

Histrionic Personality Features and Depression:

The role of emotion regulation and need frustration

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"You can say it all you want

Under your crazy laughs and your air of grandeur

It's not worth the trouble

You can lie to whoever you want

You smile too much to be happy"

"Tu pourras m'dire tout c'que tu veux Sous tes fous rires et tes grands airs C'est pas la peine Tu peux mentir à qui tu veux Tu souris trop pour être heureux"

Stromae - Sommeil

From the perspective of Self-Determination Theory, this study examined the association between features of histrionic personality disorder and depression, as well as the mediating role of both maladaptive emotion regulation (experiential suppression, expressive suppression, dysregulation) and need frustration. A total of 166 participants filled in an online questionnaire (Mage = 24.26; SD = 3.43; 69.9% female). Results did not show a significant correlation between histrionic features and depressive symptoms, thus excluding a possible mediating effect of emotion regulation or need frustration. Explorative analyses about attention seeking and seduction, two HPD categories, showed that only seduction was correlated with need frustration. Lastly, in people that scored high in histrionicity, HP features were found to correlate with expressive suppression. Strengths and limitations of the study are discussed and suggestions for future research are made. Possible interpretations of the results in terms of the "mask model of narcissism" are explored.

Keywords: histrionic personality features, depression, emotion regulation, need frustration, self-determination theory

Histrionic Personality Disorder (HPD) belongs to Cluster B personality disorders, which entail unpredictable, dramatic, emotional behavior. HPD is characterized primarily by excessive emotionality and attention seeking. Other possible symptoms are inappropriate seductiveness, shallow expression of emotions, impressionistic speech, theatricality/ exaggerated emotions and suggestibility (American Psychiatric Association, 2013). According to the systematic review and meta-analysis of Volkert and colleagues (2018), HPD prevalence in the general adult population of the Western World is 0.83%. HPD creates several implications in a person's life. For example, people with this diagnosis have increased possibilities of developing other disorders, like anxiety disorders (Kraus & Reynolds, 2001) and they have more symptoms of illness anxiety disorder (Demopulos et al., 1996). HPD influences their life also in terms of marriage dissatisfaction (Disney et al., 2012) and cognitive difficulties in logic and decision-making (Shapiro, 1965). All these negative consequences of HPD, the cognitive impairments, relational problems, health worries and stress are also symptoms of depression or manifest together with it. Therefore, the finding that histrionic features are a risk factor for the development of depression, too, comes as no surprise (van der Wal et al., 2018). This is the relationship we aimed to understand in the present research. We know that personality disorders often make a person vulnerable to depression (Hirschfeld, 1999). One factor that has been found to explain this comorbidity is personality traits, like dependency, that predispose someone to depression (Birtchnell, 1984). We examined two other factors that could potentially explain the comorbidity between histrionic features specifically and depression. These are emotion regulation and basic need frustration, both considered transdiagnostic (Aldao et al., 2016; Ryan and Deci, 2017).

Regarding the disorder's history, histrionic personality disorder was called hysterical (in

ancient Greek, "υστερία"= womb) and had long been studied in different times and places (ancient Greece, Egypt, Rome). At the beginning, it was thought to cause somatic symptoms without an organic explanation (Novais et al., 2015). Hysteria preoccupied Freud and Breuer ,who undertook many patients together, one of them being the famous Anna O (Breuer and Freud, 1955). However, because of the term's connection to women (womb), some people considered it misleading and "histrionic" appeared, to show the tendency for theatrical expression (in latin, histrio= actor) (Decker, 2013; Zimmerman, 1999). This definition was adopted and the term "hysterical" was abandoned in the DSM-IV (APA, 1994) and later editions.

Despite its long history, though, there is little research attention for HPD. A quick PsychInfo search (15/2/21) for cluster B personality disorders gives 6434 results for antisocial, 5552 for borderline and 1909 for narcissistic personality disorder, while the results for HPD are only 697, thus showing a huge gap in our knowledge. This lack of research can be due to the fact that HPD shares many common elements with other personality disorders, like borderline or dependent. Consequently, some researchers argued that it does not belong in the DSM as a distinct disorder (see a discussion about this in section III of the DSM-5; APA, 2013). Another reason that some specialists criticized the HPD diagnosis and could be why it has not been studied sufficiently, is that traits like shallowness and sexuality are considered stereotypically feminine in western cultures. That is, there is gender bias and men that are diagnosed with the disorder are seen as feminine and dramatic (PDM Task Force, 2006). In addition, "hysterical" is still being used in a pejorative way for people that express intensely their emotions. This leads to further stigmatization and confusion for HPD (Lewis & Mastico, 2017).

The dimensional perspective supports that personality disorders should not be considered categorical and it finds us in agreement. Rather than believing that a person has or has not a

disorder, they can have these dysfunctional personality features more or less (Morey et al., 2015). In fact, non-pathological histrionic features have not been adequately researched in previous studies (Renner et al., 2008). Therefore, in this study, we are interested in a specific implication of histrionic personality features in the general (non-clinical) population. This implication is the fact that the more histrionic characteristics people have, the more possible it is for them to develop depression (van der Wal et al., 2018). We aim to understand what explains the relationship between histrionic features and depression. One factor that could potentially account for it is emotion regulation (ER). Maladaptive forms of ER have been proven to associate both with depression and some personality disorders, like borderline (Aldao et al., 2016; van der Kaap-Deeder et al., 2020). Linehan already in 1993 expressed the idea that ER plays a crucial role in the development, maintenance and worsening of borderline. Therefore, we could also assume that the same holds for HPD, as the two personality disorders overlap.

Emotion regulation is a valuable concept, because it is a transdiagnostic, dynamic factor and can change, making it the perfect element to work on in psychotherapy (Aldao et al., 2016). There are studies that connect ER with psychopathology through the theoretical framework of Self-Determination Theory (e.g. van der Kaap-Deeder et al., 2020). In SDT, it is thought that people develop psychopathology because their innate psychological needs are being frustrated (Ryan and Deci, 2017; Ryan et al., 2015). Thus, the current research focused on the mediating role of ER and sequentially, need frustration between histrionic personality features and depression.

The explanatory role of maladaptive emotion regulation

We can define emotion regulation as the way people use to control the type of emotions they experience, the time they feel them and how they express them to the outside world (Gross, 2002). Research shows various ER strategies to be maladaptive. For example, when people use *expressive suppression*, they stop themselves from behaviorally expressing their emotions (Gross, 1998). Imagine someone being angry at their boss but not wanting to *show* it. Another maladaptive ER strategy is *experiential suppression*, where people try to suppress the subjective emotional experience and related physiological arousal (Liverant et al., 2008). Using the same example as before, the person does not want to *feel* their anger towards their boss. Third, when people experience *emotion dysregulation*, they do not feel capable of managing the intensity of their emotions and end up feeling overwhelmed to the extent that it interferes with normal functioning (Roth et al., 2019).

Expressive suppression, experiential suppression and emotion dysregulation have been found positively associated with depressive symptoms. People with depression tend to be overly focused on negative affect and have difficulty controlling it cognitively. This often leads to more negative emotions and possibly because of their inability to use other strategies to handle them, they resort to expressive suppression. In addition, it seems that people with depressive symptoms are often afraid of their emotions, both negative and positive, and in order to avoid them, they use experiential suppression (Aldao & Nolen-Hoeksema, 2010; Beblo et al., 2012; Joormann & Gotlib, 2010).

As for the relationship between maladaptive ER and histrionic features, there is not any

known research addressing it. However, we know that histrionics have trouble managing their emotions. For example, they may seem happy but in a theatrical way that does not seem authentic or swift emotions easily (APA, 2013). This sounds like emotion dysregulation. Additionally, impulsivity, exhibitionism and entitlement, all characteristics of HPD, are associated with ego undercontrol and underregulation of emotions (Borges & Naugle, 2017). Therefore, conceptually, it seems logical to relate histrionic features with maladaptive ER. We also know that borderline is associated with maladaptive ER and that borderline and histrionic overlap highly in some symptoms: exaggerated emotion, impulsivity, attention-seeking and manipulativeness (APA, 2013; van der Kaap-Deeder et al., 2020). So it would be reasonable to think that maybe histrionic features are also caused, maintained or exacerbated by maladaptive ER.

To sum up, we are interested in three separate relationships: one between HP features and depression, one between HP features and ER and one between ER and depression. Namely, we want to see if maladaptive ER mediates the relationship between HP features and depression.

The explanatory role of need frustration

If, indeed, maladaptive ER can account for the relationship between histrionic features and depression, how can we, then, explain why maladaptive ER relates to more depressive symptoms? The explanatory process we propose is *frustration of the basic psychological needs* that, according to Self Determination Theory, are competence, autonomy and relatedness and are necessary for a satisfying life. The need for competence is met when people feel effective in their daily activities, while feelings of failure mean need frustration. Regarding autonomy, satisfaction is achieved when people feel free to be and do what they want, while frustration is characterized by feelings of internal and external pressure. Lastly, the need for relatedness is satisfied when people feel connected to others and frustrated when they feel excluded and isolated (Ryan & Deci, 2017).

Our proposition is based on previous research showing that ER deficits can engender need frustration (Brenning et al., 2020). Conceptually, we understand this relationship in the following way: When emotions are so strong that people feel overpowered by them (emotion dysregulation) or when they are pressured to suppress their emotions (suppression), it is obvious that autonomous functioning is hampered, as they are controlled by emotions and cannot act volitionally. Furthermore, when people cannot handle their emotions effectively, it is more possible to feel like they failed and thus, the need for competence is frustrated. Finally, because they are not expressing their emotions at all (suppression) or because they express them without limits (dysregulation), they might push people away and feel relatedness frustration (van der Kaap-Deeder et al., 2020).

Brenning and colleagues (2020) showed that suppression and dysregulation are connected to more internalizing problems (e.g. depression) through need frustration in a clinical and nonclinical sample. The positive association between need frustration and ill being, such as depression, has also been proven by Cordeiro et al. (2016). Accordingly, there is some evidence for part of the model we want to prove.

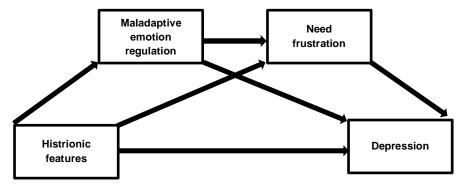
As for histrionic features and need frustration, no research has been conducted. However, we see from HPD symptoms that need frustration experiences stand out for people with histrionic traits: 1) Their constant need for attention and validation as well as their excessive emotionality may make them feel incapable of comforting and regulating themselves (competence frustration) 2) Manipulativeness, theatricality and exaggerated emotions may hinder them from creating long-lasting and healthy relationships (relatedness frustration) 3) Their suggestibility makes it difficult to even know or create their own beliefs and values, and by extension, to have a clear identity and self-definition (Horowitz, 2004). This may inhibit their freedom (autonomy frustration).

The present research

The current research aimed to investigate the role of ER to the relationship between HP features and depression and the role of need frustration to the relationship between ER and depression. Based on SDT, we suggest that more histrionic features relate to a stronger use of maladaptive ER strategies, provoking basic need frustration and finally, more depressive symptoms. Hence we forward a serial mediation model (Figure 1), hypothesizing: 1) HP features are positively associated with depression 2) Maladaptive ER is mediating the positive association between HP features and depression 3) Need frustration is mediating the positive association between maladaptive ER and depression.

Figure 1.

The Theoretical Serial Mediation Model.



Method

Participants and procedure

This research had a cross-sectional design and it was held online. Participants were invited to participate through social media channels, such as Linkedin. Before completing the questionnaire, participants were informed about the study goals, data confidentiality and voluntary participation (see information letter in the Appendix). All participants gave consent by clicking on a box after receiving the appropriate information. The research was approved by the FETC with the number 21-0072.

Participants were 166 people from all over Europe (Mage = 24.26; SD = 3.43; range: 18–49 years) of which 69.9% were female. The majority of them were coming from Greece, then from Spain and Germany and then from other countries. Regarding participants' level of education, most of them already had a Bachelor's or a Master's degree (59% and 23.5% respectively) and 69.9% of them had a "very good" level of English.

Measures

Histrionic personality features

Features of HPD were assessed with the 11-item *Brief Histrionic Personality Scale* (BHPS; Ferguson & Negy, 2014). The internal reliability in these researchers' study was found α =0.79. Regarding convergent validity, the total scale correlated .53 with the subscale about histrionic traits included in the MMPI-2. The BHPS consists of two subscales: Seductiveness (six items, e.g. "I find it exciting to flirt with others", α =0,67) and Attention Seeking (five items, e.g. "I like to be the center of attention", α =0,72). Items were rated on a 4-point Likert scale, ranging from 1 (*Never true*) to 4 (*Always true*). Internal consistency of the total scale in our sample was α =0.67.

Depression

Depressive symptoms were measured with the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001). This questionnaire has both great internal reliability (α =0.89) and construct validity in relation to the Functional Status scale (SF-20). SF's subscale "mental health" is the one that associates the most to PHQ-9 with a validity of 0.73. PHQ-9 assesses all nine symptoms of depression according to the DSM-IV for the last two weeks of the participant's life. Example items are: "Little interest or pleasure in doing things" and "Trouble falling or staying asleep, or sleeping too much". Items were rated on a 4-point Likert scale, ranging from 0 (*not at all*) to 3 (*nearly every day*). Cronbach's alpha in our sample was α =0.80.

Need frustration

Frustration of basic needs was measured with the 12- item need frustration subscale of the Basic Psychological Need Satisfaction and Need Frustration scale, which has been found reliable and valid in many studies and different cultures (BPNSNF; Chen et al., 2015). There were four items for each need, for example: "I feel pressured to do too many things." (frustration of autonomy), "I feel that people who are important to me are cold and distant towards me." (frustration of relatedness), "I feel insecure about my abilities." (frustration of competence). A 5-point Likert scale was used, ranging from 1 (*Completely disagree*) to 5 (*Completely agree*). Cronbach's alpha of the total scale in our sample was α =0.84.

Maladaptive Emotion regulation

Three styles of ER were measured. For expressive suppression, an adapted version of Roth et al.'s (2009) Emotion Regulation Inventory was used. It consists of four items, for example "I do not show my negative emotions to others." Through a series of bachelor and master thesis research, the scale showed excellent reliability and a consistent pattern of concurrent, divergent and criterion validity (e.g. Schuit, Schuurman & Janssen, 2019). Cronbach's alpha in this sample was $\alpha = 0.87$. Furthermore, the newly developed STD Emotion Regulation Scale (STD-ERS; pilot version, Brenning et al., 2021) was used to measure both experiential suppression (Six items, e.g. "When I notice unpleasant emotions, I push them away as fast as possible."; Cronbach's $\alpha = 0.84$). and Dysregulation (Five items, e.g. "When I notice unpleasant emotions, I feel overpowered by them."; Cronbach's $\alpha = 0.80$). All items were rated on a 5-point Likert scale ranging from 1 (*Not true at all*) to 5 (*Completely true*).

Plan of analyses

IBM Statistical Package for the Social Sciences (SPSS) Statistics version 26 (IBM Corp, 2019) was used for descriptive statistics of all study variables, independent samples t-tests to check for gender differences in each variable, correlations between the different variables and regression analyses to check again the correlations, while controlling for gender and age. By conducting correlations, we were testing hypothesis 1. To test hypothesis 2 and 3, PROCESS macro for SPSS was used for simple and serial mediation analyses (model 4 and 6 respectively). This procedure permits us to find out direct and indirect effects of the predictor variable (histrionic features) on the criterion variable (depression). Four simple mediation models were run, entering a respective ER strategy or need frustration as the single mediator. Furthermore, three serial mediation models were run entering the respective ER strategy as the first and need frustration as the second mediator. With bootstrapping methods we estimated the indirect effects of the independent variable on the dependent, together with standard errors and 95% confidence

intervals. The indirect effect is considered statistically significant if its 95% confidence interval does not enclose zero (Hayes, 2012). There were no missing data.

Results

Descriptive statistics and preliminary analyses

Descriptive statistics and bivariate correlations are shown in Table 1. Histrionic features were not significantly correlated with any of the other variables. The correlation of histrionic features with experiential suppression, though, was marginally significant (r = .15, p = .05). Depression was significantly positively correlated with expressive suppression, dysregulation and need frustration, the latter correlating significantly positive with expressive suppression and dysregulation, too.

Independent samples t-tests showed gender differences in expressive suppression and experiential suppression. Males suppress more than females the expression (t(164)=3.6, p<.05; Mmale=14.18, SDmale=5.68; Mfemale=10.68, SDfemale=5.72) and the experience (t(164)=2.54, p<.05; Mmale=18.84, SDmale=12.25; Mfemale=14.50, SDfemale=8.97) of their negative emotions. Bivariate correlations were performed to check if there are age differences in each variable. Age correlated significantly positively only with experiential suppression (r=0.162, n=166, p=.03). Given these results, we controlled for age and gender in all of the following analyses.

Correlations between and descriptives of study variables.										
	Mean	SD	1.	2.	3.	4.	5.			
1.Histrionic features	24.37	4.12	-							
2.Depression	16.25	4.62	0.07	-						
3.Need frustration	26.94	7.71	0.04	0.56**	-					
4.Expressive ER	11.74	5.91	0.04	0.17*	0.25**	-				
5.Experiential ER	15.81	10.23	0.15+	0.003	0.04	0.32**	-			
6.Dysregulation	16.78	10.01	0.05	0.34**	0.38**	0.01	-0.06			

Table 1.

Note.

 $p^{+}p = .05; \ *p < .05; \ **p < .01; \ ***p < .001.$

Primary analyses

Contrasting Hypothesis 1, neither correlation (r = 0.07, p = 0.35) nor regression analysis controlling for gender and age ($\beta = .07$, p = .356; $R^2 = .005$) showed a significant relationship between histrionic features and depression, rejecting Hypothesis 1.

Since there is no significant correlation between histrionic features and depression to begin with, it is logical that Hypothesis 2 and 3, about the mediating role of ER and need frustration in this relationship, was also deemed for rejection. Nevertheless, we examined both hypotheses through four simple and three serial mediation models (Table 2). None of them was significant, so hypothesis 2 and 3 were rejected.

Table 2.

Model	Total	Direct	Total Indirect	Indirect 1	Indirect 2	Indirect 3
X-M1a-Y	0.08	0.06	0.01	-	-	-
X-M1b-Y	0.08	0.07	0.00	-	-	-
X-M1c-Y	0.08	0.06	0.01	-	-	-
X-M2-Y	0.08	0.05	0.02	-	-	-
X-M1a-M2-Y	0.08	0.05	0.02	0.00	0.01	0.00
X-M1b-M2-Y	0.08	0.05	0.02	0.00	0.02	0.00
X-M1c-M2-Y	0.08	0.04	0.03	0.00	0.01	0.01

Overview of serial mediation models.

Note.

X = independent variable = histrionic features,

M1 = Mediator 1 = maladaptive emotion regulation: a) expressive suppression, b) experiential suppression, c) dysregulation

M2 = Mediator 2 = need frustration

Y= dependent variable =depression

(None of the coefficients was significant, i.e., all of the Confidence Intervals included the value 0.)

Explorative analyses

Given our lack of relations with HP features, we did a more fine-grained analysis looking deeply into earlier mentioned facets of HPD; attention seeking and seduction. Nowadays, seductiveness is seen as normal and acceptable, so we thought that attention seeking would be the one correlating more strongly with depression, maladaptive ER and need frustration. That is because manipulation for continuous attention can provoke negative emotions to other people, leaving histrionics without the attention they need and the depression that follows this rejection (Hamilton et al., 1986). However, Pearson correlation showed that, in comparison to primary analyses, the only difference was that seduction is significantly correlated with need frustration (r= 0.16, p=0.04), whereas "histrionic features" total was not. Given we did not find more specific relations with depression, we cannot proceed into further analyses.

Another aspect we thought of is that people with high histrionicity use to present themselves in such a way (theatricality) so that the tension in situations they evaluate as stressful is reduced (Renner et al., 2008). That is, histrionics may hide their negative sides, like depressive symptoms, need frustration or maladaptive ER. So, we supposed that high scorers in histrionicity would mask their true feelings, while low scorers would be more truthful and therefore, the correlations in this group would be trustworthy and substantial. In order to explore the possibility of low and high scorers having different results in the other variables, we did a median split based on their scores in the HPD questionnaire. Furthermore, within the 50% "low scorers" and 50% "high scorers", we conducted bivariate correlation analyses between all study variables. The only finding worth mentioning is that in the high scorers group, HP correlated with expressive suppression (r=0.26, p=0.01), whereas this is not true for low scorers or the total sample. Again, this finding alone is not enough to conduct further analyses.

Discussion

Past studies have shown that HP features can lead to negative implications, such as marriage dissatisfaction, cognitive difficulties, like decision-making, and comorbidity with other psychological disorders, like depression (Disney et al., 2012; Kraus & Reynolds, 2001; Shapiro, 1965; van der Wal et al., 2018). In addition, there is a huge gap in research about nonpathological histrionic traits, all the more stressing the importance of studying them in relation to depression, the number one cause of disability worldwide (Renner et al., 2008; World Health Organization, 2020). Moreover, in our study we tried to discover possible explanatory processes underlying the hypothesized relation between HP features and depression. We proposed maladaptive ER and need frustration, both being linked to various instances of psychopathology, such as depression and borderline (Aldao et al., 2016; Ryan & Deci, 2017; van der Kaap-Deeder et al., 2020). We, therefore, hypothesized that there would be a positive association between HP features and depression (Hypothesis 1), which would be mediated by ER (Hypothesis 2). Lastly, we hypothesized that need frustration is then mediating the relationship between ER and depression (Hypothesis 3), thus suggesting a serial mediation model.

Rejecting our main hypothesis, results from correlational and regression analyses showed that histrionic features did not correlate significantly with depression. This is not in line with earlier studies, which show that histrionicity is a risk factor for the development of depression. In an attempt to understand the differences between earlier studies and ours, we observe that the research of van der Wal and colleagues (2018), which found that depression can follow histrionic features, had a longitudinal design, used clinical interviewing and observation of the participant's behavior. Observing histrionic individuals growing up and some of them, developing depression, is valuable information we could not check. Lastly, they gathered their sample from the community, including psychiatric patients, which made it more possible to assess people with dysfunctional personality traits and depression. These differences can be taken into account for future research.

Next to our main hypothesis being rejected, we found HP features unrelated to both need frustration and maladaptive ER, with the exception of a marginally significant positive correlation with experiential suppression. Hence, hypotheses 2 and 3 about the mediating role of ER and need frustration were also rejected, also shown by the fact that none of our seven mediation models was significant.

In order to explore some other possibilities, we investigated the relationship between all study variables and "attention seeking" and "seduction", two categories of "histrionic features". Only seduction correlated with need frustration. This points to Lionells (1986) argument that histrionics use seduction to confront the lack of authentic relating in their lives and cover their interpersonal needs (relatedness).

Lastly, to conduct some further explorative analyses, we thought that histrionics use to act theatrically and present themselves in a positive light. So, probably, people high in histrionicity would try to hide their negative sides, like depression, ER problems and unmet needs (Renner et al., 2008). In contrast, people low in histrionicity would be more trustworthy. Again, we did not find something noteworthy, except for the fact that HP correlated significantly with expressive suppression in the high scorers group. That means that people with more histrionic traits have the tendency to suppress the expression of their negative emotions.

As seen in Table 1, the SD's of histrionic features and depression are lower than the SD's of other variables, restricting the magnitude of possible correlations. This may be due to convenience sampling, in which we expect only few "real" histrionic traits. The absence of the expected results can be explained also by the "mask model of narcissism". As Bakkevig and Karterud (2010) highlight, Histrionic (HPD) and Narcissistic Personality Disorders (NPD) are highly comorbid and share many common traits, like the need for admiration. The researchers even think that HPD is just the "warmer" side of narcissism and is seen more often in women, while NPD in men, thus proposing HPD as a subtype of NPD. The model proposes that grandiosity feelings and the very positive self-view that narcissistic, and by extension, histrionic individuals possess, are considered inauthentic, a mask with which they try to hide their insecurity and low self-esteem. In reality, they yearn for attention to conceal their sense of inadequacy (Kohut, 1996). They want others to cherish them, so they pressure themselves to find ways to feel superior (Sedikides et al., 2019). One of these is to not let anything make them feel threatened or weak by being defensive and hypervigilant (Hardaker et al., 2021). Histrionics specifically, have the tendency to play a role (theatricality) and present themselves in a convenient way, with the hope to reduce tension when things become stressful (Renner, 2008). For example, they might present themselves as completely "healthy" and satisfied to hide possible negative feelings. Therefore, we assume that asking them to answer a questionnaire about depression, problematic ER and need frustration and reveal "ugly" things about themselves, would be perceived as a threat. This feeling would lead them to put their grandiosity mask and to not answer honestly. That means that our results cannot be fully trusted, as we may have missed to spot "hidden" histrionics.

However few, some results and ideas presented above lead to important clinical implications. We have seen that people with histrionic features suppress their emotional experience and expression more than people with fewer or no histrionic features and try to hide their negative sides. Together with their therapist, they can figure out where this emotional suppression comes from, the purposes it serves and how it can be substituted by more adaptive ER styles, like acceptance. They can learn to be open towards their experiences. Acceptance and commitment therapy is based on this idea and could be an option for people with histrionic characteristics (Hayes et al., 1999). Mindfulness, where you focus on and accept your present experiences without judging them, could also have great benefits for them (Kabat-Zinn, J, 1994).

Strengths, future challenges and limitations

The study brought attention to personality features like attention seeking, seduction and theatricality, which are often encountered in people, but are poorly researched. We, thus, tried to open a dialogue about the neglected topic of HPD and its implications. It included a diverse sample, with different ages and cultures and several analyses to dig deep into the concepts. As for maladaptive ER and need frustration, to our knowledge, this was the first research investigating their relationship to HPD. However, there were some limitations, too. Firstly, it was a cross-sectional design, so no conclusions about causality and direction could be made. Another setback is that women were overrepresented (69.9%) and the majority of the participants were young educated people and specifically, University students. This can restrict our findings' generalizability.

Future research can include a more diverse sample regarding age, culture and gender, as well as a longitudinal design to check which factor comes first, and different measures to have more reliable information (e.g. clinical interview, observation). Additionally, in order to increase the variability, we could include other samples, such as clinical samples. Nevertheless, the most important thing that researchers might consider is the possible tendency of people high in histrionicity to conceal the truth. For example, they could include a check item that says: "I am filling in the truth" or "In this question, I should answer b". This way, we hope that they will let their guard down and be more aware of filling in the questionnaire truthfully. An even better solution for this "mask" problem, though, is to use a measure of honesty, like the L scale in the MMPI-2 (Butcher et al., 2001). That could be a scale exploring how honest they normally are, if they would lie to get what they want or a scale questioning how important social desirability is for them, because people that want to be perceived as desirable tend to present themselves positively (e.g. Marlowe–Crowne Social Desirability Scale: MCSDS; Crowne & Marlowe, 1960).

Summary and conclusion

The present study was one of the few to investigate histrionic features in the general population, while it was the only so far relating HPD to concepts of SDT. Earlier findings about the association between HPD and depression were not proven in this study and, by extension, neither were the underlying mechanisms. We delved into the study's limitations and possible defense mechanisms which could be related to histrionic traits. We thought that people high in histrionicity did not answer honestly to our questionnaire and thus, concealed information that would give us different results in order to protect themselves. However, it would be useful for clinicians to know the mechanisms behind depression in histrionics and then find ways to make their lives easier. That is why we propose further research with different methods, preferably observations, interviews, inclusion of clinical sample and scales checking for honesty or social desirability.

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Appendix

Information letter

Dear Participant, welcome!

Thank you so much for considering participation in this research!

I invite you to take part in my research study, as part of the MSc in Clinical Psychology for Utrecht University. Findings will help to understand whether the relationship between some personality characteristics and depression can be explained by the way we regulate our emotions and the frustration of our feelings of competence, autonomy and relatedness.

Do I have to take part?

Your participation is entirely voluntary, and if you do choose to take part in it, you can withdraw at any time. Even once the research has started, you may stop, for any reason, without having to explain, and without further consequences. The data that was collected up to that point may be used, unless you explicitly state otherwise. To be able to participate, you need to be 18+ age.

If I do decide to take part what will I be asked to do?

If you do decide to take part, you will be asked to complete an anonymous questionnaire. It includes questions about your demographic data (age, gender, education), personality traits, emotion regulation (e.g. how you deal with negative emotion), need frustration (e.g. feeling pressured, incompetent or alone) and depressive symptoms (e.g. experiencing negative mood). It will take approximately 15 minutes.

Possible advantages or disadvantages

Overall we consider filling in these questionnaires not to be burdensome or emotionally stressful. There are however some items which could evoke unpleasant feelings. You will, for instance, be asked if you are feeling down, depressed, or hopeless and if you have thoughts that you would be better off dead, or of hurting yourself in some way. If these themes cause you significant worry, we invite you to contact the research team (see below), your general practitioner or www.deluisterlijn.nl (for dutch) or https://www.iasp.info/resources/Crisis_Centres/Europe/ (to find a line for your country) and have an (anonymous) telephone or chat.

What will happen to my data?

The information you give will be used for a research report that could eventually lead to a publication of a scientific article. All data collected during this research will be anonymous. No questions will be asked to identify your details (e.g. name and contact details). This survey is private, only the researcher and research team will be able to view the data. Research is conducted from the Netherlands, and the European General Data Protection Regulation (GDPR) protects your data privacy.

If you have any questions, please feel free to ask now, or at any time throughout the study. Our contact details are provided below.

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For the formal complaints about this study, please contact the complaints officer:

Klachtenfunctionaris-fetcsocwet@uu.nl