

The Effect of Emotion Regulation Competency on Maladaptive Daydreaming among Young Adults; Mediating Role of Psychological Flexibility

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Abstract

Young adulthood is a transitional phase characterised by various personal, social, and academic challenges. During this period, skills such as Emotion Regulation Competency (ERC) and Psychological Flexibility (PF) are crucial for addressing transitional challenges. Lack of these skills raises the vulnerability to mental health challenges, including maladaptive behaviours like Maladaptive Daydreaming (MD). This study aims to examine the effect of ERC (across both negative and positive emotions) on MD, with PF mediating this relationship. Methods: Data were collected from 260 young adults (130 men, 130 women). Participants completed self-report measures, including the Perth Emotion Regulation Competency Inventory (PERCI), the Maladaptive Daydreaming Scale (MDS-16), and the Acceptance and Action Questionnaire (AAQ-II), to assess ERC, MD, and PF, respectively. The collected data was analysed through SPSS. Results indicated significant associations among difficulties in emotion regulation, MD, and PF with poor ERC, resulting in higher MD and reduced PF. Additionally, mediation analyses showed that PF significantly mediates the effects of poor ERC on MD. Moreover, 64.23% of the participants were identified as maladaptive daydreamers due to experiencing MD at a significant level, suggesting a high prevalence of MD among young adults. Conclusion: Interventions aimed at enhancing emotion regulation skills and psychological flexibility can help to reduce maladaptive daydreaming and promote better mental health outcomes in young adults.

Keywords: Emotion Regulation Competency, Maladaptive Daydreaming, Psychological Flexibility, Young Adults.

Introduction

Young adulthood is a developmental stage characterised by substantial social, personal, academic, and psychological transitions (Wood et al., 2018). Transitional challenges of young adulthood include evolving personal identities, rapid change, academic demands, and social expectations that often lead to elevated stress levels and raise the vulnerability to mental health challenges (Auerbach et al., 2018; Macleod & Brownlie, 2014). Studies suggest that nearly 48% of young adults report experiencing mental health symptoms, which underscores the high prevalence of psychological difficulties in this population (Adams et al., 2022). Considering this, it becomes a global priority to address mental health concerns within this population, so we centred this study on young adults. Individuals require certain competencies, such as the Emotion Regulation

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Competency (ERC) and Psychological Flexibility (PF), to address the challenges of young adulthood.

ERC is the ability of individuals to understand and modulate their emotional responses constructively rather than relying on maladaptive coping strategies. It describes how emotional responses are controlled or managed in accordance with objectives or circumstances (Gross, 2015). This may entail trying to reduce, sustain, or even enhance emotions (Gross, 2015). Among young adults, ERC is highly significant, as it helps them cope with transitional challenges adaptively and enables them to demonstrate greater resilience and better coping strategies (Auerbach et al., 2018; Gross, 2015). It predicts later mental health status, as it plays a vital role in maintaining overall wellbeing by helping individuals respond to their emotions effectively (Côté et al., 2010; Gross, 2015). Whereas, poor ERC leads to adverse mental health outcomes, including maladaptive behaviours, psychopathological symptoms like stress and anxiety (Novick-Kline et al., 2005), emotional maladjustment (Berking et al., 2008), and negative social interactions, etc. (Côté et al., 2010). Poor ERC is associated with greater difficulty regulating emotions, and vice versa (Preece et al., 2018).

Similarly, PF is the ability to fully experience the present moment, including unpleasant thoughts and feelings, while maintaining clarity about personal values and committing to value-driven actions (Hayes et al., 2006; Kashdan & Rottenberg, 2010). Higher PF enables individuals to engage with their experiences in a meaningful way and to accept their emotional challenges without suppressing or avoiding them, thereby reducing their reliance on avoidance-based coping strategies. When the skills like ERC and PF are underdeveloped or are not fully functional, young adults become more prone to psychological difficulties and mental health concerns (Berking et al., 2008; Bond et al., 2013; Hayes et al., 2006), and one such problem that has recently been gaining considerable attention by researchers as well as clinicians is MD.

MD was first identified by Somer (2002), who defined it as a condition that involves a strong urge to engage in excessive and immersive daydreaming that interferes with functioning and/or causes distress. Daydreaming is a usual cognitive phenomenon involving a temporary disconnection from reality; however, when it progresses into a counterproductive state and starts to affect daily life and emotional balance in negative ways, it becomes MD (Somer et al., 2016a; West & Somer, 2020). It may be used as a stress-relief strategy that temporarily calms the individual by providing comfort through escape or avoidance of distressing emotions (Nowacki & Pyszkowska, 2024). Studies have linked it to functional and emotional impairments, such as social isolation (Somer et al., 2016b), avoidant coping, frustration intolerance (Nowacki & Pyszkowska, 2024), impaired sleep, and poor academic performance (Ögüt, 2024; Soffer-Dudek & Somer, 2018). Additionally, studies have also found its clinical associations with dissociative disorders, OCD, ADHD, anxiety and depressive disorders (Somer et al., 2017) and other psychopathological symptoms. Given these consequences, it is important to examine the psychological mechanisms underlying MD.

Studies have suggested a strong association between MD and difficulties in emotion regulation, emphasising that poor ERC may lead individuals to escape distress via immersive daydreaming (Greene et al., 2020; Sándor et al., 2023; Thomson & Jaque, 2025), supporting its role as one of the psychological mechanisms underlying MD. However, the pathway from ERC to MD may not be straightforward and warrants an in-depth examination of the cause-and-effect relationships between these constructs. Understanding how difficulties in emotion regulation translate into maladaptive coping strategies like MD requires considering the role of underlying psychological processes that shape this relationship.

PF is a key predictor of wellbeing, emotional resilience, and reduced psychopathology, especially when combined with effective emotion regulation (Hayes et al., 2006). Lower PF (also termed as psychological inflexibility/experiential avoidance) is associated with maladaptive emotion regulation and psychological difficulties (Mousavi et al., 2016). It protects against psychopathology and emotional distress and mediates the effects of emotion regulation difficulties (Borjali et al., 2016), leading to better mental health outcomes. This positions PF as a potential explanatory mechanism in the ERC – MD relationship. Considering these facts, the present study aims to examine the relationship between ERC and MD among young adults, with an emphasis on PF as a mediating factor.

Theoretical Framework

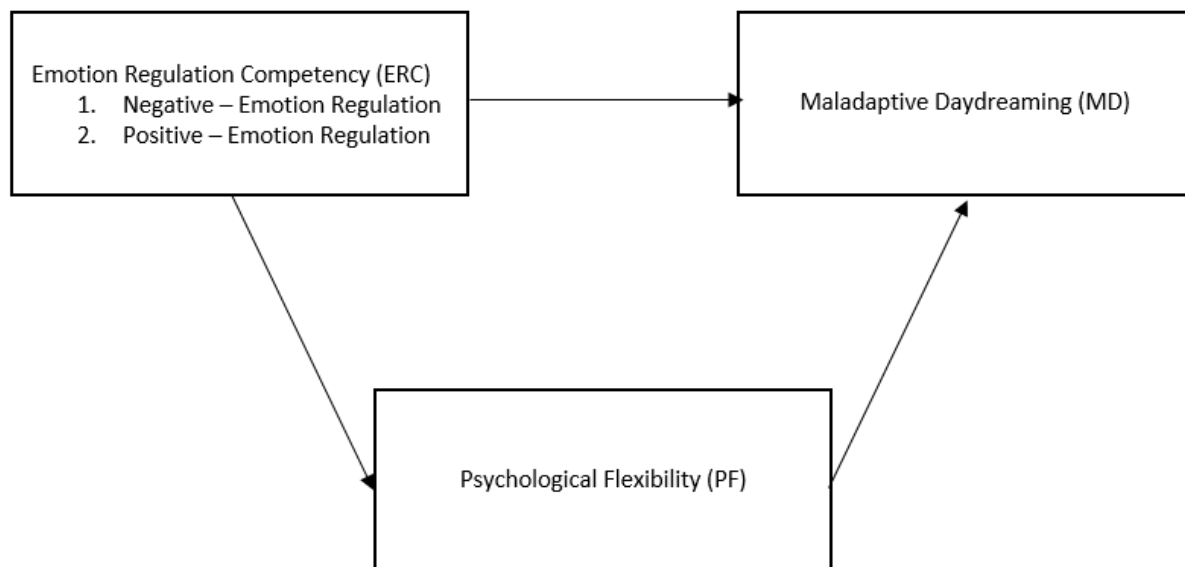
The Differential Emotional Processing Theory of MD suggests that people use MD to satisfy or fulfil unmet real-life needs through imagined scenarios. It further suggests that MD serves as a coping strategy to protect individuals emotionally from distressing emotions and/or situations by avoiding them and escaping into daydreams (Haynes et al., 2020). Furthermore, the Gross' Process Model of Emotion Regulation (Gross, 1998, 2002, 2014) highlights that ERC is very important for adaptive functioning, and difficulties in this area can result in maladaptive behaviours. According to this model, there are five steps in emotion regulation: situational selection, situation modification, attentional deployment, cognitive change, and response modulation. Difficulties in navigating these stages effectively can lead to maladaptive behaviours. For instance, struggling at the stage of attentional deployment or cognitive change can lead them to resort to maladaptive coping strategies that involve avoiding distressing emotions (Gross, 2015). Moreover, PF is explained by the model of Acceptance and Commitment Therapy (ACT) (Hayes, 1999), which defines it as the ability to embrace thoughts and emotions without avoiding or suppressing them while being fully engaged with the present moment. According to this framework, PF comprises six core processes: acceptance, cognitive defusion, present-moment awareness, self-as-context, and committed actions (Hayes et al., 2006). PF is a fundamental concept in the field of mental health, as it promotes the ability to deal with life challenges in more healthy and adaptive ways (Hayes et al., 2006) and reduces reliance on avoidance-based coping strategies (Bond et al., 2013). The integration of the aforementioned theoretical perspectives provides a comprehensive framework for understanding the relationship between ERC and MD and the mediating role of PF in this relationship. According to Haynes (2022), MD is employed as an avoidance-based coping strategy to escape distressing emotions/situations. The reliance on maladaptive strategies like MD is likely due to the underdevelopment of adaptive emotion regulation strategies, which leaves individuals with difficulty regulating their emotions in healthier ways (Gross, 2015). This relationship is mediated by PF: higher experiential avoidance (low PF) increases individuals' reliance on avoidance-based coping strategies, such as MD (Bond et al., 2013; Hayes et al., 2006). Therefore, ERC and PF may both predict MD, highlighting these constructs as effective therapeutic targets for treating MD. The proposed model of this study is shown in Figure 1.

Rationale

It has become very important to address issues like difficulties in emotion regulation and MD due to their adverse effects on the mental health and daily life functioning of young adults. In recent years, ERC, MD, and PF have attracted considerable attention from researchers and clinicians, and numerous studies have investigated various aspects of these constructs. Despite the growing research, significant gaps in the literature warrant further exploration on these topics. A few studies

investigate the direct causal relationship between ERC and MD. Several studies have examined their association, but they have mainly focused on specific emotion-regulation strategies, such as expressive suppression and cognitive reappraisal, or on overall difficulties in emotion regulation, rather than on a comprehensive assessment of ERC across both positive and negative emotions. Additionally, there is a notable dearth of research on the prevalence of MD across diverse populations, and even fewer studies have examined how demographic factors influence our study variables. Furthermore, most research on MD has been conducted in Western cultures, with very few studies in non-Western contexts such as Pakistan. Another significant gap in the literature is the scarcity of studies examining PF's role in MD. It remains underexplored whether PF can serve as a protective factor by reducing the reliance on MD. Given these literature gaps, the present study aims to investigate the effect of ERC on MD, with PF as a mediating factor. This study comprehensively assesses ERC's role in regulating both negative and positive emotions. Furthermore, it enhances the existing literature on MD by treating ERC and PF as predictors. Additionally, it expands understanding of these phenomena in the context of non-Western cultures, such as Pakistan. In practice, this study provides information for the development of therapeutic techniques to reduce maladaptive behaviours, such as MD, in young adults, thereby enhancing overall wellbeing and mental health by promoting adaptive emotional functioning.

Figure 1: The Proposed Model



Aims

The present study had four main aims. First, to investigate the effect of ERC (both across negative and positive emotions) on MD. Second, to examine the mediating role of PF in this relationship. Third, to examine the prevalence of MD among young adults. Fourth, to investigate the demographic differences in ERC, MD, and PF. Since MD has increasingly been recognized as a maladaptive coping strategy (Somer et al., 2016b; Thomson & Jaque, 2025), we hypothesized that ERC (general as well as for both negative and positive emotions) would have a significant relationship with MD, with difficulties in emotion regulation leading towards MD. We then hypothesized that PF would act as a mediating factor in this relationship as existing literature suggests that PF mediates a number of psychological processes in a way that influences the way how these processes impact the outcomes of mental health (Sebastião & Neto, 2025) and it renders

people less susceptible to maladaptive coping strategies and psychological difficulties (Öztekin et al., 2025). We further hypothesized that young adults would demonstrate a high prevalence of MD, and demographic factors would significantly influence the study variables.

Methodology

Participants

Participant recruitment was done through both physical and online methods. An online Google forms survey was conducted and hard copies of the survey form were also administered. The participants were approached from universities and other organizations of Islamabad and Rawalpindi. Study sample consisted of 260 young adults, with an equal number of men ($n = 130$) and women ($n = 130$), selected via purposive sampling technique. In terms of education level, the participants included undergraduates ($n = 74$), graduates ($n = 96$), and postgraduates ($n = 90$). The sample was diverse in terms of area of residence, with participants from urban ($n = 135$) and rural ($n = 125$) backgrounds. Additional demographic characteristics included family structure (i.e., nuclear and joint), birth order (First born, middle born, and youngest), and employment status (student, employed, and unemployed). All the participants had an education level of intermediate and above to ensure they had basic literacy skills to understand and comprehend the questions. Married individuals were excluded to eliminate any possible confounding factors linked with marital status. All the ethical guidelines including informed consent and confidentiality etc. were considered during the process of data collection. The protocol of this study was approved by the institutional review board.

Measures

The Perth Emotion Regulation Competency Inventory (PERCI; Preece et al., 2018). The PERCI was used to assess the ERC across both positive and negative emotions. This 32 items scale asks participants about how much difficulties they face in regulating their negative and positive emotions. It is a 7 point Likert type scale, ranging from “strongly disagree” to “strongly agree”. Items of this scale are divided into two main subscales i.e., negative – emotion regulation (measures ERC for negative emotions like sadness) and positive – emotion regulation (measures ERC for positive emotions like happiness). Sum of the items in negative subscale indicates the overall level of difficulty in regulating negative emotions, whereas the sum of items in positive subscale indicates the difficulty in regulating positive emotions. Overall, higher scores indicate a higher level of emotion regulation difficulties i.e., poor ERC whereas, lower scores indicate lower level of emotion regulation difficulties i.e., good ERC. The internal consistency for the current sample, as identified by Cronbach’s alpha was $\alpha = .91$ for the overall ERC, and $\alpha = .85$ and $\alpha = .91$ for the subscales measuring ERC for negative and positive emotions respectively.

The Maladaptive Daydreaming Scale (MDS-16; Somer et al., 2016). The MDS-16 was used to assess MD among young adults. This 16 items scale asks the participants about how frequently and/or intensively they engage in MD. The total score is the average of its items, which can range from 0 to 100. The cut-off score is 40, below which MD does not exist, but when the score exceeds 40, it indicates the presence of MD. From 40 to 100, low scores indicate low levels of MD, while higher scores indicate high levels of MD. The internal consistency for the current sample, as identified by Cronbach’s alpha was $\alpha = .92$.

The Acceptance and Action Questionnaire (AAQ-II; Bond et al., 2011). The AAQ-II was used to assess PF among participants. This 7 items scale asks the participants about their levels of PF and experiential avoidance. It is a 7 point Likert type scale, ranging from “never true” to “always true”.

It measures two main constructs i.e., PF, and experiential avoidance/psychological inflexibility. The total is the sum of its items. Low Scores i.e., 7 to 21 indicate higher PF. Moderate scores i.e., ranging from 22 to 35 indicated moderate levels of both, PF and experiential avoidance and lastly, scores higher than 35 indicate higher psychological inflexibility/experiential avoidance. The internal consistency for the current sample, as identified by Cronbach's alpha was $\alpha = .88$.

Data Analyses

Collected data was analyzed with the help of SPSS (Version 7). First of all, reliability analysis and descriptive statistics was used to assess the psychometric properties of the measures and the collected data. All of the used measures i.e., PERCI (along with both of its subscales i.e., negative-ER and positive-ER), MDS-16, and AAQ-II showed the reliabilities of .91, .85, .91, .92, and .88 respectively, all of which lied within the categories of good to excellent reliabilities, reflecting strong to very high internal consistencies (Ahmad et al., 2024). Bivariate correlations between the study variables were calculated and simple linear regression analyses were used to examine the effect of ERC (and both of its domains i.e., negative-emotion regulation and positive-emotion regulation) on MD. Moreover, regression model was used to examine the mediating role of PF in the ERC – MD relationship. Independent samples t-test was used to check the differences across study variables based on gender, family structure, and area of residence, and lastly, ANOVA was used to investigate if there were any significant differences across the study variables based on other demographic variables including level of education, birth order, and employment status.

Results

Table 1: Socio-Demographic Information of the Participants (N = 260)

Characteristics	f	%
Gender		
Males	130	50
Females	130	50
Education		
Undergraduates	74	28.5
Graduates	96	36.9
Postgraduates	90	34.6
Residence		
Urban	135	51.9
Rural	125	48.1
Birth Order		
First Born	85	32.7
Middle Born	90	34.6
Youngest	85	32.7
Employment Status		
Student	117	44.6
Employed	77	29.6
Unemployed	67	25.8
Maladaptive Daydreaming		
Non-Maladaptive Daydreamers	93	35.77
Maladaptive Daydreamers	167	64.23

Note: f = Frequency; % = Percentage

Besides the socio-demographic characteristics of the participants, Table 1 shows the prevalence of MD among young adults. The cut-off score for MD on MDS-16 was 40. Based on this criterion, 167 participants (64.23%) were identified as maladaptive daydreamers as their score on MDS – 16 exceeded the cut-off score whereas, 93 participants (35.77%) were identified as non-maladaptive daydreamers. According to these statistics, a significant proportion of the sample exhibited excessive levels of MD.

Table 2: Descriptive statistics and bivariate correlations for all variables

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5
ERC	260	113.46	31.43	—				
P-ER	260	47.68	19.07	.84**	—			
N-ER	260	68.78	18.64	.83**	.39**	—		
MD	260	44.94	18.80	.66**	.58**	.53**	—	
PF	260	25.80	9.84	.65**	.49**	.59**	.53**	—

Note: *n* = Sample Size; *M* = Mean; *SD* = Standard Deviation; N-ER = Negative – Emotion Regulation; P - ER = Positive – Emotion Regulation; ** = $p < 0.01$

Table 2 shows the descriptive statistics and bivariate correlations among the study variables. Poor ERC (i.e., higher score on PERCI) showed a strong positive correlation with MD ($r = .66$, $p < .01$). Similarly, higher levels of MD showed strong positive correlations with difficulties regulating both negative ($r = .53$, $p < .01$) and positive emotions ($r = .58$, $p < .01$). This indicates that greater difficulties in regulating positive and negative emotions are strongly linked with higher levels of MD. Furthermore, higher ERC shows a strong positive correlation with PF ($r = .65$, $p < .01$). Lastly, higher levels of MD are also strongly linked with poor psychological inflexibility ($r = .53$, $p < .01$). Concisely, Table 1 shows that greater ERC strongly and positively links with greater PF and lower levels of MD, supporting our proposed directions of these relationships.

Table 3: Regression of coefficients on ERC and MD (N = 260)

Variables	<i>B</i>	β	<i>SE</i>
Constant	-.22		3.27
ERC and MD	.40***	.666***	.03
R^2	.44		

Note: *** = $p < 0.001$; SE = Standard Error

Table 3 shows the impact of ERC on MD. The R^2 value of .44 indicates that ERC explains 44% variance in MD indicating a strong predictive relationship between these two variables ($\beta = .67$, $p < .001$). It shows that poor ERC significantly predicts MD. As ERC was further divided into two categories i.e., ERC for negative emotions and ERC for positive emotions, therefore, both these categories were separately assessed for their effects on MD, which are shown in Table 4 and 5 respectively.

Table 4: Regression of coefficients on Negative – Emotion Regulation and MD (N = 260)

Variables	<i>B</i>	β	<i>SE</i>
Constant	9.52**		3.63
N – ER and MD	.54***	.53***	.05
R^2	.29		

Note: *** = $p < 0.001$; ** = $p < 0.01$; SE = Standard Error

In table 4, the R^2 value of .29 indicates that ERC for negative emotions explain 29% variance in MD, which suggests a strong predictive relationship between these variables ($\beta = .53$, $p < .001$). These results reveal that higher difficulties in regulating negative emotions significantly predict higher levels of MD.

Table 5: Regression of coefficients on Positive – Emotion Regulation and MD (N = 260)

Variables	<i>B</i>	β	<i>SE</i>
Constant	17.91***		2.58
P – ER and MD	.57***	.58***	.05
R^2	.33		

Note: *** = $p < 0.001$; SE = Standard Error

In Table 5, the R^2 value of .33 indicates that ERC for positive emotions explain 33% variance in MD, indicating a strong predictive relationship between these variables ($\beta = .53$, $p < .001$). These results reveal that higher difficulties in regulating positive emotions significantly predict higher levels of MD.

Table 6: Regression Analysis for Mediator PF between ERC and MD (N = 260)

Variable	<i>B</i>	95%CI		<i>SE B</i>	β	R^2	ΔR^2
		LL	UL				
Step 1						.44	.44***
Constant	-.22	-6.67	6.23	3.27			
ERC	.40***	.34	.45	.03	.67***		
Step 2						.46	.02**
Constant	-1.09	-7.49	5.31	3.25			
ERC	.34***	.27	.41	.04	.56***		
PF	.31**	.08	.54	.12	.16**		

Note: *** = $p < 0.001$; ** = $p < 0.01$; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; SE = Standard Error

Table 6 shows the impact of ERC and PF on MD. In step 1, the R^2 value of .44 indicates that poor ERC explains 44% variance in MD with $F(1,258) = 205.23$, $p < .001$. This shows that difficulties in emotion regulation positively predict MD ($\beta = .67$, $p < .001$). In step 2, the R^2 value of .46 reveals that ERC and PF explain 46% variance in MD with $F(2,257) = 108.67$, $p < .001$. This reveals that ERC ($\beta = .56$, $p < .001$) and PF ($\beta = .16$, $p < .01$) significantly predict MD. The ΔR^2 value of .02 indicates 2% change in the variance of Model 1 and Model 2 with $F(2,257) = 108.67$, $p < .01$. From Model 1 to Model 2, the regression weights for ERC reduced from .67 to .56, which confirms mediation (Hayes & Preacher, 2014). More specifically, PF significantly mediated the

effect of poor ERC on MD, suggesting that part of the reason individuals with poor ERC experience lower levels of MD is due to their high levels of PF.

Table 7: Regression Analysis for Mediator PF between Negative – Emotion Regulation and MD

Variable	B	95%CI		SE B	β	R^2	ΔR^2
		LL	UL				
Step 1						.29	.29***
Constant	9.52**	2.38	16.67	3.63			
N – ER	.54***	.43	.64	.05	.53***		
Step 2						.35	.07***
Constant	6.15	-.77	13.08	3.52			
N – ER	.35***	.23	.47	.06	.35***		
PF	.62***	.38	.85	.12	.32***		

Note: *** = $p < 0.001$; ** = $p < 0.01$; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; SE = Standard Error

Table 7 shows the impact of ERC for negative emotions, and PF on MD. In step 1, the R^2 value of .29 indicates that higher difficulties in regulating negative emotions explain 29% variance in MD with $F(1,258) = 102.89$, $p < .001$. This suggests that difficulties in regulating negative emotions significantly and positively predict higher levels of MD ($\beta = .53$, $p < .001$). In step 2, the R^2 value of .35 indicates that difficulties in regulating negative emotions and psychological inflexibility explain 35% variance in MD with $F(2,257) = 70.27$, $p < .001$. This suggests that negative-emotion regulation ($\beta = .35$, $p < .001$) and psychological inflexibility ($\beta = .32$, $p < .001$) positively predict MD. The ΔR^2 value of .07 revealed 7% change in the variance of Model 1 and Model 2 with $F(2,257) = 70.27$, $p < .001$. From Model 1 to Model 2, the regression weights for negative-emotion regulation reduced from .53 to .35, which confirms mediation (Hayes & Preacher, 2014). More specifically, PF significantly mediated the effect of difficulties in regulating negative emotions on MD, suggesting that part of the reason individuals with poor ERC for negative emotions experience lower levels of MD is due to their high levels of PF.

Table 8: Regression Analysis for Mediator PF between Positive – Emotion Regulation and MD

Variable	B	95%CI		SE B	β	R^2	ΔR^2
		LL	UL				
Step 1						.33	.33***
Constant	17.91***	12.84	22.99	2.58			
P – ER	.57***	.47	.66	.05	.58***		
Step 2						.41	.08***
Constant	9.63***	4.07	15.19	2.82			
P – ER	.41***	.31	.52	.05	.42***		
PF	.61***	.40	.82	.11	.32***		

Note: *** = $p < 0.001$; ** = $p < 0.01$; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; SE = Standard Error

Table 8 shows the impact of ERC for positive emotions, and PF on MD. In step 1, the R^2 value of .33 indicates that higher difficulties in regulating positive emotions explain 33% variance in MD with $F(1,258) = 127.51$, $p < .001$. This suggests that difficulties in regulating positive emotions

positively predict MD ($\beta = .58, p < .001$). In step 2, the R^2 value of .41 indicates that difficulties in regulating positive emotions and psychological inflexibility explain 41% variance in MD with $F(2,257) = 88.27, p < .001$. This suggests that difficulties in regulating positive emotions ($\beta = 0.42, p < .001$) and psychological inflexibility ($\beta = .32, p < .001$) positively predict MD. The ΔR^2 value of .08 reveals 8% change in the variance of Model 1 and Model 2 with $F(2,257) = 88.27, p < .001$. From Model 1 to Model 2, the regression weights for positive-emotion regulation reduced from .58 to .42, which confirms mediation (Hayes & Preacher, 2014). More specifically, PF mediated the effect of difficulties in regulating positive emotions on MD, suggesting that part of the reason individuals with poor ERC for positive emotions experience lower levels of MD is due to their high levels of PF.

Independent samples t-tests were administered for comparing the study variables based on gender, and area of residence. One-way analyses of variance (ANOVAs) were administered to for comparing birth order, education level, and employment status groups on ERC, MD and PF. According to the results, men and women did not show any significant differences in study variables (all $p > 0.05$). Similarly, one-way analysis of variance showed no significant differences across birth order groups in ERC, MD, or PF. On the contrary, significant differences were observed based on area of residence, education level and employment status. These results are presented in Tables 9, 10, and 11.

Table 9: Independent Samples t-test for Differences in Study ERC, MD, and PF Based on Area of Residence (N = 260)

Scales	Urban (n = 135)		Rural (n = 125)		$t(258)$	p	Cohen's d
	M	SD	M	SD			
ERC	109.35	36.87	117.90	23.60	2.21	.28	—
N – ER	63.76	20.38	67.96	16.37	1.82	.70	—
P – ER	45.58	21.33	49.94	16.07	1.85	.66	—
MD	39.19	23.11	51.14	9.26	5.40	<.001	-.67
PF	24.05	10.38	27.67	8.88	3.01	.003	-.37

Note: M = Mean; SD = Standard Deviation

Results showed significantly higher levels of MD in rural participants than urban participants, $t(258) = 5.40, p < .001, d = .67$. Rural participants also showed significant higher psychological inflexibility than urban participants, $t(258) = 3.01, p = .003, d = .37$. No significant differences were observed in overall ERC or its subscales (all $p > .05$).

Table 10: Means, Standard Deviations and One-Way Analyses of Variance in ERC, MD, and PF Based on Education Level (N = 260)

Measure	Undergraduates (n = 74)		Graduates (n = 96)		Postgraduates (n = 90)		$F(2,259)$	η^2
	M	SD	M	SD	M	SD		
ERC	109.43	27.25	118.17	32.63	111.73	33.01	1.84	—
P – ER	45.14	14.81	52.02	20.62	45.13	19.81	4.04*	.031
N – ER	64.30	17.01	66.16	19.27	66.60	19.36	.34	—
MD	39.38	16.52	47.43	18.41	46.86	20.17	4.68**	.035
PF	25.28	10.11	26.63	9.51	25.32	10.02	.54	—

Note: M = Mean; SD = Standard Deviation

Table 10 presents the differences based on education level. Significant differences were found in MD, $F(2,259)=4.68$, $p=.010$, $\eta^2 = .035$. Graduates reported higher levels of MD as compared to undergraduates and postgraduates. No significant differences were observed for overall ERC or PF (all $p > .05$).

Table 11: Means, Standard Deviations and One-Way Analyses of Variance in ERC, MD, and PF Based on Employment Status (N = 260)

Measure	Student (n = 116)		Employed (n = 77)		Unemployed (n = 67)		F (2,259)	η^2
	M	SD	M	SD	M	SD		
ERC	120.37	32.86	107.66	31.70	108.15	26.21	5.24**	.039
P – ER	51.92	19.33	44.29	19.09	47.67	17.30	5.37**	.040
N – ER	68.44	18.83	63.38	19.86	63.93	16.41	2.18	—
MD	47.81	19.56	45.10	18.94	39.80	16.29	3.95*	.030
PF	27.65	9.50	24.83	10.25	23.69	9.48	4.05*	.031

Note: M = Mean; SD = Standard Deviation

As shown in Table 11, significant differences were observed based on employment status for overall ERC, $F(2,259)=5.24$, $p<.01$, $\eta^2 = .039$, P-ER, $F(2,259)=5.37$, $p<.01$, $\eta^2 = .040$, MD, $F(2,259)=3.95$, $p<.05$, $\eta^2 = .030$, and PF, $F(2,259)=4.05$, $p<.05$, $\eta^2 = .031$. Students reported higher difficulties across all of these domains as compared to employed and unemployed participants.

Discussion

The present study aimed to examine the effect of ERC (for both negative and positive emotions) on MD, while focusing on the mediating role played by PF in this relationship. We hypothesized that ERC (general as well as for both negative and positive emotions) would have a significant relationship with MD, with difficulties in regulating negative as well as positive emotions leading to higher levels of MD. Our results supported this hypothesis by showing strong associations between these variables in proposed directions (see Table 2). This means that individuals with poor ERC are more likely to engage in MD. Results of linear regression analyses also support our hypothesis by showing that ERC (general as well as for both negative and positive emotions) is a strong predictor of MD, with higher difficulties in emotion regulation leading to higher levels of MD (see Table 3, 4, and 5). Existing literature supports our findings by showing a strong link between emotion regulation difficulties and MD (Greene et al., 2020; Sándor et al., 2023). Studies suggest that MD may result from the frequent use of immersive daydreaming as avoidance based coping strategy to escape distressing emotions rather than regulating them in adaptive ways, which is one of the reasons why maladaptive daydreamers often report higher levels emotion regulation difficulties as compared to non-maladaptive daydreamers (West & Somer, 2020). Moreover, from a theoretical perspective, our findings are also supported by the Gross's process model of emotion regulation (Gross, 2015), which highlights that effective emotion regulation mitigates the intensity and duration of emotional experiences. However, when individuals struggle to regulate their emotions in adaptive ways, they may shift to avoidance based coping like fantasizing or daydreaming to manage emotional distress and overwhelming emotions.

For the mediating factor in the ERC-MD relationship, we hypothesized that PF would significantly mediate this relationship. Our results supported this hypothesis as well by showing a significant mediating role of PF in these linear relationships (see Table 6, 7, and 8). Existing literature supports

these findings by highlighting that higher PF and ERC enable the individuals to manage their internal emotional experiences adaptively and reduce their reliance on maladaptive coping strategies like maladaptive daydreaming (Kashdan & Rottenberg, 2010; Soffer-Dudek & Somer, 2018). Moreover, research suggests that PF mediates the effects of negative emotional experiences on maladaptive behaviors and psychopathology, and acts as a protective factor against emotional dysregulation and MD (Twohig et al., 2015), which also support our study findings. Collectively, the findings of this study, aligning with the existing body of literature, demonstrates that PF serves as a vital pathway through which difficulties in emotion regulation (both across positive and negative emotions) affects cognitive behavioral outcomes like MD.

We further proposed that there will be a high prevalence of MD among young adults. According to the results (see Table 1), 167/260 participants scored higher than the clinically determined cut-off score for MD (i.e., 40), indicating that 64.23% of the young adults experience MD at a significant level and are identified as maladaptive daydreamers. Increased prevalence of MD among young adults can be attributed to the transitional challenges of young adulthood that induce significant distress, making them more susceptible to maladaptive coping strategies like MD (Auerbach et al., 2018; MacLeod & Brownlie, 2014).

Lastly, we hypothesized that there will be significant differences in study variables based on demographic factors. In terms of gender and birth order, no significant differences were observed. However, area of residence, level of education, and employment status were found to be the significant predictors of ERC, MD, and PF. In terms of area of residence, rural participants faced significantly higher levels of MD and psychological inflexibility. Study by Atherton et al. (2024) support this finding by highlighting that people living in rural areas are more likely to be anxious depressed, more neurotic, and less open-minded as compared to urban residents. These personality traits and mental health challenges might be linked with reduced PF, and maladaptive coping strategies like MD. In terms of level of education, graduates exhibited higher levels of MD as compared to graduates and postgraduates (see Table 10). This might reflect the challenges associated with this academic stage. The transition from undergraduate to graduate studies may involve increased academic pressures and responsibilities, making individuals to engage more frequently in MD as a coping mechanism. Lastly, a notable finding was that, in terms of employment status, students exhibited higher difficulties in overall emotion regulation, MD, and psychological inflexibility (see Table 11). This might be attributed to the fact that students often encounter unique stressors like academic pressures, social challenges, and transitional life phases that can impair their ERC and PF.

Practical and Theoretical Implications

Theoretically, this study adds to the existing body of literature on MD by identifying difficulties in emotion regulation (both across negative and positive emotions) and psychological inflexibility as its key predictors. Existing studies along with the differential emotional processing theory of MD (Haynes, 2022) emphasize that when negative or distressing emotions are not regulated effectively, it results in behaviors like MD. However, this study adds to the knowledge of this concept by finding out that MD results not only from the distressing emotions but from the positive emotions as well, when they are not regulated in adaptive ways and this dimension was often neglected in previous studies. Furthermore, the mediating role of PF in ERC-MD relationship opens new avenues for theoretical exploration and future research. Moreover, the inclusion of non-western population in this study contributes to the cross-cultural validation of these constructs and extends their relevance beyond western populations, which have traditionally dominated the

literature. Practically, the findings of this study support the incorporation of emotion regulation training and evidence based therapeutic approaches for enhancing PF like acceptance and commitment therapy into intervention programs with a goal of addressing maladaptive coping behaviors like MD and improve overall emotional functioning of young adults. By incorporating the findings of this study, mental health professionals can help young adults to develop more adaptive strategies that may lead to enhanced well-being, academic functioning, and improved quality of life.

Conclusion

Based on all the aforementioned findings, this study concludes that interventions aimed at enhancing ERC and PF such as emotion regulation training and acceptance and commitment therapy (ACT) may help reduce reliance on MD, thereby enhancing the overall emotional and psychological well-being of young adults.

References

- Adams, S. H., Schaub, J. P., Nagata, J. M., Park, M. J., Brindis, C. D., & Irwin, C. E. (2022). Young adult anxiety or depressive symptoms and mental health service utilization during the COVID-19 pandemic. *Journal of Adolescent Health*, 70(6), 985–988. <https://doi.org/10.1016/j.jadohealth.2022.02.023>
- Ahmad, N., Alias, F. A., Hamat, M., & Mohamed, S. A. (2024). Reliability analysis: Application of Cronbach's alpha in research instruments. In *Pioneering the future: Delving into e-learning's landscape* (Vol. 8, pp. 114–119). Universiti Teknologi MARA. <https://appspenang.uitm.edu.my/sigcs/>
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Greif Green, J., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, 127(7), 623–638. <https://doi.org/10.1037/abn0000362>
- Berking, M., Wupperman, P., Reichardt, A., Pejic, T., Dippel, A., & Znoj, H. (2008). Emotion-regulation skills as a treatment target in psychotherapy. *Behaviour Research and Therapy*, 46(11), 1230–1237. <https://doi.org/10.1016/j.brat.2008.08.005>
- Bond, F. W., Hayes, S. C., & Barnes-Holmes, D. (2013). Psychological flexibility, ACT, and organizational behavior. In S. C. Hayes, F. W. Bond, D. Barnes-Holmes, & J. Austin (Eds.), *Acceptance and mindfulness at work* (pp. 25–54). Routledge. <https://doi.org/10.4324/9781315808383>
- Borjali, A., Bahramizadeh, H., Eskandari, H., & Farrokhi, N. (2016). Psychological flexibility mediate the effect of early maladaptive schemas on psychopathology. *International Journal of Applied Behavioral Sciences*, 3(4), 9–17. <https://doi.org/10.22037/ijabs.v3i4.15451>
- Côté, S., Gyurak, A., & Levenson, R. W. (2010). The ability to regulate emotion is associated with greater well-being, income, and socioeconomic status. *Emotion*, 10(6), 923–933. <https://doi.org/10.1037/a0021156>
- Greene, T., West, M., & Somer, E. (2020). Maladaptive daydreaming and emotional regulation difficulties: A network analysis. *Psychiatry Research*, 285, 112799. <https://doi.org/10.1016/j.psychres.2020.112799>
- Gross, J. J. (2014). Emotion regulation: Conceptual and empirical foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3–20). The Guilford Press.
- Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26(1), 1–26. <https://doi.org/10.1080/1047840X.2014.940781>
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67(3), 451–470. <https://doi.org/10.1111/bmsp.12028>
- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour Research and Therapy*, 44(1), 1–25. <https://doi.org/10.1016/j.brat.2005.06.006>

- Haynes, R. (2022). *The differential emotional processing theory of maladaptive daydreaming* (Doctoral thesis, Charles Sturt University).
- Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, 30(7), 865–878. <https://doi.org/10.1016/j.cpr.2010.03.001>
- Macleod, K. B., & Brownlie, E. B. (2014). Mental health and transitions from adolescence to emerging adulthood: Developmental and diversity considerations. *Canadian Journal of Community Mental Health*, 33(1), 77–86. <https://doi.org/10.7870/cjcmh-2014-007>
- Mousavi, S. S. S., Nadri, M., Amiri, M., Radffar, F., & Farokhcheh, M. (2016). The predictive role of psychological flexibility and cognitive emotion regulation strategies on depression, anxiety, and stress in type 2 diabetic patients. *Middle Eastern Journal of Disability Studies*, 9, 50. <http://jdisabilstud.org/article-1-876-en.html>
- Novick-Kline, P., Turk, C. L., Mennin, D. S., Hoyt, E. A., & Gallagher, C. L. (2005). Level of emotional awareness as a differentiating variable between individuals with and without generalized anxiety disorder. *Journal of Anxiety Disorders*, 19(5), 557–572. <https://doi.org/10.1016/j.janxdis.2004.06.001>
- Nowacki, A., & Pyszkowska, A. (2024). It is all about discomfort avoidance: Maladaptive daydreaming, frustration intolerance, and coping strategies—A network analysis. *Current Psychology*, 43(34), 27447–27455. <https://doi.org/10.1007/s12144-024-06382-x>
- Ögüt, Ç. (2024). Association of maladaptive daydreaming with behavioral addiction. *Health Sciences Quarterly*, 4(3), 233–241. <https://doi.org/10.26900/hsq.2395>
- Öztekin, G. G., Gómez-Salgado, J., & Yıldırım, M. (2025). Future anxiety, depression and stress among undergraduate students: Psychological flexibility and emotion regulation as mediators. *Frontiers in Psychology*, 16, 1517441. <https://doi.org/10.3389/fpsyg.2025.1517441>
- Preece, D. A., Becerra, R., Robinson, K., Dandy, J., & Allan, A. (2018). Measuring emotion regulation ability across negative and positive emotions: The Perth Emotion Regulation Competency Inventory (PERCI). *Personality and Individual Differences*, 135, 229–241. <https://doi.org/10.1016/j.paid.2018.07.025>
- Sándor, A., Bugán, A., Nagy, A., Bogdán, L. S., & Molnár, J. (2023). Attachment characteristics and emotion regulation difficulties among maladaptive and normal daydreamers. *Current Psychology*, 42(2), 1617–1634. <https://doi.org/10.1007/s12144-021-01546-5>
- Sebastião, R., & Neto, D. D. (2025). Longitudinal association of stress with mental health in the context of COVID-19: The mediating role of psychological flexibility and emotional schemas. *Applied Psychology: Health and Well-Being*, 17(1), e12614. <https://doi.org/10.1111/aphw.12614>
- Soffer-Dudek, N., & Somer, E. (2018). Trapped in a daydream: Daily elevations in maladaptive daydreaming are associated with daily psychopathological symptoms. *Frontiers in Psychiatry*, 9, 194. <https://doi.org/10.3389/fpsyg.2018.00194>
- Somer, E., Soffer-Dudek, N., & Ross, C. A. (2017). The comorbidity of daydreaming disorder (maladaptive daydreaming). *The Journal of Nervous and Mental Disease*, 205(7), 525–530. <https://doi.org/10.1097/NMD.0000000000000685>
- Somer, E., Somer, L., & Jopp, D. S. (2016a). Childhood antecedents and maintaining factors in maladaptive daydreaming. *Journal of Nervous and Mental Disease*, 204(6), 471–478. <https://doi.org/10.1097/NMD.0000000000000507>
- Thomson, P., & Jaque, S. V. (2025). Creativity, emotion regulation, and maladaptive daydreaming. *Creativity Research Journal*, 37(1), 94–103. <https://doi.org/10.1080/10400419.2023.2230022>
- Twohig, M. P., Vilardaga, J. C. P., Levin, M. E., & Hayes, S. C. (2015). Changes in psychological flexibility during acceptance and commitment therapy for obsessive compulsive disorder. *Journal of Contextual Behavioral Science*, 4(3), 196–202. <https://doi.org/10.1016/j.jcbs.2015.07.001>
- West, M. J., & Somer, E. (2020). Empathy, emotion regulation, and creativity in immersive and maladaptive daydreaming. *Imagination, Cognition and Personality*, 39(4), 358–373. <https://doi.org/10.1177/0276236619864277>
- Wood, D., Crapnell, T., Lau, L., Bennett, A., Lotstein, D., Ferris, M., & Kuo, A. (2018). Emerging adulthood as a critical stage in the life course. In N. Halfon, C. B. Forrest, R. M. Lerner, & E. M. Faustman (Eds.), *Handbook of life course health development* (pp. 123–143). Springer. https://doi.org/10.1007/978-3-319-47143-3_7