

Moral Disengagement, Social Deduction Game Playing and Deceptive Tendencies: Examine Their Associations

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Abstract. Social deduction games include rule-based deception, hidden roles and strategic guesses about other players. But little is known about whether playing these games is linked to people's lying habits and moral traits in real life. This one-time survey studied connections between social deduction game engagement and self-reported lying tendency, lie acceptability and moral disengagement among 128 participants with such game experience. Game engagement was tested by a combined index covering gameplay frequency and perceived lying-related content. Social deduction game engagement has no clear link with people's daily lying tendency. But higher game engagement is connected with a higher level of moral disengagement. These findings show that deception-based game play relates more closely to moral-cognitive justification processes than to daily lying habits themselves. The results support a situational view of game deception: players may distinguish rule-allowed bluffing from real-life dishonesty. Future studies should use larger and more representative samples and explore mechanisms between game exposure and real-life behavior.

Keywords: Social deduction games, lying tendency, deception, moral disengagement, moral integrity

1. Introduction

Lying is a common social behavior, and it can cause problems when people tell frequent lies for anti-social purposes over a long time [1]. Different people have different moral views, and this is an important factor to understand deceptive acts. Studies show that people with lower levels of honesty and humility usually report more lying behaviors [2]. Also, moral disengagement is linked to dishonest and anti-social acts. It has been found to be a risk factor for many kinds of bad behavior, such as aggression, bullying and dishonesty [3-6]. People can make harmful or dishonest acts seem acceptable to themselves. They may do this by finding moral reasons for the acts, making excuses, and thinking they take little responsibility [7]. As a result, people with higher moral disengagement will feel less bad when they tell lies. For this reason, they may be more willing to do deceptive things.

Worries about the effects of video games on people's behavior have led to lots of research, but the findings are not consistent. Some review studies say that playing video games is connected with less helpful behavior and more aggression [8]. But other studies question how strong and stable these

links are [9]. These mixed results show that we should study different game types separately, instead of treating all video games as the same [10]. One type of game has not got much research attention: social deduction games. These games are built around secret roles, strategic lying, persuasion, doubt and guessing other people's true thoughts [11]. Unlike many traditional games, social deduction games give players rewards for tricking others well, hiding facts and controlling social communication to win the game. These acts only take place in a made-up, rule-based game world. But they still create a special chance for us to study whether playing these games is linked to real-life lying habits and moral views.

As digital games grow into more complex social environments that are like real social life, players get chances to practice acts similar to real-world social communication [12]. Social deduction games are especially worth noticing. That is because reasoning is not just a small part of the game — it is the key to playing well. The Chinese game market is a major power around the world. It makes billions of pounds every year and has nearly 700 million game players [13]. Even though social deduction games are becoming more and more popular in China, few studies have looked at how playing them connects with people's moral ideas and reasoning skills. So it is necessary to study the links between playing social deduction games, moral disengagement and people's tendency to tell lies. This study tests these links by measuring social deduction game play among Chinese people, as well as their moral disengagement and daily lying tendency. By studying all these factors together, this research aims to provide number-based evidence. It wants to find out if playing social deduction games is connected with moral disengagement and deceptive tendencies.

2. Literature review

Lying is not just a matter of personal morality. It also plays an important role in relationships between people. Deception changes the way people judge others, affects whether they trust what others say, and influences whether they expect honesty in daily social interactions. We can define a lie as a planned act to make another person believe something that the speaker knows is not true [14, 15]. People usually think lying is morally wrong, but its social meaning is not always that simple. People may tell lies for their own benefits, but they may also lie to protect others, avoid social conflicts, or deal with sensitive interpersonal situations. For example, Bok talks about different situations where people discuss the morality of lying. These include lies for public interests, deception in social science studies, and lies told to sick or dying people [16]. These examples show that lying is not only a kind of behavior, but also a choice related to morality and interpersonal relationships. One reason why psychologists study deception in many different fields is that the moral nature of lying is not clear-cut. These fields cover interpersonal communication, emotional growth, personal characteristics and moral judgment [17-19]. Practical research shows that lying is common, but not everyone lies with the same frequency. In a diary study, DePaulo and his colleagues asked 77 college students and 70 community adults to write down their social interactions and lies over seven days [14]. The participants recorded 1,535 lies in total, and most of these lies were about unimportant things and were not carefully planned in advance. But people reported that interactions with lies felt less pleasant and less intimate than interactions without lies. This suggests that even daily lying may bring negative effects on people's relationships. A larger survey by Serota and his team also showed that lying habits are very unevenly distributed among people [20]. Among 998 respondents, about 60% said they told no lies in the past 24 hours, while only 5.3% of respondents accounted for half of all the reported lies. All these studies show that we should study lying not only as a common social behavior, but also as a phenomenon that differs from person to person. Self-report studies rely on people's memory and willingness to disclose their

behavior, rather than objective counts of lies. But they still provide useful evidence that people are quite different in how often they tell lies and how they experience interactions that involve deception.

2.1. Individual differences in lying tendency and lying acceptability

Individual differences in deception cannot be reduced to a simple distinction between honest and dishonest people. People are different in many aspects when it comes to lying. They may hold different views on how skilled they are at lying, how often they tell lies, how hard it is for them to resist lying, how much guilt they feel after telling lies, and whether they think lying is acceptable in specific situations. The motive behind a lie also changes the meaning of the lie itself. For example, the LYin Lying Tendency Scale divides lies into three types: selfish lies, altruistic lies and lies for social acceptance. It also provides psychometric evidence that these different motives can be separated from each other [2]. That is why it is important to tell the difference between lying tendency and lying acceptability. Lying tendency refers to a person's general psychological and behavioral tendency toward lying. It may include how good people think they are at lying, how likely their lies will be found out, how often they report lying, how difficult it is for them to refuse deception, the guilt they feel after lying, and their willingness to lie under certain conditions. On the other hand, lying acceptability means the degree to which a person thinks lying is morally allowed. These two concepts are related, but they are not the same. A person may believe that lying is acceptable in some situations but still seldom tell lies, while another person may lie frequently but still feel guilty or morally uncomfortable.

Lying acceptability reflects another aspect where people's subjective moral judgment may decide whether they are willing to take part in deceptive acts. Oliveira and Levine point out that people's attitudes toward lying are connected with whether they judge dishonest communication as acceptable [21]. If a person views lying as acceptable, their inner psychological barriers to deception may be weaker. So lying acceptability may have a more direct link with real-life lying tendency. But lying acceptability is not an absolute or unchanging attitude. It largely depends on the specific situation and the liar's intention. Cantarero and Szarota show that altruistic lies, which are meant to benefit other people, are judged more positively and get more moral forgiveness than selfish lies [15]. This difference shows that people can hardly be put into fixed groups of honest or dishonest people. Instead, their willingness to lie may depend on how they balance personal benefit, social pressure, possible harm, and moral justification. This makes lying acceptability a key concept for understanding why some people may be more willing than others to find reasons for their deceptive behavior.

2.2. Moral disengagement and deception

Lying acceptability can show whether a person thinks lying is morally allowed, but it cannot fully explain how people find excuses for deception when it goes against their moral standards. Moral disengagement offers a useful way to understand this process. According to social cognitive theory, moral standards control people's behavior through expected self-punishment, such as guilt and self-blame. Moral disengagement happens when people selectively turn off these self-punishments, while their general moral standards still stay formally unchanged [4]. Bandura points out several mechanisms of moral disengagement [4]. Moral justification, euphemistic labelling and advantageous comparison can make harmful acts seem acceptable or less serious. Displacement and diffusion of responsibility reduce people's sense of personal responsibility. Distortion of

consequences makes the harm caused seem smaller. Dehumanisation and attribution of blame change how people see the affected person [4, 7]. These mechanisms may work together, allowing people to find excuses for behavior that would otherwise go against their moral self-image. These mechanisms are also related to deceptive behavior. A lie may be justified as protecting a friend, blamed on social pressure, described as harmless, or treated as necessary under the circumstances. When applied to deceptive behavior, moral disengagement may help explain why people become more willing to accept hiding information, exaggerating facts, or deliberately giving false information. In this sense, moral disengagement may act as a psychological bridge between people's moral attitudes toward lying and their actual tendency to deceive.

Earlier research supports that moral disengagement is connected with unethical and anti-social behavior, but evidence focused specially on adult lying remains limited. Moral disengagement was positively linked with aggression and delinquency, and negatively linked with prosocial behavior and expected guilt [7]. But because deception appeared in both the disengagement and delinquency measures, some content overlap should be noted. In another study of 338 university athletes, moral disengagement was related to more justification of cheating, though actual cheating behavior was not observed [22]. These findings show that moral disengagement is related to approving or self-reporting bad behavior, but they do not fully prove whether moral disengagement predicts real-life lying among adults.

The difference between deception as bad behavior and deception as rule-based game play is especially important for this study. In many social deduction games, bluffing and misleading others are not treated as moral wrongs. Instead, they are seen as expected and reasonable parts of the game. So strategic deception in games may not necessarily require moral disengagement. Players may view deception in the game as separate from deception in real life. This brings up an important question: does taking part in game-based deception relate to wider real-life lying tendency and moral disengagement? Or do players separate these two situations in their minds?

2.3. Video games and deception

Video games have become a main kind of social and leisure activity today. They help players keep in touch with each other, build online friendships, and add to people's online social resources [23]. Researchers in media psychology and communication have discussed for a long time whether and how playing video games connects with people's attitudes and behaviors in real life. Most of these studies focus on violent video games, aggressive behavior, helpful behavior, and moral decision-making. But the results of these studies are not consistent. Some studies point out possible spillover effects of media, but others say that the effects of game playing are weak, change with different situations, or are influenced by personal differences. In this wide discussion, social deduction games provide a very useful setting for studying deception. Different from games that mainly focus on operation skills, competition or fighting, social deduction games are centered on secret roles, unequal information, persuasion, doubt and strategic lying. Games like Werewolf, Mafia, Among Us, Goose Goose Duck, Secret Hitler and The Resistance: Avalon often ask players to bluff, hide information, find out lies, or persuade others when they are not sure about the truth. In these games, deception is not just a small extra part. It is a formal and necessary part of the game rules. This makes social deduction games valuable for research on human behavior. For one thing, playing deception-based games again and again may make people feel more comfortable with deception, think lying is more acceptable, or have a higher level of moral disengagement. For another, since deception in these games follows rules, is agreed by all players and is expected, players may think it

is morally different from dishonesty in real life. If so, playing social deduction games may have little or no connection with people's daily lying tendency or moral disengagement.

So there are several possible explanations for this. First, people who already feel at ease with strategic lying may be more likely to choose social deduction games or keep playing them. Second, playing deceptive roles many times may make people more familiar with hiding information, persuading others and finding excuses for their acts. Third, players may think that deception in games only works in the game situation and has nothing to do with daily moral standards. All these explanations fit with the cross-sectional connections found in research, but they involve different time orders and psychological processes. Qualitative studies support the view that players judge in-game deception according to the specific situation. For example, Sparrow and his workmates interviewed 20 players of multiplayer games. They found that people's moral judgments depended on game rules, results, players' expectations and the virtual nature of the game [24]. One participant said that deception in *Secret Hitler* was acceptable because lying was a part of the game's purpose that all players agreed on. This shows that players may not judge all kinds of deception with the same standard. Instead, they may tell the difference between deception that breaks real-life moral rules and deception that happens within the agreed game rules. Since present research has not clearly proved whether playing social deduction games connects with people's attitudes toward deception in real life, it is necessary to first study whether there is an empirical link between them.

2.4. Chinese context and research gap

China offers a suitable research background for studying social deduction games and people's attitudes toward deception. China has a huge number of digital game players across the country, and social deduction or social reasoning games have become widely popular in both online and offline forms. Localised game environments may combine features of Werewolf, Mafia, Among Us-style play, and other role-based deception mechanics with Chinese commercial and regulatory contexts [13]. In addition, related offline forms of role-play and scripted murder games have expanded as social entertainment activities among young people. Despite this relevance, there remains limited quantitative research on whether engagement with social deduction games is associated with real-life deception-related and morality-related outcomes among Chinese players. Existing qualitative research on social deduction players' moral judgements is often based on small Western samples, such as the study by Sparrow et al. [24]. Therefore, examining adult Chinese players provides an opportunity to explore whether deception-based gameplay is associated with lying tendency, lying acceptability, moral disengagement, and generalized trust in a culturally and commercially important gaming context. Since social deduction games create a distinctive moral environment. In ordinary life, lying is often judged negatively because it may mislead others and damage trust. In social deduction games, however, deception may be expected, rewarded, and accepted by all players. This raises a theoretically important question: does repeated engagement with game-sanctioned deception relate to real-life deception-related attitudes, or is it psychologically contained within the game context?

2.5. Current study

The present study used a cross-sectional survey design to examine whether social deduction game engagement is associated with individual differences in deception-related and morality-related variables. Because the study was cross-sectional, it did not test whether gameplay changes real-life moral attitudes or behaviour. Instead, it examined whether greater engagement with deception-based

gameplay was statistically associated with self-reported lying tendency, lie acceptability, moral disengagement, generalized trust, moral self, and moral integrity. Social deduction games provide a useful context for studying these questions because deception is central to gameplay but is also rule-governed, expected, and understood by players as part of a shared activity. On one hand, repeated participation in games that reward deception, concealment, and vigilance may be associated with greater moral disengagement or lower trust if players generalise these strategies beyond the game context. On the other hand, players may clearly separate game-based deception from everyday dishonesty, in which case game engagement may show little or no association with real-life lying tendency or generalized trust. For this reason, the associations between social deduction game engagement and the main psychological outcomes were examined as exploratory research questions rather than as strong directional hypotheses.

Social deduction games are a relevant context for this question because deception is central to gameplay but is also rule-governed, expected, and accepted by other players. On the one hand, repeated engagement with games that reward concealment, bluffing, and strategic suspicion may be associated with moral-cognitive processes such as moral disengagement. On the other hand, players may clearly distinguish game-based deception from real-life dishonesty, meaning that game engagement may not necessarily be associated with everyday lying tendency or lie acceptability. Therefore, the present study examined both the direct association between social deduction game engagement and deception-related outcomes and its association with broader moral-cognitive characteristics. The study was guided by the following research questions and hypotheses; First, is social deduction game engagement associated with real-life lying tendency and lie acceptability? Second, is social deduction game engagement associated with morality-related variables, including moral disengagement, generalized trust?

H1: Higher social deduction game engagement is predicted to be associated with higher moral disengagement.

H2: Higher social deduction game engagement is predicted to be associated with higher real-life lying tendency.

3. Methodology

3.1. Variable measurement

We will take social deduction game engagement as the variable that reflects game exposure. Participants will be asked to report up to two social deduction or deception-based games they have played recently. For each game, participants will rate their play frequency on a 5-point scale. The scale ranges from 1 = very rarely to 5 = always. They will also rate how much deception-related content each game includes. Such content covers hidden identities, strategic lying, bluffing, misleading others, or hiding information. This rating also uses a 5-point scale, from 1 = not at all to 5 = very high. For each reported game, we will calculate an engagement score. The score comes from multiplying the frequency score by the deception-content score. The final social deduction game engagement score is the average of all the reported games' scores. Higher scores mean greater involvement in deception-based social deduction games.

Real-life lying tendency will be measured as the main result variable. We will use the selfish-lying dimension of the Lying Tendency Scale developed by Zhou et al. [2]. This dimension focuses on lying for personal benefit, not prosocial or altruistic lying. Participants will answer the items on a 5-point Likert scale. The scale ranges from 1 = strongly disagree to 5 = strongly agree. We will average item scores to get a composite score. Higher scores show a stronger tendency to tell selfish

lies in real-life situations. We will test the internal consistency of this scale using Cronbach's alpha. A value of .70 or above is considered acceptable.

Moral disengagement will be measured with Bandura's Moral Disengagement Scale [7]. This scale tests how far people will justify, play down, or explain unethical behavior as reasonable. Participants will answer the items on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree. We will calculate an average score across all items. Higher scores mean a greater tendency to disconnect morally from unethical or dishonest behavior. We will also test the internal consistency of this scale with Cronbach's alpha. A value of .70 or above is seen as acceptable. Generalized trust refers to a general belief that other people are honest, trustworthy, kind, and willing to pay back trust [25, 26]. We measured generalized trust using Rosenberg's Faith in People Scale [27]. This scale tests how much participants believe most people are honest, reliable, fair and kind. Participants will respond to the items on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree. We will average item scores to produce a total score. Higher scores show higher levels of general trust toward other people.

3.2. Sample selection

In total, 346 research questionnaires were collected and recorded for this study. Following the pre-set eligibility standards and data cleaning procedures, 184 questionnaires were excluded from the data set, and 162 valid questionnaires were finally kept in the cleaned research sample. The documented exclusion categories included respondents younger than 18 years (24 questionnaires), invalid or non-social-deduction game entries (103 questionnaires), and duplicate reporting of the same social deduction game. The source record did not provide a separate count for duplicate-game reporting or establish that the listed categories were mutually exclusive; no residual count was inferred. The analyses of game engagement reported below used the 128 respondents who formed the eligible social-deduction-player analytical sample. The authoritative record did not provide a more specific disposition for every retained case outside this N = 128 sample.

Table 1. Participant flow

Stage or documented category	Count or status
Questionnaires recorded	346
Excluded under eligibility and cleaning procedures	184
Respondents younger than 18 years	24
Invalid or non-social-deduction game entries	103
Duplicate reporting of the same social deduction game	Count not available
Retained cleaned sample	162
Eligible social-deduction-player analytical sample	128

Note. The documented exclusion categories are not presented as mutually exclusive and therefore should not be summed. No duplicate-game count was inferred.

4. Results

4.1. Correlation analysis

As shown in Table 2, social deduction game engagement was not significantly associated with real-life lying tendency, $r = .132$, $p = .139$. It was also not significantly associated with lie acceptability, $r = -.017$, $p = .847$. These results indicate that greater engagement with social deduction games was not linked to stronger self-reported lying tendency or to more permissive attitudes toward lying in the bivariate analyses. For variables related to personal morality, the research results presented a different pattern. Social deduction game engagement had a positive connection with moral disengagement ($r = .487$, $p < .001$), generalized trust ($r = .271$, $p = .002$) and moral self ($r = .223$, $p = .012$). It also had a clear negative connection with moral integrity ($r = -.365$, $p < .001$). This finding shows that game engagement has a closer link with general moral-cognitive factors than with daily lying tendency or the acceptability of lying. The links between these psychological variables were generally in line with what each scale was designed to measure. Lying tendency had a strong positive link with lie acceptability ($r = .657$, $p < .001$), and it also had a positive connection with moral disengagement ($r = .460$, $p < .001$). In addition, lying tendency had a strong negative link with moral integrity ($r = -.673$, $p < .001$). Moral disengagement also had a strong negative connection with moral integrity ($r = -.719$, $p < .001$). These result patterns show that participants who accepted lying more easily and showed higher moral disengagement usually reported a stronger tendency to lie and a lower level of moral integrity.

Table 2. Pearson correlations

Variable	1	2	3	4	5	6	7
1. Social deduction game engagement	—						
2. Lying tendency	.132	—					
3. Lie acceptability	-.017	.657***	—				
4. Moral disengagement	.487***	.460***	.258**	—			
5. Generalized trust	.271**	-.164	-.322***	.270**	—		
6. Moral self	.223*	.270**	.162	.417***	.348***	—	
7. Moral integrity	-.365***	-.673***	-.455***	-.719***	-.087	-.417***	—

Note. N = 128. Values are Pearson correlation coefficients. * $p < .05$. ** $p < .01$. *** $p < .001$.

4.2. Regression estimates

Two multiple linear regression models were estimated. Model 1 predicted moral disengagement, while Model 2 predicted lying tendency. Both models included social deduction game engagement and relevant psychological and demographic covariates. Model 1 examined moral disengagement as the outcome variable. The model was statistically significant, $F(8, 119) = 16.52$, $p < .001$, and explained 52.6% of the variance in moral disengagement, $R^2 = .526$, adjusted $R^2 = .494$. Social deduction game engagement was positively and significantly associated with moral disengagement, $B = 0.050$, $SE = 0.010$, $p < .001$. Participants with higher engagement in social deduction games involving deception-related content therefore tended to report higher moral disengagement after adjustment for lying tendency, generalized trust, lie acceptability, gender, education, and occupation.

Several other variables were also significantly associated with moral disengagement. Lying tendency was positively associated with moral disengagement, $B = 0.122$, $SE = 0.059$, $p = .042$. Lie acceptability was also positively associated with moral disengagement, $B = 0.190$, $SE = 0.068$, $p = .006$. Generalized trust showed a positive association with moral disengagement, $B = 0.189$, $SE = 0.056$, $p = .001$. This latter finding should be interpreted cautiously because it was not expected theoretically. Among the demographic variables in Model 1, gender was not statistically significant. Compared with participants educated below bachelor's level, those with a master's degree or above reported higher moral disengagement, $B = 0.289$, $SE = 0.143$, $p = .045$, whereas the bachelor's-level coefficient was not statistically significant. Non-students reported lower moral disengagement than students, $B = -0.198$, $SE = 0.091$, $p = .032$.

Model 2 examined lying tendency as the outcome variable. The model was statistically significant, $F(8, 119) = 22.34$, $p < .001$, and explained 60.0% of the variance in lying tendency, $R^2 = .600$, adjusted $R^2 = .574$. Social deduction game engagement was not significantly associated with lying tendency after adjustment for the measured covariates, $B = 0.011$, $SE = 0.016$, $p = .511$. Thus, the adjusted model did not provide evidence of an independent association between game engagement and self-reported lying tendency.

Lie acceptability was the strongest predictor of lying tendency, $B = 0.746$, $SE = 0.082$, $p < .001$. Moral disengagement was also positively associated with lying tendency, $B = 0.281$, $SE = 0.137$, $p = .042$. These results indicate that participants who viewed lying as more acceptable and those who reported higher moral disengagement also tended to report stronger lying tendency. Generalized trust showed a negative but non-significant association with lying tendency, $B = -0.105$, $SE = 0.088$, $p = .234$. The demographic predictors in Model 2 were mostly non-significant. Women did not differ significantly from men in lying tendency, $B = -0.062$, $SE = 0.142$, $p = .663$. Participants with a master's degree or above reported higher lying tendency than those educated below bachelor's level, $B = 0.440$, $SE = 0.217$, $p = .045$, whereas the bachelor's-level coefficient was not statistically significant. Occupation was also not significant: non-students did not differ reliably from students, $B = -0.133$, $SE = 0.141$, $p = .348$.

Taken together, the results show a differentiated pattern. Social deduction game engagement was not significantly associated with lying tendency or lie acceptability, but it was associated with several morality-related variables, particularly higher moral disengagement and lower moral integrity. In the adjusted models, game engagement remained significantly associated with moral disengagement but did not independently predict lying tendency. Lie acceptability and moral disengagement were both positively associated with lying tendency.

Table 3. Multiple linear regression models predicting moral disengagement and lying tendency

Predictor	Model 1: Moral disengagement	Model 2: Lying tendency
Social deduction game engagement	0.050*** (0.010)	0.011 (0.016)
Lying tendency	0.122* (0.059)	—
Moral disengagement	—	0.281* (0.137)
Generalized trust	0.189** (0.056)	-0.105 (0.088)
Lie acceptability	0.190** (0.068)	0.746*** (0.082)
Gender		
Male	Reference	Reference

Table 3. (continued)

Female	0.157 (0.092)	−0.062 (0.142)
Education level		
Below bachelor's level	Reference	Reference
Bachelor's level	0.122 (0.111)	0.203 (0.168)
Master's or above	0.289* (0.143)	0.440* (0.217)
Occupation status		
Student	Reference	Reference
Non-student	−0.198* (0.091)	−0.133 (0.141)
Predictor	Model 1: Moraldisengagement	Model 2: Lyingtendency
Constant	−0.272 (0.311)	1.351** (0.458)
N	128	128
R ²	0.526	0.600
Adjusted R ²	0.494	0.574
F statistic	16.52***	22.34***

Note. Unstandardized coefficients are reported, with standard errors in parentheses. Reference categories are male, below bachelor's level, and student. Model 1 predicts moral disengagement; Model 2 predicts lying tendency. * $p < .05$. ** $p < .01$. *** $p < .001$.

5. Discussion

This study examined whether engagement with social deduction games was associated with self-reported lying tendency and related moral-cognitive characteristics. The findings provide a differentiated picture. Social deduction game engagement was not significantly associated with real-life lying tendency or lie acceptability, either in bivariate analyses or after adjustment for the measured psychological and demographic variables. However, game engagement was positively associated with moral disengagement in both the correlation and adjusted regression analyses. In addition, lie acceptability and moral disengagement were positive predictors of lying tendency, supporting H1 and H2 as association-based hypotheses. Generalized trust did not independently predict lying tendency. Exploratory correlations further showed that game engagement was positively associated with generalized trust and moral self, but negatively associated with moral integrity. Taken together, these findings do not support a simple interpretation that more engaged players are uniformly more or less moral. Instead, they suggest that deception-based game engagement may be more closely related to moral-cognitive justification processes than to self-reported everyday lying tendency.

The absence of a significant association between game engagement and lying tendency is consistent with the contextual account developed in the literature review. Deception in social deduction games is rule-governed, expected by other players, and accepted as part of a shared activity. It therefore differs from everyday lying, where the person being misled has not agreed to deception as part of the interaction. The measured outcome also captured a broad self-reported tendency toward lying in real life, whereas deception in social deduction games serves a strategic and consensual gameplay function. Respondents may therefore maintain contextual moral

boundaries between skilful bluffing during play and dishonesty in everyday relationships. This interpretation is consistent with Sparrow et al., whose participants evaluated conduct in multiplayer games in relation to rules, consequences, expectations, and virtual context [24]. Nevertheless, the non-significant association should not be interpreted as proof that gameplay and real-life deception are completely separate. It only indicates that no reliable association with lying tendency was detected in the present sample.

The positive association between social deduction game engagement and moral disengagement remained statistically significant after adjusting for lying tendency, lie acceptability, generalized trust, and demographic variables. One possible explanation is self-selection: individuals who are already more comfortable with strategic justification, concealment, or morally flexible reasoning may be more likely to choose or continue playing deception-based games. Another possibility is that repeated exposure to game contexts involving concealment, persuasion, and suspicion may be associated with greater familiarity with justificatory reasoning, even if this does not translate into higher reported lying tendency. A third possibility is that unmeasured factors, such as personality, peer context, competitive motivation, or recruitment patterns, shaped both game engagement and moral disengagement.

The psychological predictors of lying tendency were more consistent with the theoretical expectations. Lie acceptability was strongly and positively associated with lying tendency, suggesting that respondents who judged lying more permissively also reported a stronger tendency to lie. This finding is conceptually coherent, but it should not be taken to mean that moral judgement and behaviour are identical. Evaluations of lying may vary depending on motive, context, and perceived consequences, and the present study measured self-reported tendency rather than observed deceptive behaviour. Moral disengagement also positively predicted lying tendency. This is consistent with Bandura's account of moral self-regulation, in which guilt and self-condemnation normally restrain harmful or dishonest conduct, while mechanisms such as moral justification, diffusion of responsibility, and minimisation of consequences may allow self-sanctions to be selectively suspended [7]. However, the survey did not directly observe guilt, self-sanction, or specific disengagement mechanisms in action.

The exploratory findings involving generalized trust, moral self, and moral integrity further complicate a single moral interpretation of the results. Generalized trust was positively associated with moral disengagement in the adjusted model, although it did not independently predict lying tendency. This finding was not anticipated theoretically and should be interpreted cautiously. The most defensible conclusion is that, in this sample, expectations about other people's trustworthiness and the tendency to endorse moral justifications were not opposing tendencies. This makes sense conceptually. Generalized trust is about people's beliefs toward others, while moral disengagement is about how people control their own behavior.

Similarly, we should not take the result pattern as proof of a simple change in overall morality. Respondents with higher engagement-index scores show higher moral self but lower moral integrity. Moral self reflects how much people see themselves as moral persons. By contrast, moral integrity reflects resistance to dishonest, self-serving or morally harmful behavior after reverse coding. So these two constructs capture different aspects of morality. This matches Bandura's view that general moral standards stay intact, while self-sanctions are selectively suspended in specific situations [4]. Future research should use larger and more representative samples. It should set pre-specified cleaning and exclusion rules, and fully document scoring and reliability procedures. Exposure measures should distinguish frequency, duration, roles, game context, deception content and actual deceptive acts, rather than relying on a single composite index. Behavioral tasks, short diaries or

experience-sampling methods can also help capture how players understand and use deception across game and non-game contexts. Most importantly, longitudinal or repeated-measures designs are needed to clarify directionality. These designs can test whether moral-cognitive traits precede game selection, change with continued engagement, or reflect stable third variables.

6. Conclusion

Overall, this study provides a differentiated account of how deception-based game engagement relates to real-life deception and moral cognition. Social deduction game engagement was not significantly associated with self-reported lying tendency or lie acceptability. This suggests game-based deception may not easily generalize to everyday dishonesty. However, game engagement was positively linked with moral disengagement and negatively linked with moral integrity. This indicates a possible connection with broader moral-cognitive justification processes. Future research should separate play frequency, roles, deception content and game context. It can test whether moral cognition precedes game selection, changes with sustained game engagement, or reflects third variables. Therefore, the findings narrow the question. They shift focus from whether players report more lying to how rule-governed deception relates to distinct moral cognition across contexts.

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