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From Daydreaming to Dissociation: An Exploratory Study on the Role of Thought Suppression and Dissociation in Fantasy Prone Individuals

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Fantasy proneness (FP) is a personality trait associated with dissociation and psychopathology; however, it is also helpful in creative pursuits and part of normative human experiences. This study examined the role of thought suppression factors in the relationship between FP, measured by the Creative Experiences Questionnaire (CEQ), and dissociative experiences, measured by the Dissociative Experiences Scale II (DES-II), in a nonclinical sample ($N = 187$). Results from a principal component analysis (PCA) supported a two-factor structure of the White Bear Suppression Inventory (WBSI), consisting of thought intrusion and suppression effort. Results from a parallel mediation analysis indicated that thought intrusion mediated the relationship between FP and dissociation, while suppression effort did not. Furthermore, the mediation effect of thought intrusion was particularly strong for the relationship between FP and the DES-Taxon (DES-T), a subscale that captures potential pathological dissociative experiences. Our findings provide insight into a mechanism that may connect the adaptive use of fantasy to the development of maladaptive dissociative behaviors.

Keywords: Dissociation, emotion regulation, fantasy, thought suppression, cognitive processes

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It is estimated that about half of human thought can be characterized as daydreaming (Killingsworth & Gilbert, 2010). In fact, a wandering mind is a normal and benign result of the default mode network when the brain is at rest (Mason et al., 2007). While mind-wandering is a familiar concept to many, some individuals experience this phenomenon more frequently, or are "fantasy prone." Originally coined as the "fantasy prone personality" by Wilson and Barber (1983), fantasy proneness (FP) is now defined as a personality trait characterized by the tendency to engage in fantasy and imaginary activity more often and with greater vividness than the average person (Merckelbach et al., 2001). These individuals spent much time fantasizing and often report vivid childhood memories, strong bodily sensations accompanying fantasy, and out-of-body experiences. FP is best understood as a dimensional construct varying in terms of the extent to which fantasizing occurs and produces interference in awareness and daily life activities.

Fantasy engagement is often used to relieve boredom and induce positive emotions (Cuper & Lynch, 2009), as well as plan, simulate, and

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creatively problem solve (Mooneyham & Schooler, 2013). Indeed, imaginary involvement is adaptive for artists (Thomson et al., 2009) and other creative pursuits (Dunn et al., 2004; Lack et al., 2003). In addition, FP has been linked to effective emotion regulation techniques, such as positive refocusing (Bacon & Charlesford, 2018). Despite the innocuous, and, at times, positive outcomes of having an active imagination, FP has frequently been associated with pathology, including dissociative, depressive, and personality disorders (Giesbrecht, Merckelbach, & Geraerts, 2007; Giesbrecht, Merckelbach, Kater, et al., 2007; Merckelbach et al., 2020), and high levels of neuroticism (Sánchez-Bernardos et al., 2015).

The distinction between adaptive and maladaptive FP might be best explained by considering the role of dissociation. Most research has centered on the premise that dissociation is a defense mechanism employed to protect an individual from overwhelming traumatic experiences and can be pathological under certain conditions. While pathological dissociation often does stem from trauma, milder experiences of dissociation are a common occurrence in the general population (Ross et al., 1990), suggesting multiple developmental pathways. As a result, processes of normative dissociation in daily life have gained attention. For example, absorption, which refers to the process of becoming deeply immersed in an inner experience while neglecting other stimuli in the environment, is a common dissociative experience and a core mechanism of FP (Levin & Spei, 2004). Specifically, daydreaming, fantasy, and flow states, each characterized by intense absorption, are considered normative dissociative states (Butler, 2006; Dalenberg & Paulson, 2009). Given this, it is not surprising that absorption has consistently been correlated with FP (Merckelbach et al., 2021) and even been used as an index of FP (Näring & Nijenhuis, 2005). In Butler's (2006) discussion of normative dissociation, she describes fantasies as an absorption process of intentionally engaging in an internal world with the purpose of self-amusement, pleasure, distraction, or escape. Clearly, absorption and FP are highly interrelated.

Intense absorption via engaging in a fantasy world is often innocuous, but can have negative outcomes. For example, maladaptive daydreaming (MD) has recently gained attention as a form of extensive fantasy engagement that often replaces human interaction and interferes with functioning (Somer et al., 2016). While MD has some overlap with dissociation, the experience of dissociation is not necessarily why this phenomenon of intense absorption is problematic. Rather, the compulsive quality and functional interference of MD is most concerning. Ostensibly, the relationship between absorption via fantasy engagement, dissociation, and the processes actually contributing to impairment is nuanced.

The Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986), a widely used measure of dissociation, has attempted to distinguish normative dissociation, such as absorption, from pathological dissociation, such as amnesia and depersonalization (Dalenberg & Paulson, 2009). While it was developed with pathological dissociation in mind, it has been broadly used in the study of dissociation (Černis et al., 2018). This has led to concerns that research using this measure can be biased by floor effects and skew (Wright & Loftus, 1999), as well as providing limited opportunity to examine components of dissociation (Kennedy et al., 2004). Other measures have been developed to address some of these issues, such as the Dissociative Experiences Scale-Comparison (Wright & Loftus, 1999), Scales of Dissociative Activities (Mayer & Farmer, 2003), and Wessex Dissociation Scale (Kennedy et al., 2004). However, to this point, none of these other measures have been used with nearly the frequency as the DES. Therefore, we chose to use the DES in this exploratory study to allow comparison with the current literature.

Using the DES, high levels of absorption are present in both nonclinical and clinical samples (Lyssenko et al., 2018). Previous research has also found a relationship between absorption and the DES-Taxon (DES-T; Levin & Spei, 2004), a scale constructed of a subset of DES items used to identify individuals who likely meet diagnostic criteria for a dissociative disorder (Waller et al., 1996). It appears that while those who experience pathological dissociation score high in absorption, the reverse is not true; high absorption is not always pathological. Butler (2006) argues for a hierarchical approach in which normative dissociative experiences represent a foundation from which pathological dissociative states may arise. Absorption may be key to this process. If FP represents an individual's capacity for absorption, it may likely underpin a normative process of dissociation, and possibly predispose an individual to be more susceptible to pathological dissociation.

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Indeed, FP, such as dissociation, is not unidimensional, which partially explains its inconsistent connection to symptoms of psychological distress (e.g., anxiety, depression, and somatization) and mental health service utilization (Klinger et al., 2009). However, the use of specific cognitive and behavioral coping strategies in conjunction with FP can also account for its relationship with psychological distress. Maladaptive strategies, such as self-blame, rumination, and catastrophizing, have been found to mediate the relationship between FP and psychological distress (anxiety, depression, and stress) while positive refocusing ameliorates it (Bacon & Charlesford, 2018). Thought suppression, which is a known maladaptive coping strategy because of its paradoxical increase in thought intrusions (Abramowitz et al., 2001), could similarly account for the relationship between FP and a different form of psychological distress, specifically, problematic experiences of dissociation.

The White Bear Suppression Inventory (WBSI; Wegner & Zanakos, 1994), originally developed as a one-factor measure of the tendency to suppress thoughts, has since been found to encompass two factors (Rassin, 2003; Schmidt et al., 2009), namely, thought intrusion and suppression efforts. Intrusive thoughts are persistent and often distressing to the individual and are indicated in several clinical disorders. Suppression efforts, on the other hand, are conscious attempts to expel a thought from awareness. Thought intrusion and suppression efforts, while correlated, have been found to have diverging impacts on various conditions of psychological distress (Rassin, 2003), such that thought intrusion is more frequently related to pathology compared to suppression efforts. When experiencing intrusive thoughts after failed suppression attempts, those with trait FP may employ imagination to enhance disconnection from reality to escape the intrusive thoughts, resulting in heightened experiences of pathological dissociation.

The Present Study

Given that FP appears to be involved in both normative and pathological experiences of dissociation, the present exploratory investigation aimed to identify the mechanism of thought suppression contributing to this distinction. We used two factors of the WBSI to examine the mediating role of thought intrusion and suppression efforts in the relationship between FP and maladaptive dissociation as measured by the DES-T. We hypothesized that the intrusion factor would mediate the relationship between FP and the DES-T.

Method

Participants

Participants were recruited online via Amazon's Mechanical Turk (MTurk). Eligible participants were over 18 years, English-speaking, U.S. citizens, with 12+ years of education or equivalent, and had an Amazon Masters qualification. Participants were paid U.S. $10 for successful completion of the study. This study was approved by the Institutional Review Board of Suffolk University (1404645-3). Two hundred and fourteen participants consented to participate in the study. Twenty-three participants withdrew their consent before completing the study. Three people were excluded due to failing an attention check, and one person was excluded due to being an outlier as determined by examining Mahalanobis distances within the study variables, yielding a final sample of 187. See Table 1 for a full description of participant characteristics.

Measures

Fantasy Proneness

FP was measured using the Creative Experiences Questionnaire (CEQ; Merckelbach et al., 2001), a 25-item self-report questionnaire. Total scores range from 0 to 25 with higher scores indicating higher levels of FP. An example item includes, "I spend more than half the day (daytime) fantasizing or daydreaming."

Thought Suppression

Thought suppression was measured using the WBSI (Wegner & Zanakos, 1994), a 15-item self-report questionnaire. Total scores range from 15 to 75 with higher scores indicating greater tendencies to suppress thoughts. Extracted factors from a principal component analysis (PCA) measured thought intrusion and suppression efforts. WBSI items can be found in Table 2.

Table 1
Participant Demographics

Variable	*N*	%	*M*	*SD*
Age	187	100	41.10	10.81
Gender				
Female	104	55.6		
Male	82	43.9		
Other	1	0.5		
Race/ethnicity				
White (non-Hispanic/Latino)	153	81.8		
Black/African American	15	8.0		
Hispanic/Latino	10	5.3		
Asian/Pacific Islander	7	3.7		
Other	2	1.1		
Highest education level				
High school diploma	31	16.6		
Some college	71	38.0		
4-year college degree	67	35.8		
Graduate degree	18	9.6		

Dissociation

Dissociation was measured using the second version of the Dissociative Experiences Scale II (DES-II; Carlson & Putnam, 1993), a 28-item self-report measure. Participants were asked to indicate the percentage of the time, from 0% (*never*) to 100% (*always*), and they have had each experience in their daily life. Total scores ranged from 0 to 100 with higher scores indicating higher levels of dissociation. An example item includes, "Some people find that they sometimes sit staring off into space, thinking of nothing, and are not aware of the passage of time."

Along with the total score, the DES-II produces a taxon scale (DES-T), which is the average of eight items that are most associated with the presence of dissociative disorders (Waller & Ross, 1997). The DES-T was used as a continuous variable, where greater scores indicated more pathological experiences of dissociation. An example item includes, "Some people have the experience of feeling that other people, objects, and the world around them are not real." The use of the DES-T has been controversial in regard to its specificity and ability to accurately differentiate those with and without a dissociative disorder. Using the DES-T as a continuous variable rather than a grouping tool based on its probability estimates, we aimed to avoid making claims about the presence of a dissociative disorder. Rather, in our study, we used the DES-T as an index of more problematic experiences of dissociation.

Attention Check

The Attention Network Test (ANT; Fan et al., 2002) is a behavioral task designed to

Table 2
Results of Principal Component Analysis (PCA) Resulting in Two Factors

WBSI item	Factor 1: Intrusion	Factor 2: Suppression effort
Sometimes my mind races so fast I wish I could stop it (7)	**0.90**	−0.16
There are things that I try not to think about (11)	**0.85**	−0.07
I have thoughts that I cannot stop (3)	**0.83**	0.06
Sometimes I wonder why I have the thoughts I do (2)	**0.77**	0.00
My thoughts frequently return to one idea (5)	**0.77**	−0.07
There are images that come to mind that I cannot erase (4)	**0.65**	0.26
There are thoughts that keep jumping into my head (9)	**0.65**	0.28
There are many thoughts that I have that I don't tell anyone (15)	**0.59**	0.26
Sometimes I really wish I could stop thinking (12)	**0.59**	0.30
There are things I prefer not to think about (1)	−0.05	**0.91**
Sometimes I stay busy just to keep thoughts from intruding on my mind (10)	0.13	**0.84**
I often do things to distract myself from my thoughts (13)	0.26	**0.72**
I always try to put problems out of my mind (8)	−0.04	**0.60**

Note. WBSI = white bear suppression inventory. Factor loadings of >.35 were considered significant (in bold).

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measure the efficiency of attentional networks using cue–target reactions and a flanker task. In the present study, the overall percent of correct reactions was used as an attention check for validity purposes. Individuals with >10% error rate were excluded from the study.

Procedure

Participants completed study measures over one timepoint on the Inquisit online platform. Once a participant accepted the Human Intelligence Task (HIT) on MTurk, an electronic consent form and contact information for a study team representative were provided. After consenting, data were collected for all measures during one session.

Statistical Analyses

Analyses were carried out in IBM SPSS, Version 25 (IBM Corp, 2017). All variables were inspected for parametric assumptions and internal consistency. Linear regressions, analyses of variance (ANOVA), and independent samples *t* tests were peformed to examine the influence of demographic variables on the mediator or outcome variables. To confirm the two-factor strucutre of the WBSI, we conducted a PCA with direct oblimin rotation. No restrictions on the number of extracted factors were set a priori. Factors with eigenvalues >1 were chosen for further analysis. The extracted factors were included in a Pearson correlation matrix to examine relationships among study variables.

Finally, extracted factors were used as mediators in a parallel mediation analysis using the PROCESS macro developed by Hayes (2013) for SPSS. This method uses regression path analyses to estimate direct and indirect effects of a predicator variable on an outcome using 95% bootstrap confidence intervals estimated based on 5,000 random resamples. Point estimates are considered significant if the 95% confidence interval does not contain zero. This approach was chosen over the causal steps method due to its ability to limit Type 1 error while maximizing power (Biesanz et al., 2010) and general consensus among statisticians that the bootstrapped percentile confidence interval method performs best overall (Hayes & Scharkow, 2013).

Results

PCA of the WBSI

At the initial stage, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .93, above the recommended value of .6, and the Bartlett's test of sphericity was significant, $\chi^2(105) = 2094.68$, $p < .001$. A PCA with direct Oblimin rotation yielded two factors with eigenvalues >1.0 (8.6 and 1.2, respectively). Two items (Items 6 and 14) had cross loadings of above .30 on the other factor and, therefore, were eliminated. Factor loadings of the final 13 items are displayed in Table 2. Factor 1 was labeled as Intrusion, as it contained items relating to the intrusive nature of unwanted thoughts. The Intrusion factor comprised nine items explaining 56.3% of the variance with factor loadings from .59 to .90. Factor 2 was labeled Suppression Efforts, as it contained items related to the intentional effort to avoid thinking certain thoughts. The Suppression Efforts factor comprised four items explaining an additional 9.5% of the variance with factor loadings from .60 to .91. The two-factor solution accounted for 65.8% of the variance. The correlation between the two factors was 0.57.

Correlations Among Study Variables

Table 3 presents the correlation coefficients, mean values, standard deviations, and Cronbach's α for all continuous study variables. The variables of interest were all correlated at a statistically significant level. Multicollinearity was assessed with Variance Inflation Factor (VIF). Cronbach's alphas indicated good-to-excellent internal consistency on all study measures.

Baseline Demographic Variables Predicting Outcomes

There were no significant differences in either thought suppression factor or dissociation based on gender or race. A simple regression revealed age to be a significant predictor of dissociation, $F(1,180) = 8.13$, $p = .005$, $R^2 = .04$. This is consistent with the literature (Walker et al., 1996), and age was included as a covariate in the mediation analysis. In addition, education was a significant predictor of both intrusion and suppression efforts, such that those without a college

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Table 3
Means, Standard Deviations, Cronbach's α, and Pearson's Correlations for All Continuous Variables in the Study

Variable	*M*	*SD*	α	1	2	3	4
1. CEQ	6.52	4.37	.82	—			
2. WBSI-I	25.66	8.93	.92	.37**	—		
3. WBSI-S	14.08	3.60	.84	.28**	.56**	—	
4. DES-II	17.24	13.20	.94	.35**	.52**	.24**	—
5. DES-T	8.72	12.00	.86	.22**	.44**	.16*	.88**

Note. $N = 187$. CEQ = creative experiences questionnaire; WBSI-I = white bear suppression inventory-intrusion factor; WBSI-S = WBSI-suppression effort factor; DES-II = dissociative experiences scale II; DES-T = DES-Taxon.
* $p < .05$. ** $p < .01$.

degree ($M = 26.97$, $SD = 8.78$ and $M = 14.81$, $SD = 3.35$, respectively) scored higher than those with a college degree ($M = 24.08$, $SD = 8.91$), $t(185) = 2.23$, $p = .027$ and $M = 13.21$, $SD = 3.72$, $t(185) = 3.08$, $p = .003$, respectively. A dichotomous variable of education (0 = *no bachelor's degree*, 1 = *bachelor's degree and higher*) was also included as a covariate in the mediation analyses.

Testing Direct and Indirect Effects

A parallel mediation model revealed a significant indirect effect of thought intrusion on the relationship between the FP and the DES-T. The total indirect effect, standard error, 95% confidence interval (95% CI), and completely standardized indirect effect are reported in Table 4. There was no significant effect of suppression efforts on the DES-T. When controlling for both mediators, the direct effect of FP on the DES-T was no longer significant, indicating a full mediation. See Figure 1 for a depiction of all path coefficients. The ratio of the indirect effect to the total effect ($P_M = .74$) indicated that thought intrusion mediated 74.3% of the total effect of FP on the DES-T.

A second parallel mediation model was conducted to examine if the indirect effect found on the DES-T differed for the total DES-II score. Again, there was a significant indirect effect of thought intrusion on the total DES-II score (see Table 4). However, when controlling for both mediators, the direct effect of FP on the total DES score was still significant, indicating partial mediation. See Figure 2 for a depiction of all path coefficients. The ratio of the indirect effect to the total effect ($P_M = .48$) indicated that thought intrusion mediated 48.3% of the total effect of FP on the total DES-II score.

Discussion

The present study aimed to explore the role of thought suppression in the relationship between fantasy engagement and the experience of normative and maladaptive dissociation. Replicating prior studies examining the anatomy of the WBSI (Rassin, 2003; Schmidt et al., 2009), we found a two-factor structure composed of thought

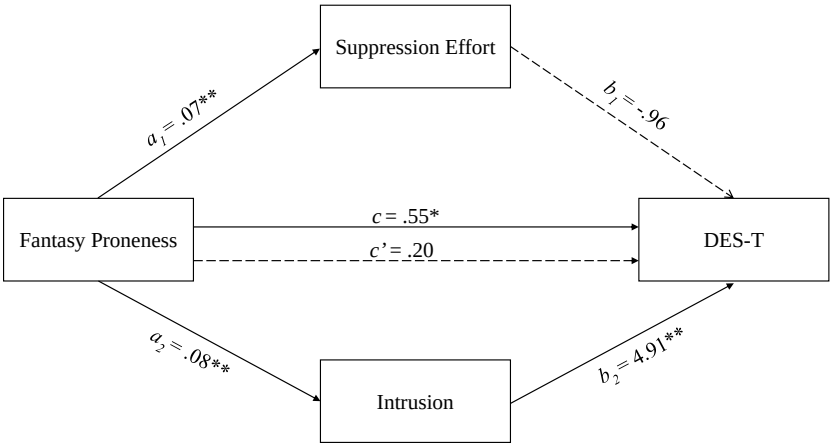
Table 4
Indirect Effects on the Association of Fantasy Proneness and Dissociation

Predictor	Mediator	Outcome	Indirect effect			
			ab	*SE*	ab_{cs}	95% CI
FP	Suppression effort	DES-T	−0.06	0.05	−0.02	[−0.18, 0.03]
	Intrusion		0.41	0.11	0.15	[0.21, 0.65]
FP	Suppression effort	DES-II	−0.06	0.05	−0.02	[−0.18, 0.04]
	Intrusion		0.49	0.13	0.16	[0.26, 0.76]

Note. Models controlled for age and education level of participant. *ab* = unstandardized indirect effect; *SE* = standard error; ab_{cs} = completely standardized indirect effect; 95% CI = 95% confidence interval; FP = fantasy proneness; DES-II = dissociative experiences scale II; DES-T = DES-Taxon.

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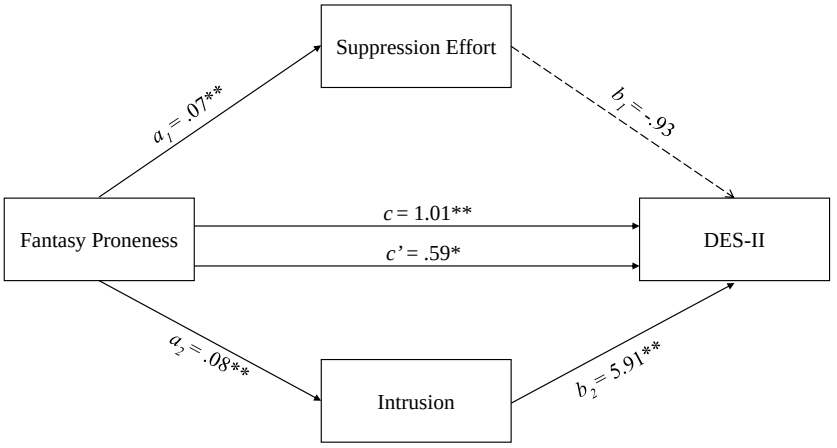
Figure 1
Parallel Mediation Model With Unstandardized Coefficients



Note. The model controlled for age and education level. a_n = effect of FP on thought suppression dimensions. b_n = effect of thought suppression dimensions on Dissociative Experiences Scale Taxon (DES-T). c = total effect of FP on DES-T, without accounting for mediators. c' = direct effect of FP on DES-T once mediators have been included in the model. Solid lines indicate significant effects. FP = fantasy proneness.
$^{*}p < .05$. $^{**}p < .01$.

intrusion and suppression efforts. Using these factors, we found that thought intrusion fully mediated the relationship between FP and pathological dissociation, where suppression efforts did not. This finding supports prior research identifying thought intrusion to be the strongest of the WBSI factors at predicting psychological distress (Schmidt et al., 2009).

Figure 2
Parallel Mediation Model With Unstandardized Coefficients



Note. The model controlled for age and education level. a_n = effect of FP on thought suppression dimensions. b_n = effect of thought suppression dimensions on Dissociative Experiences Scale (DES-II). c = total effect of FP on DES-II, without accounting for mediators. c' = direct effect of FP on DES-II once mediators have been included in the model. Solid lines indicate significant effects. FP = fantasy proneness.
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The difference between thought intrusion and suppression efforts is nuanced. Suppression efforts can be described as an attempt to control when and how certain thoughts are experienced. In contrast, thought intrusion can be described as the outcome of thought control. In other words, strategies used to avoid unwanted thoughts (suppression efforts) can vary, but their effect with chronic use leads to increased form and frequency of the unwanted thoughts (thought intrusions). It should be noted that high frequency of thought intrusion is not necessarily synonymous with a high level of suppression efforts. As Höping and de Jong-Meyer (2003) describe, intrusive thoughts could be a result of low suppression effort, either by choice or by breakdown of suppression efforts. For example, Ryckman and Lambert (2015) found that individuals who self-report unsuccessful suppression attempts were more ruminative and experienced more thought intrusions compared to those who self-report success with suppression attempts. In this example, the ability to successfully suppress thoughts does not necessarily correspond to the amount of effort put in to do so.

Given the distinction between suppression efforts and thought intrusion, our results indicate that thought intrusions have a larger role in FP that is related to more problematic experiences of dissociation. An explanation for this finding is that fantasies themselves are experienced as intrusive. While the fantasy prone individual will describe daydreams as a source of comfort, they also can experience them as intrusive in frequency and uncontrollability (Bigelsen & Schupak, 2011). Spontaneous, as opposed to deliberate, mind-wandering has been associated with appraisal of thoughts being unacceptable (Seli et al., 2017), indicating an intrusive nature. Uncontrollable mind-wandering, similar to spontaneous immersion into fantasy, has been conceptualized as a failure of executive control, permitting off-task intrusions (Kane & McVay, 2012). Inhibitory control impairments have been linked to both the experience of intrusive thoughts (Bomyea & Amir, 2011; Brewin & Smart, 2005; Verwoerd et al., 2011), FP (Giesbrecht, Merckelbach, Kater, et al., 2007; Merckelbach et al., 1999), and dissociative amnesia and pathological dissociation (Giesbrecht et al., 2004). Therefore, cognitive lapses in daily life may contribute to spontaneous and intrusive shifts into fantasy, resulting in dissociative experiences.

Our findings also contribute to the theoretical understanding of FP as a continuous dimension of normative-to-pathological experiences and how defensive responses contribute to the negative impacts of the fantasy engagement. Whether fantasy is the initial tool or the initial problem, the experience of intrusive thoughts in the context of FP appears to drive the relationship with maladaptive dissociative behavior. In a normative process of absorption, attention is focused on one stimulus, blocking other aspects of awareness resulting in poorly integrated material. Conversely, in more problematic occurrences of absorption, such as pathological dissociative episodes, the unwanted material is fully encoded, but actively blocked in a defensive process of emotional avoidance (Oathes & Ray, 2008). The fantasy prone individual who is experiencing intrusive thought content may shift into maladaptive uses of dissociation as an avoidant thought regulation strategy to evade aversive cognitive activity. Chronic use of this strategy may facilitate more detachment from the present moment, increasing experiences of dissociation.

Results from the follow-up analysis revealed an indirect effect of thought intrusion on the relationship between FP and broad dissociative experience, as measured by total DES-II score. This relationship was partially mediated, indicating that FP contributes to the experience of dissociation independent of thought intrusion. The total DES-II score, relative to DES-T, captures pathological and normative dissociation. Therefore, these results are expected because of greater variability in the total DES-II scale. Furthermore, the mediation was stronger in the first model, supporting our main hypothesis that thought intrusion is a key influence on the relationship between FP and maladaptive dissociation.

Clinical Implications

The present study was conducted in a nonclinical sample and did not collect trauma history, a common precursor to clinical dissociation, and the mean level of dissociation in this sample was lower than recommended clinical cutoffs for post-traumatic stress disorder (PTSD) and dissociative disorders (Carlson & Putnam, 1993). Therefore, the effects observed in the present study represent relatively mild experiences of dissociation. Nevertheless, clinical implications

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can be extrapolated and applied based on the mechanisms involved. The most efficacious treatment focus for dissociative behaviors in the fantasy-prone individual may not be to diminish engagement in fantasy. Interventions for fantasy-prone individuals that dissociate may likely be more successful if they address thought intrusion.

Limitations and Future Directions

This study has limitations worth noting. As mentioned above, our community sample produced low scores on variables of interest in this study. Therefore, future studies should similarly examine the mechanistic property of thought intrusion in samples who are more fantasy prone, such as though who identify as maladaptive daydreamers and those who dissociate. In addition, research using the CEQ would benefit from a deeper understanding of the factor structure of the measure. Some researchers have supported a one-dimensional structure of FP (Merckelbach et al., 2001), while others have found a two- (Sánchez-Bernardos et al., 2015) or three- (Sánchez-Bernardos & Avia, 2004) factor structure. It may be that specific components of FP are more relevant in the development of dissociation. For example, fantasy to escape may have a stronger effect on dissociation compared to imaginativeness and enjoyment of make-believe activities.

Given the use of the DES-II and its development as a tool to measure clinical dissociation, it is possible to conclude that our results are due to a small group of outliers. We looked closely at our distributions to ensure that they were not bimodal, which they were not. The DES-II distributions were positively skewed, which is expected given the phenomenon being measured. Given these factors and the exploratory nature of our study, we feel comfortable concluding that the results are not due to a small group of individuals with outlying DES-II scores. However, it is an area to be explored more fully in future work, particularly through using multiple measures of dissociation.

While the results of our study suggest that an indirect path between FP and maladaptive dissociation through thought intrusion exists, we know little about moderators of this relationship. For whom is this relationship the strongest? Also, what maintains engagement in fantasy as a beneficial trait instead of precursor to dissociation? Which emotion regulation strategies also mediate this relationship? For example, FP may lend itself to cognitive reappraisal, considered an adaptive emotion regulation strategy. Finally, the sample in this study consisted of mostly white, highly educated individuals, which is consistent with research focused on the demographics of MTurk users (Walters et al., 2018). This raises concern about the generalizability for our results, as well as other studies using MTurk.

Conclusions

This study is the first to examine the role of thought intrusion and suppression as mediators between FP and dissociation. Our results indicate that thought intrusion mediates this relationship, while suppression efforts do not. Furthermore, the mediation is particularly strong for the relationship between FP and the DES-II Taxon, a subscale that captures more pathological dissociative experiences. These results provide insight into the mechanisms that connect the adaptive use of fantasy to the development of maladaptive dissociative behaviors.

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