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Interpersonal ambivalence in depression: a psychodynamic perspective on the role of prosocial attitudes and latent aggression

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ABSTRACT

This study aimed at examining the role of interpersonal ambivalence in the pathogenesis of depression within the framework of psychodynamic theory, focusing on the roles of latent aggression and heightened sense of responsibility in depression. A total of 479 participants were recruited from the general population. Depression severity was assessed using the Patient Health Questionnaire (PHQ-9), and interpersonal ambivalence (latent aggression, responsibility, distrust) was measured with the Responsibility and Interpersonal Behaviors and Attitudes Questionnaire (RIBAQ-R). Data were analyzed using a general linear model repeated measures analysis to examine group differences on the RIBAQ subscales. Structural equation modeling was used to explore potential mediation effects of responsibility and latent aggression on depression. Latent aggression, responsibility, and distrust were significantly elevated in individuals with depression. To provide insight into possible causal mechanisms, we adopted mediation analyses. Latent aggression emerged as a mediator in the relationship between inflated responsibility and depression severity. These findings suggest that interpersonal ambivalence, particularly conflict between prosocial responsibility and antisocial latent aggression, contributes to depression, providing empirical evidence for psychodynamic theories.

IMPACT STATEMENT

This study provides new insights into the etiology of depression from a psychodynamic perspective by applying structural equation modeling to examine underlying mechanisms. It demonstrates that latent aggression mediates the relationship between inflated responsibility and depression severity, suggesting that internal conflict between prosocial and antisocial tendencies may be a significant risk factor. These findings advance the theoretical understanding of depression's dynamics and highlight the importance of addressing unconscious aggression in psychodynamic treatments for depression.

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Introduction

Depression is one of the most prevalent psychiatric disorders, affecting around 5% of the global adult population (WHO, 2023). It is one of the leading causes of disability (Institute for Health Metrics and Evaluation, 2020), with increasing prevalence rates worldwide (Moreno-Agostino et al., 2021). Numerous theories have been proposed to explain its etiology, with cognitive-behavioral and biological models currently dominating the field. Although psychodynamic theories were once central to psychotherapy, they have received less attention in recent decades. This study seeks to re-examine depression through a psychodynamic lens, with a focus on interpersonal ambivalence.

Contemporary theories of depression

Contemporary theories of depression encompass various perspectives, highlighting cognitive/psychological factors (such as emotion recognition difficulties), social factors (such as bullying), and/or biological

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components of depression, as well as their interaction (e.g., Kupferberg et al., 2016; Remes et al., 2021). From a biological perspective, potential pathophysiological mechanisms of depression include disrupted neurotransmission, hypothalamic-pituitary adrenal axis dysregulation linked to chronic stress, inflammation, diminished neuroplasticity, and brain network dysfunction. These mechanisms are interconnected and influence each other bidirectionally (e.g., Dean & Keshavan, 2017).

Cognitive theories, originally formulated by Aaron Beck (1976), focus on how thoughts, attitudes, and information processing can increase the risk of depression, highlighting inhibitory deficits, rumination, and difficulty using positive stimuli to regulate mood (Gotlib & Joormann, 2010). According to these theories, depression is marked by negative emotional and cognitive biases in self-referential processing, interpretation, attention, and memory, along with the use of maladaptive cognitive emotion-regulation strategies (LeMoult & Gotlib, 2019). In cognitive behavioral therapy (CBT), the therapist focuses on the impact of these dysfunctional thoughts on the patient's present and future functioning and aims to evaluate, challenge, and modify the patient's dysfunctional beliefs. A recent meta-analysis by Cuijpers et al. (2023) revealed that while CBT is effective in treating depression across different age and target groups, formats, and settings, its superiority over other psychotherapies is not fully established. For example, the effects of CBT are not significantly greater than those of psychodynamic-interpersonal therapies, which emphasize the interpersonal and nonconscious aspects of depression thought to be central to its development (Kupferberg & Hasler, 2023), nor of third-wave CBT approaches. Interventions based on third-wave CBT models such as acceptance and commitment therapy (ACT), positive psychology, and metacognitive therapy have also shown positive results for treating depression in a separate meta-analysis (Schefft et al., 2023) indicating that these third-wave therapies are efficacious and acceptable alternatives to classic CBT. The results of Cuijpers et al. (2023) indicate that psychodynamic and CBT approaches might be effective in treating depression as well. Similarly, Leichsenring et al. (2023) found high-quality evidence that psychodynamic therapies are effective in treating depression and, applying the GRADE criteria, made a strong recommendation for psychodynamic therapy for depression. Nevertheless, further high-quality studies on psychodynamic therapy are still needed.

Psychodynamic conceptions of depression

In contrast to CBT, early psychodynamic models (Freud, 1915) explain both normal and abnormal human behavior as an interplay of two opposing drives (i.e., libido and aggression), reflecting prosocial and antisocial motives. Depression, according to Abraham (1912), Freud (1917), Klein (1940), and Jacobson (1977), is understood as an auto-aggressive behavior directed inwards (a turning against the self). This is associated with the pathological processing of the loss of an 'object' (e.g., the love of a beloved person) that is attributed to one's own failure, including rejection/abandonment by significant others. Although the theorists differ in certain aspects, they all emphasize that, in depression, nonconscious anger is redirected toward the self, leading to auto-aggressive behavior. In their integrative psychodynamic model of depression, Busch et al. (2016) argue that there is a vicious circle in the development of depression: unconscious anger toward others, triggered by perceived or actual loss, rejection, or disappointment in oneself compared to others, is subsequently internalized as guilt and worthlessness and processed in a depressive manner.

Other modern psychodynamic approaches to depression focus on the role of different personality styles (Blatt & Luyten, 2009), the role of mentalization (Fonagy et al., 2002; Reininger et al., 2025), or, in the context of Brief Dynamic Interpersonal Therapy, both mentalization and the interpersonal affective focus (Fonagy et al., 2020; Lemma et al., 2010).

Aggression in depression

In support of the model by Busch et al. (2016), Haddad et al. (2008) found that individual differences in aggression, along with personal experiences, play a key role in the development of depressive symptoms. They also emphasized that unique personal experiences and perceptions contribute to both depressive symptoms and self-directed aggression. Further evidence by Şahïn et al. (2011) suggests that the severity of depression can be predicted by factors such as internalized anger, aggression, dissatisfaction with interpersonal relationships, and negative self-perception. Between-group analyses revealed that

patients with depression exhibited significantly higher levels of negative interpersonal styles (i.e., more dominant, avoidant, angry, insensitive, and manipulative), elevated anger, and a more negative self-perception compared to controls. Thus, the authors concluded that anger might play a crucial role in the escalation of depressive symptoms into more severe depression. Similarly, results from Fava et al. (2010) and Judd et al. (2013) suggest that people with a diagnosis of depression experience increased levels of irritability and propensity to anger, especially in more severe depressive episodes or if the depression is chronic. In line with this, speaking for the role of interpersonal aggression in depression, Monnier et al. (2000) reported that antisocial coping behaviors, i.e., actions that satisfy an individual's personal needs to the detriment of those in their social environment, are correlated with depression.

Interpersonal ambivalence in OCD and depression

Empirical studies on the dynamics of prosocial and antisocial behavior that shape human psycho(patho) logy are still rare. To remediate the current gap of suitable instruments, our group developed the Responsibility and Interpersonal Behaviors and Attitudes Questionnaire (RIBAQ), which measures pro-social sense of responsibility and anti-social characteristics such as distrust and latent aggression (Moritz et al., 2009). So far, we have used this instrument primarily with individuals with obsessive compulsive disorder (OCD), where a nonconscious conflict between repressed libidinal impulses (e.g., hatred of a loved one) and a punitive, guilt-inducing instance of conscience is assumed (Lang, 2015). Obsessive-compulsive symptoms are assumed to serve to mask aggression, with antisocial motives being overcompensated for by hypermorality and strict safety behaviors. As predicted, OCD patients showed both heightened responsibility and latent aggression compared to healthy controls. Interestingly, the two traits were found to be positively correlated, pointing to a functional connection (Moritz et al., 2011, 2013). In a previous study, the RIBAQ identified elevated levels of both responsibility and distrust in a psychiatric sample comprising individuals with depression or anxiety disorders, as well as in individuals with OCD, relative to healthy controls. These findings underscore the sensitivity of the RIBAQ in capturing these cognitive factors not only in OCD but also across other clinical populations such as individuals with depression (Moritz et al., 2009).

The role of responsibility

Cognitive models of OCD propose that inflated beliefs of responsibility, a cognitive bias characterized by the belief that one is personally accountable for causing harm or for not preventing harm to oneself and/or others (Salkovskis, 1985), are a vulnerability and maintenance factor specific to OCD. However, this assumption has been challenged by findings indicating that inflated responsibility is not specific to OCD, but is also evident across other forms of psychopathology, particularly anxiety disorders (Avard & Garratt-Reed, 2021; Pozza & Dèttore, 2014). In their meta-analysis, Pozza and Dèttore (2014) reported that inflated responsibility, as assessed by measures developed by the Obsessive-Compulsive Cognitions Working Group, was associated with depressive symptoms to a similar extent as with OCD and anxiety symptoms. Empirical findings regarding depression, however, remain mixed. Some studies have reported elevated responsibility beliefs in individuals with depressive symptoms (Bahceci et al., 2014; Belloch et al., 2010), while others suggest that inflated responsibility is not central to depression symptoms (Avard & Garratt-Reed, 2021). Given inconsistencies and differences in methodology between these studies, further research using valid responsibility-specific measures is needed to clarify the role of inflated responsibility in depression.

Current study

Psychodynamic theories of depression remain largely untested empirically. However, notwithstanding long-standing concerns about the effectiveness of psychodynamic treatments that have undergone less rigorous scientific investigation than CBT, there is some evidence in favor of their theoretical foundations and efficacy (e.g., Ajilchi et al., 2016; De Roten et al., 2017; Driessen et al., 2013; Katz & Hilsenroth, 2018; Leichsenring et al., 2015, 2023; Rosso et al., 2019; Town et al., 2017). Since the RIBAQ has not been used in previous depression research, we administered it in the current study to determine whether interpersonal ambivalence, i.e., stronger latent aggression and responsibility, can also be observed in depression. Given the limited research

on heightened sense of responsibility in depression, with findings suggesting that responsibility is not specific to OCD but may be a transdiagnostic factor in psychopathology (Pozza & Dèttore, 2014), our study aimed to explore the apparent conundrum between prosocial (submissive) attitudes and elevated anger or aggression in depression. More specifically, we hypothesized that we would find increased levels of both latent aggression and responsibility in depression and tested several mediation models concerning the directionality of the effects, which we expected to be different from those in OCD.

Methods

Participants

Participants were recruited via the online forum WiSoPanel®, which encompasses around 14,000 people from the general population (thus with and without psychiatric diagnoses); all were invited to participate in the web-based study. For a detailed description and methodological discussion of WiSoPanel®, see Göritz (2014), who also demonstrated good data quality of the platform compared to two other crowdsourced samples (Göritz et al., 2021). From those participants that completed the online questionnaire following the invitation on WiSoPanel®, 63 participants were excluded blind to results from the analyses (4 provided implausible answers in free-text answers, 9 were older than 80 years, 2 indicated that they had not responded truthfully, 7 selected the same response option for all items in the PHQ-9 questionnaire, 6 had missings in the RIBAQ, and 35 had missings in the social interaction questionnaire) leading to a final working sample of 479 participants. For characteristics of the final sample, see Table 1. At the beginning of the questionnaire, participants were informed about the background and procedure of the study and asked to agree to participate in the study. Ethical approval for the study was granted by the local ethics committee of Medical Center Hamburg (Germany, LPEK-0725).

Procedure

The study was conducted online using a self-report questionnaire. After their recruitment through WiSoPanel® and after they gave informed consent to participate in the study, participants completed the online questionnaire on Unipark/Questback®. At the end of the questionnaire, participants were asked to confirm whether they had answered truthfully. As a token of appreciation for their participation, they

Table 1. Sample characteristics of the total sample ($n = 479$).

Variable	Mean/frequency (standard deviation or percentage)
Sex	
Female	304 (63.5%)
Male	175 (36.5%)
Age	53.47 (13.97)
Nationality	
Germany	450 (93.9%)
Austria	22 (4.6%)
Switzerland	5 (1.0%)
Other	2 (0.4%)
Highest Educational Degree	
No degree (yet)	4 (0.8%)
9 Years of School	46 (9.6%)
O-Levels	104 (21.7%)
A-Levels	124 (25.9%)
University	183 (38.2%)
Doctorate	18 (3.8%)
Employment Status	
Working	302 (63.0%)
Student	30 (6.3%)
Retired	88 (18.4%)
Unemployed	22 (4.6%)
Parental Leave	1 (0.2%)
Other	36 (7.5%)
Therapy Experience	
Yes	155 (32.4%)
No	118 (24.6%)
Missing	206 (43.0%)

received a self-help manual, developed by our research team, that focuses on promoting self-care, improving sleep, and encouraging relaxation. This study was not preregistered.

Materials

After a brief introduction containing the study information, sociodemographic information pertaining to gender, age, nationality, employment status and education were assessed. A newly created questionnaire assessing attitudes toward social interactions was administered to the participants; these results will be reported in a different paper.

Patient health questionnaire (PHQ-9)

The Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001) was employed to assess depression severity. The depression scale of the PHQ-9 is a widely used (El-Den et al., 2018) and easily administered nine-item self-report scale based on the nine key symptoms of depression (e.g., loss of interest, depressed mood, loss of energy, eating problems, trouble concentrating). Participants are asked to consider their experiences over the past two weeks and respond to each item using a 4-point Likert scale (0 = *not at all* to 3 = *nearly every day*). The PHQ-9 is highly reliable and widely validated across multiple studies in the general population and primary care settings (e.g., Costantini et al., 2021). A total score ranging from 0 to 27 can be calculated, with scores between 10 and 14 indicating the presence of moderate depression, scores between 15 and 19 indicating moderately severe depression, and scores above 20 indicating severe depression.

Responsibility and Interpersonal Behaviors and Attitudes Questionnaire – Revised (RIBAQ-R)

We also administered the RIBAQ-R, which was originally created to evaluate responsibility-related interpersonal attitudes and behaviors with a focus on addressing interpersonal ambivalence in OCD (Moritz et al., 2009, 2011). The present study used a shortened version (RIBAQ-R) consisting of 20 items reflecting the three subscales: Responsibility (8 items), Latent Aggression (6 items), and Distrust (6 items) (Moritz et al., 2013). Examples of items are 'I am a very moral person and cannot even excuse small mistakes' (Responsibility), 'I am less moral than I pretend to be' (Latent Aggression), and 'You can only count on yourself' (Distrust), which participants rate on a 4-point Likert scale (*do not agree at all*, *rather disagree*, *rather agree*, *fully agree*). Psychometric analyses of the long version of the RIBAQ (32 items) yielded satisfactory to good reliability (Cronbach's α = 0.70–0.87) of the scales and showed external validity in a prior study (Moritz et al., 2011). Moreover, the scales of the shorter version were highly correlated with those of the original questionnaire (Moritz et al., 2013).

Statistical analyses

Following data screening and cleaning, the depression severity score of the PHQ-9 and the mean scores of the RIBAQ-R subscales (Latent Aggression, Distrust, and Responsibility) were computed for each participant.

RIBAQ-R

To investigate whether levels of latent aggression, distrust, and responsibility differ between depressed and non-depressed individuals, participants were matched accordingly. For each participant with a moderately severe or severe depressive episode ($n = 49$, defined as PHQ-9 score ≥ 15), a match of the participants with no depression ($n = 210$) was selected. To do this, we used the MatchIt package (Ho et al., 2011) in R, as described by Randolph et al. (2014) and Zhao et al. (2021), with the setting option optimal (i.e., smallest sum of the absolute pairwise distances) based on the variables (all categorically scaled) year of birth, gender (*male* vs. *female*) and degree (*no degree* vs. *9 years of school* vs. *O-levels* vs. *A-levels* vs. *university* vs. *doctorate*). The resulting samples (both $n = 49$) did not differ significantly in age, sex, or education. A general linear model (GLM) repeated measures analysis was conducted with the RIBAQ-R subscales as the within-subject factor and the matched groups as the between-subjects factor, followed by post-hoc independent samples *t*-tests.

Confirmatory factor analysis (CFA)

Before fitting the structural equation models (SEM), a confirmatory factor analysis (CFA) was conducted to validate the measurement model for the latent variables. The CFA was performed to confirm that the items for latent aggression (LA), responsibility (RB), and depression (DEP) loaded significantly on their respective latent factors, thereby ensuring the construct validity of the measures used in the study. Although a few values did not fully meet the ideal standard, the overall results demonstrated that the measurement possesses acceptable validity. The CFA was adjusted based on the modification indices by incorporating a covariance between the error terms. The fit of the CFA model was assessed using several indices, including the comparative fit index (CFI), Tucker-Lewis Index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). A CFI and TLI value greater than .95 and an RMSEA and SRMR value less than 0.08 are generally considered indicative of a good fit (Bentler, 1992; Hu & Bentler, 1999; MacCallum et al., 1996). To assess the potential presence of common method variance, Harman's single-factor test was applied. The CFA evaluated whether the hypothesized model provided an acceptable fit to the data, confirming the measurement model as appropriate prior to conducting the SEM analysis. Following the CFA, a correlation matrix was constructed to explore the relationships among LA, RB, and DEP, providing initial information on their interactions.

Structural equation modeling (SEM)

The primary analytical technique employed in this study was SEM, which allows for the examination of complex relationships between latent variables. The primary SEM analysis involved three models. Model 1 suggested that perceived RB and LA jointly predict DEP, assessing their direct effects while controlling for each other's influences. Model fit indices and standardized loadings were assessed to evaluate the adequacy of this model.

To further explore the interactions between RB and LA in the context of DEP, a mediation model was fitted. Model 2 proposed that the effect of RB on DEP is mediated by LA. Model 3 proposed the reverse mediation effect, where LA mediates the relationship between RB and DEP. This allowed us to examine whether different configurations of the relationships among LA, RB, and DEP could yield divergent results. By doing so, we aimed to assess the stability and robustness of the findings under different modeling conditions. The mediation analyses were conducted using a bootstrapping approach with 5000 repeated samples to estimate the indirect effects and to construct bias-corrected confidence intervals (bcCIs) (Hayes, 2009; Jung et al., 2019). This method is widely used to provide a more precise estimation of the mediation relationship (Efron & Tibshirani, 1994). It yields asymmetric confidence intervals (CIs) for the mediation effect; if the 95% CI does not include zero, it signals that the mediation effect is statistically significant (Shrout & Bolger, 2002). The average causal mediation effect (ACME), average direct effect (ADE), and total effects were calculated based on the standardized SEM paths.

Software and implementation

All SEM analyses were conducted using the lavaan package (Rosseel, 2012) in R version 4.3.3 (R Core Team, 2024).

Results

Group differences in the RIBAQ-R

A repeated measures GLM was conducted to examine whether the participants with depression responded differently in the RIBAQ-R subscales (within-subject factor) compared to the participants without depression (between-subject factor). The assumption of sphericity was violated (Mauchly's $W = 0.781$, $p < .001$), so a Greenhouse-Geisser correction was applied. There were large significant within-subject, $F(1.64, 157.56) = 26.843$, $p < .001$, $\eta_p^2 = 0.22$, and between-subject main effects, $F(1, 96) = 68.639$, $p < .001$, $\eta_p^2 = 0.42$. For each of the RIBAQ-R subscales, there was a significant difference between the groups (see

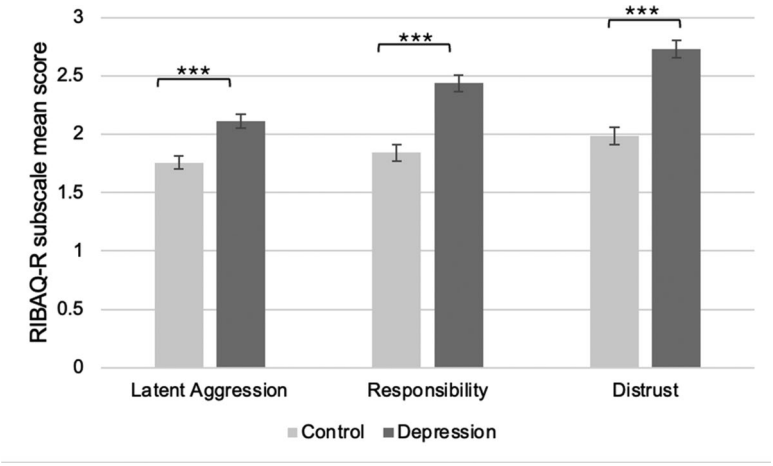

Figure 1. Group differences, RIBAQ-R scale.

Figure 1). To follow up on the significant between-subject effect, we calculated *t*-tests, which showed that participants with depression had higher scores on latent aggression, $t(77.65) = 4.35$, $p < .001$, $d = 0.88$, responsibility, $t(96) = 6.10$, $p < .001$, $d = 1.23$, and distrust, $t(96) = 7.01$, $p < .001$, $d = 1.42$. Results were qualified by a significant interaction effect between group and subscales at a medium effect size, $F(1.64, 157.56) = 5.70$, $p = .007$, $\eta_p^2 = .06$, which could have originated from the comparably small group differences for latent aggression.

Confirmatory factor analysis (CFA)

For the CFA and SEM, 35 participants were excluded due to being outliers or having missing values. A CFA was applied, and all criteria for the fit indices were met. The CFI was .964 (> .95), the TLI showed a value of .956 (> .95), and RMSEA and SRMR were 0.031 and 0.043, respectively (< 0.08). The values for the subsequent models were equivalent since the measurement model for the latent variables remained unchanged between the CFA and the path analysis. Additionally, Harman's single-factor test revealed that a single factor accounted for only 22.48% of the variance, suggesting that common method variance was not a significant concern in this study.

Correlation matrix

The correlation matrix indicated that all three latent constructs were positively correlated. Specifically, LA showed a moderate positive correlation with RB ($r = .40$, $p < .001$) and with DEP ($r = .30$, $p < .001$). RB also demonstrated a significant positive moderate correlation with DEP ($r = .39$, $p < .001$) (see Table 2). These findings suggest that higher levels of LA and RB are associated with increased levels of DEP, supporting the theoretical framework of the study.

Structural equation modeling (SEM)

Model 1 was specified to assess the predictive relationships between the constructs, where RB and LA jointly predict DEP. The results indicated that despite the significant correlations observed in the correlation matrix, the direct path from RB to DEP was not statistically significant when both predictors were regressed simultaneously on DEP (standardized $\beta = 0.20$, $p = .219$). In contrast, the path from RB to LA was significant ($\beta = 0.77$, $p < .001$), as was the path from LA to DEP ($\beta = 0.42$, $p < .05$). This finding highlights that while RB and DEP are correlated, the relationship between RB and DEP is not significant when LA is taken into account, suggesting that LA could have a mediating role between the variables (Figure 2).

Table 2. Correlation matrix of latent constructs.

	Depression (PHQ-9 Sum)	RIBAQ-R LA (Mean)	RIBAQ-R RB (Mean)
Depression (PHQ-9 Sum)			
RIBAQ-R LA (Mean)	.30***		
RIBAQ-R RB (Mean)	.39***	.40***	

Note: Computed correlation used the Pearson-method with pairwise deletion; *** = $p < .001$; PHQ-9 Sum: Sum of Patient Health Questionnaire-9; RIBAQ-R: Responsibility and Interpersonal Behaviors and Attitudes Questionnaire – Revised; RB: RIBAQ-R Responsibility; LA: RIBAQ-R Latent Aggression.

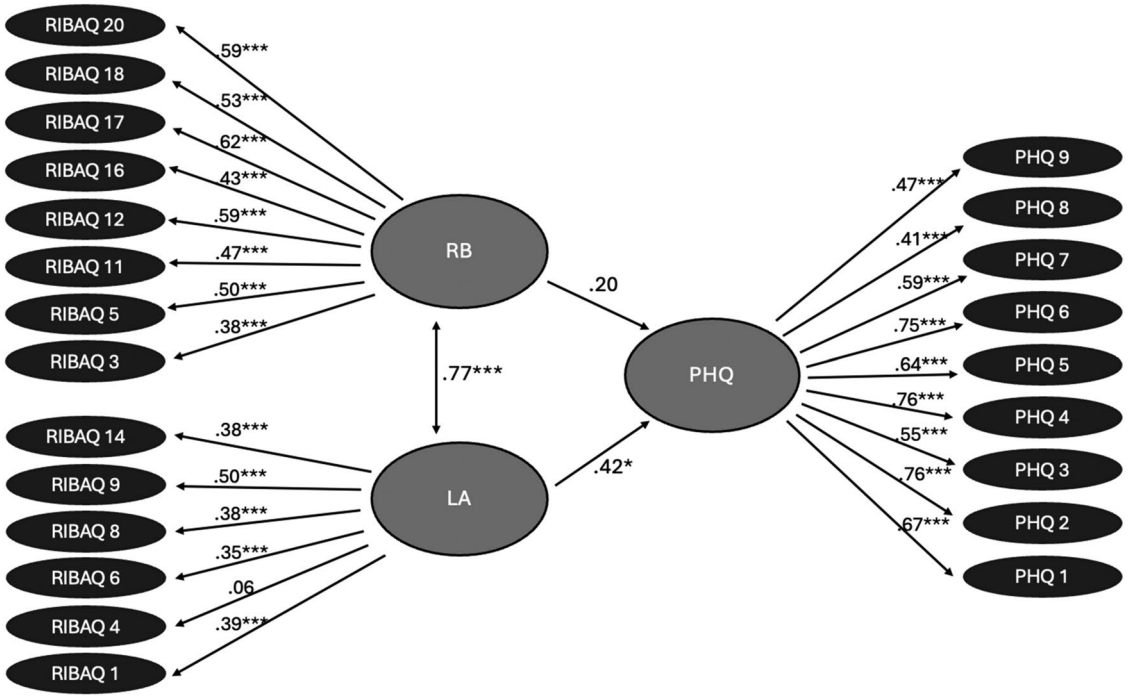

Figure 2. Predicting relationships between responsibility and latent aggression on depression suggests latent aggression has a mediating role (Model 1). RIBAQ-R: Responsibility and Interpersonal Behaviors and Attitudes Questionnaire – Revised; RB: RIBAQ-R Responsibility; LA: RIBAQ-R Latent Aggression; PHQ: Patient Health Questionnaire-9.

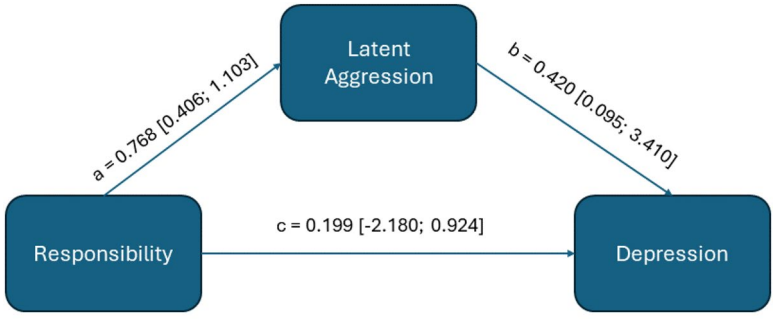

Figure 3. Latent aggression mediates the effect of responsibility on depression (Model 2). ACME: average causal mediation effect; ADE: average direct effect.

Mediation analyses

To further explore the interactions between RB and LA, two mediation models were fitted. Model 2 suggested that the effect of RB on DEP is mediated by LA. The mediation analysis revealed a significant ACME of .323 (bcCI = 0.127, 3.353), indicating that the indirect effect of RB on DEP through LA is

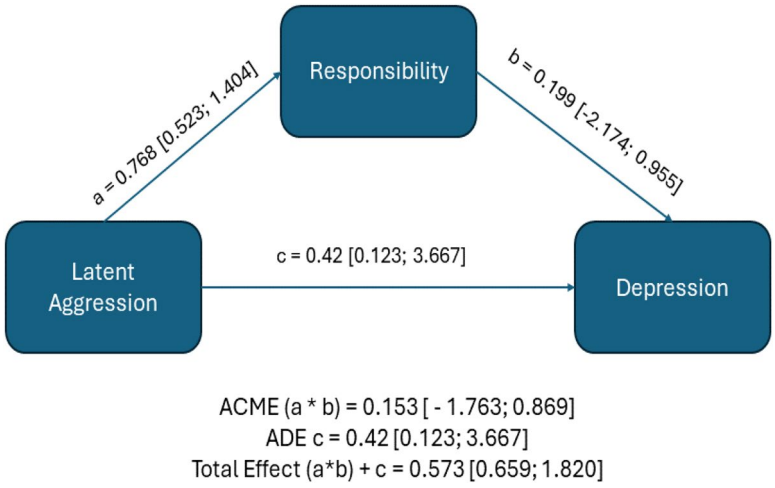

Figure 4. Responsibility does not mediate the effect of latent aggression on depression (Model 3). ACME: average causal mediation effect; ADE: average direct effect.

statistically significant. The ADE was .199 and found to be non-significant (bcCI = −2.180, 0.924), while the total effect (ACME + ADE) was significant at .522 (bcCI = 0.610, 1.311) (see Figure 3). Model 3 proposed the reverse mediation pathway, in which the effect of LA on DEP is mediated by RB. In this model, the ACME was non-significant with .153 (bcCI = −1.763, 0.869), while the ADE was significant with a value of .42 (bcCI = 0.123, 3.667) (Figure 4). The total effect (ACME + ADE) was also significant at .573 (bcCI = 0.659, 1.820). These findings indicate that while LA significantly mediates the relationship between RB and DEP, the reverse mediation effect is not supported.

Discussion

Our study aimed to examine the role of interpersonal ambivalence (i.e., concurrent prosocial and antisocial attitudes), which has previously been reported for OCD (Moritz et al., 2011, 2013), in depression. To do this, we administered the RIBAQ-R, a self-devised questionnaire on interpersonal ambivalence, to a sample from the general population. As hypothesized, participants with more severe levels of depression displayed higher scores on all subscales of the RIBAQ-R (latent aggression, responsibility, and distrust). To explore the specific relationship between antisocial (i.e., LA) and prosocial (i.e., RB) attitudes and depression, we tested several mediation models for the directionality of the effects. The SEM analyses revealed that LA significantly mediated the effect of RB on depression, whereas the inverse model, which has been postulated for OCD, did not show significant effects.

Empirical support for psychodynamic theories of depression

Our findings warrant independent replication. Yet, they align with psychodynamic theories of depression suggesting that rejection by others or lack of social credit may incite aggressive attitudes, making a person prone to develop depression (Peker et al., 2015). In this view, claimed prosocial behavior (discretionary altruism/'altruistische Abtretung'; Bayer, 2020)—such as taking on excessive responsibility or adhering to rigid moral standards—may represent a root problem of depression. When these efforts to care for or meet the expectations of others are met with indifference, rejection, or outright resentment, the individual may experience frustration and anger due to unmet emotional needs. This frustration may transform into latent aggression, which in our analyses acted as a mediator between over-responsibility and depression and which is also in line with Dollard's frustration-aggression hypothesis (Dollard et al., 1939), which proposes that aggressive impulses in part stem from frustration. In essence, latent aggression represents the 'dark side' of an excessive sense of responsibility. To illustrate, when a person consistently strives to fulfill external obligations without sufficient recognition

or reward, internal conflict arises. This conflict may stem from feelings of inadequacy, disappointment, or guilt over harboring unexpressed anger toward others. Over time, these unresolved emotions create a state of self-dissonance, and the individual struggles to reconcile their internal frustration with their prosocial image.

Early psychodynamic theories posit that in depression this frustration is internalized, with unconscious anger being directed inward and manifesting as self-aggressive behaviors (see above; e.g., Abraham, 1912). This framework also coincides with Freud's early understanding of depression, wherein aggressive impulses are turned inward to that part of the ego associated with loss and frustration (Freud, 1917). By internalizing aggression, the individual becomes both the victim and the perpetrator of this emotional conflict, unable or at least with limited ability to express anger outwardly, thus reinforcing depressive symptoms. This self-directed aggression not only perpetuates the depressive state but also underscores the complex relationship between moral rigidity, unacknowledged needs, and emotional repression.

Differentiating between OCD and depression

Our findings point to a possibly important distinction between OCD and depression. Although both disorders share aspects of interpersonal ambivalence, specifically elevated aggression and responsibility, the directionality of the effect seems to differ. In OCD, psychodynamic theories propose that hypermorality—manifested as over-responsibility—arises as a defense mechanism against aggressive or erotic impulses toward others. Individuals with OCD may repress these aggressive fantasies, often unconsciously, rather than confronting them adaptively (see Kempke & Luyten, 2007). Empirical studies have supported these assumptions in OCD (Moritz et al., 2009, 2011, 2013). In short, whereas aggressive impulses are deemed primary in OCD, they are a secondary mediator in depression.

Importantly, we also tested the model stipulated for OCD, which did not yield significant results. This underscores a key psychodynamic difference: in depression, aggression is largely turned inward, manifesting as self-criticism, guilt, and self-sabotage, while in OCD it is often externalized in the form of compulsive behaviors. These divergent mechanisms also have distinct implications for interpersonal relationships. In depression, self-directed anger may lead to withdrawal, strained communication, and diminished self-esteem, affecting the quality of relationships. In contrast, OCD-related compulsions may create tension or avoidance in interpersonal interactions as the individual seeks to control their internal distress because they worry they might act on their impulses.

This specificity suggests that while both disorders share some key mechanisms of interpersonal conflict, the underlying psychodynamic processes diverge, which has important implications for treatment. Therapeutic interventions for OCD may benefit from helping individuals confront and externalize their repressed aggression adaptively, while interventions for depression might focus on mitigating self-directed aggression, fostering self-compassion, and resolving the internalized conflict between moral standards and unmet needs. In addition, patients with depression may benefit from aiming for a good balance in their interpersonal relationships by caring for others only to the extent that they do not put themselves or others under pressure (i.e., by becoming exhausted themselves and implicitly forcing others to pay them back for the care they have received). These distinctions further support the argument that the two disorders are based on distinct processes.

Strengths and limitations

By applying psychodynamic theory to understand interpersonal ambivalence of depression, this study addresses an understudied field within depression research. To the best of our knowledge, our study is the first to use the RIBAQ-R in depression; this assessment tool has previously only been applied to OCD. Thus, it provides new insights into interpersonal ambivalence in depression, offering new perspectives into its etiology, especially in contrast to OCD. By drawing on psychodynamic and psychoanalytic concepts in an empirical study, this research challenges the dominance of cognitive-behavioral and biological models, opening the door for future research that incorporates dynamic approaches to understanding psychopathology. This will increase the external validity of the findings. Unlike many studies on

psychodynamic theories, our approach rested on advanced statistical techniques and used a sizable sample of participants. The use of CFA and SEM strengthens the robustness and trustworthiness of the model, providing insights into the relationships between latent aggression, responsibility, and depression, clarifying the directionality of these effects, and advancing the theoretical understanding of depression's dynamics.

The study also has some limitations. First, the study is cross-sectional, meaning it cannot establish causality. Longitudinal and especially experimental designs are needed to determine whether increased latent aggression and responsibility precede or result from depressive symptoms. Moreover, the data were collected through self-report questionnaires, which can be subject to biases such as social desirability, recall bias, or miscomprehension of items. Future studies could use expert ratings, although these are subject to biases as well, to validate our findings. This study only included a small sample of individuals with depression which limits statistical power and stability of estimates. Regarding generalizability, the sample is not clinical. Thus, individuals with severe depression and a confirmed diagnosis of major depressive disorder are not adequately represented. Though speculative, it can be argued that the effects might be even more pronounced in samples with higher levels of depression. This, however, has yet to be tested.

While this study emphasizes psychodynamic aspects of depression, it does not integrate biological or cognitive factors that contemporary theories have identified as important in the etiology of depression. Such an integrative approach could provide a more comprehensive understanding of the disorder. This also applies to the mediation model; while the results of our analyses provide valuable insights, the complexity of the interactions between latent aggression, responsibility, and depression may require further investigation. In future studies, additional variables, such as self-esteem, guilt, trauma, or social support, could offer a more nuanced understanding of these relationships.

Conclusion

This study provides novel insights into the psychodynamic mechanisms underlying depression, highlighting interpersonal ambivalence involving over-responsibility and subsequent antisocial behavior. By applying the RIBAQ-R, traditionally used in OCD research, to a sample from the general population with varying levels of depression severity, we were able to demonstrate that heightened latent aggression mediates the relationship between over-responsibility and depression. These findings underscore the importance of addressing internalized aggression and unresolved emotional conflict in the treatment of depression. While the results highlight the distinct psychodynamic processes differentiating depression from OCD, further research is needed to establish causality and explore potential additional explanatory factors such as trauma, work relationships, and social support. Ultimately, this study provides an alternative approach to the predominant cognitive-behavioral model of depression and advocates for a more dynamic and integrative understanding of the etiology of depression.

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Ethics statement

This study protocol was reviewed and approved by the Local Psychology Ethics Commission (Lokale Psychologische Ethikkomission) of the Center for Psychosocial Medicine at the University Medical Center Hamburg-Eppendorf (Germany), approval number LPEK-0725. All participants provided consent prior to participation in the study.

Authors contributions

LB: conceptualization, analysis, writing the original draft; SM: supervision, conceptualization, writing (review and editing); resources; ASG: data collection; LS: analysis, writing (review and editing); KMR: writing (review and editing)

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No potential conflict of interest was reported by the author(s).

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During the preparation of this manuscript the authors used ChatGPT to refine phrasing and simplify complex sentences. Following the use of this tool, the content was reviewed and edited as necessary.

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Data availability statement

The data that support the findings of this article are available from the corresponding author upon reasonable request.

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