C., & Pearce, G. (2022). The effect of priming on fraud: Evidence from a natural field experiment. *Economic Inquiry*, 60(4), 1854–1874. <https://doi.org/10.1111/ecin.13088>
- Boyle, B. A., Dahlstrom, R. F., & Kellaris, J. J. (1998). Points of Reference and Individual Differences as Sources of Bias in Ethical Judgments. *Journal of Business Ethics*, 17, 5, 517-525. <https://doi.org/10.1023/A:1017960518974>
- Brugman, B. C. (2024). How the effects of emphasizing ethics are examined: A systematic review of moral framing experiments? *Annals of the International Communication Association*, 48(4), 436–455, <https://doi.org/10.1080/23808985.2024.2393845>
- Fida, R., Ghezzi, V., Paciello, M., Tramontano, C., Dentale, F., & Barbaranelli, C. (2021). The implicit component of moral disengagement: Applying the relational responding task to investigate its relationship with cheating behavior. *Personality and Social Psychology Bulletin*, 48(1), 78-94. <https://doi.org/10.1177/0146167220984293>
- Forsyth, D. R. (1992). Judging the morality of business practices: The influence of personal moral philosophies. *Journal of Business Ethics*, 11(5–6), 461–470. <https://doi.org/10.1007/BF00870557>
- Harman, G. (2000). *Explaining value and other essays in moral philosophy*. Oxford University Press.
- Helson, H. (1959). Adaptation level theory. In S. Koch (Eds.), *Psychology: A study of a science* (Vol. 1., pp. 565-621). McGraw-Hill.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83. <https://doi.org/10.1017/S0140525X0999152X>
- Hirsch, C. R., Meeten, F., Krahé, C., & Reeder, C. (2016). Resolving ambiguity in emotional disorders: The nature and role of interpretation biases. *Annual Review of Clinical Psychology*, 12, 281–305. <https://doi.org/10.1146/annurev-clinpsy-021815-093436>
- Hunt, N. C., Curtis, M. B., & Rixom, J. M. (2022). Financial priming, psychological distance and recognizing financial misreporting as an ethical issue: The role of financial reporting responsibility. *Accounting, Organizations and Society*, 102, 101349. <https://doi.org/10.1016/j.aos.2022.101349>
- Ilicic, J., Brennan, S.M. & Kulczynski, A. (2021). Sinfully decadent: Priming effects of immoral advertising symbols on indulgence. *Marketing Letters*, 32, 61–73. <https://doi.org/10.1007/s11002-020-09544-6>

- James, I. A., Southam, L., & Blackburn, I. M. (2004). Schemas revisited. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, 11(6), 369-377. <https://doi.org/10.1002/cpp.423>
- Jiang, R., Li, X., Xu, P., & Lei, Y. (2022). Do teachers need to inhibit heuristic bias in mathematics problem-solving? Evidence from a negative-priming study. *Current Psychology*, 41, 6954–6965. <https://doi.org/10.1007/s12144-020-01209-x>
- Kamrani, F., N, Kamrani., & Kamrani, F. (2022). Eleven years of psychological researches in Pakistan (1995–2006): What titles reveal about Pakistani research. *Journal of Professional & Applied Psychology*, 3(2), 319–326. <https://doi.org/10.52053/jpap.v3i2.117>
- Karimi, K. (2011). *Moral objectivism versus moral relativism: A critical examination* [Unpublished Doctoral dissertation, The University of Nairobi]. <https://erepository.uonbi.ac.ke/bitstream/handle/11295/3640/Karimi>
- Kellaris, J. J., Boyle, B. A., & Dahlstrom, R. F. (1994). Framing and situational ethics. *Marketing Letters*, 5, 69-75. <https://doi.org/10.1007/BF00993959>
- Kellaris, J. J., Dahlstrom, R. F., & Boyle, B. A. (1996). Contextual bias in ethical judgment of marketing practices. *Psychology & Marketing*, 13(7), 677-694. [https://doi.org/10.1002/\(SICI\)1520-6793\(199610\)13:7%3C677::AID-MAR3%3E3.0.CO;2-E](https://doi.org/10.1002/(SICI)1520-6793(199610)13:7%3C677::AID-MAR3%3E3.0.CO;2-E)
- Kellaris, J. J. (2010). Using demonstration experiments to illustrate the pitfalls of unintentional moral relativism. *Christian Business Academy Review*, 5, 41-46. <https://doi.org/10.69492/cbar.v5i0.74>
- Kleinlogel, E. P., Dietz, J., & Antonakis, J. (2017). Lucky, competent, or just a cheat? Interactive effects of honesty-humility and moral cues on cheating behavior. *Personality and Social Psychology Bulletin*, 44(2), 158-172. <https://doi.org/10.1177/0146167217733071>
- Kleiser, S. B., Sivadas, E., Kellaris, J. J., & Dahlstrom, R. F. (2003). Ethical ideologies: Efficient assessment and influence on ethical judgements of marketing practices. *Psychology & Marketing*, 20(1), 1–21. <https://doi.org/10.1002/mar.10056>
- O’Fallon, M., & Butterfield, K. (2005). A review of the ethical decision making literature: 1996–2003. *Journal of Business Ethics*, 59(4), 375–413. <https://doi.org/10.1007/s10551-005-2929-7>
- Pelham, B. W., Sumarta, T. T., & Myaskovsky, L. (1994). The easy path from many too much: The numerosity heuristic. *Cognitive Psychology*, 26(2), 103-133. <https://doi.org/10.1006/cogp.1994.1004>
- Pulfrey, C., Durussel, K., & Butera, F. (2018). The good cheat: Benevolence and the justification of collective cheating. *Journal of Educational Psychology*, 110(6), 764–784. <https://doi.org/10.1037/edu0000247>

- Rai, T. S., & Holyoak, K. J. (2013). Exposure to moral relativism compromises moral behavior. *Journal of Experimental Social Psychology*, 49(6), 995–100. <https://doi.org/10.1016/j.jesp.2013.06.008>
- Resnik, D. B. (2011). *What is ethics in research & why is it important?* National Institute of Environmental Health Sciences. <https://www.niehs.nih.gov/research/resources/bioethics/whatis>
- Schauster, E., Ferrucci, P., Tandoc, E., & Walker, T. (2021). Advertising primed: How professional identity affects moral reasoning. *Journal of Business Ethics*, 171, 175–187. <https://doi.org/10.1007/s10551-020-04429-0>
- Shariff, A. F., & Norenzayan, A. (2007). God is watching you: Priming God concepts increases prosocial behavior in an anonymous economic game. *Psychological Science*, 18(9), 803–809. <https://org/doi/10.1111/j.1467-9280.2007.01983.x>
- Sparks, J. R., & Pan, Y. (2010). Ethical judgments in business ethics research: Definition, and research agenda. *Journal of Business Ethics*, 91, 405–418. <https://doi.org/10.1007/s10551-009-0092-2>
- Sweeney, R., & Kellaris, J. J. (2008). Gimme three good reasons not to do it: The influence of frames, self-generation, and numerosity of justifications on ethical judgment. In M. L. Cronley & D. V. Soman (Eds.), *Advances in consumer research* (Vol. 35, pp. 157–162). Association for Consumer Research.
- Tännsjö, T. (2007). Moral relativism. *Philosophical Studies*, 135, 123–143. <https://doi.org/10.1007/s11098-007-9083-2>
- Tindall, I. K., Fu, K.W., Tremayne, K., & Curtis, G. J. (2021). Can negative emotions increase students' plagiarism and cheating? *International Journal of Educational Integrity*, 17, 25. <https://doi.org/10.1007/s40979-021-00093-7>
- Toader, I., Moreno, L., Briñol, P., & Petty, R. E. (2024). Power corrupts and being sure of felt power corrupts even more: Implications for immoral decisions and cheating. *European Journal of Social Psychology*. 55(3) 520-531. <https://doi.org/10.1002/ejsp.3099>
- Tsikandilakis, M., Leong, M.Q., Yu, Z., Paterakis, G., Bali, P., Derrfuss, J., Mevel, P-A., Milbank, A., Tong, E. M. W., Madam, C., & Mitchell, P. (2022). “Speak of the Devil... and he shall appear”: Religiosity, unconsciousness, and the effects of explicit priming in the misperception of immorality. *Psychological Research*, 86, 37–65. <https://doi.org/10.1007/s00426-020-01461-7>
- Wenzel, K., & Reinhard, M.A. (2020). Tests and academic cheating: Do learning tasks influence cheating by way of negative evaluations? *Social Psychology of Education*, 23, 721–753. <https://doi.org/10.1007/s11218-020-09556-0>
- Wu, Y. W., Zhong, L. L., Ruan, Q. N., Liang, J., & Yan, W. J. (2020). Can priming legal consequences and the concept of honesty decrease cheating during examinations? *Frontiers in Psychology*, 10, 2887. <https://doi.org/10.3389/fpsyg.2019.02887>.