It is all about discomfort avoidance: maladaptive daydreaming, frustration intolerance, and coping strategies – a network analysis

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Abstract

Maladaptive daydreaming (MD) is a need to daydream that replaces human interactions and disturbs everyday life. Research suggests that MD can be considered a stress-relief strategy, as a repeating sequence of using imagination may play a significant role in calming oneself down and seeking comfort through escapism and avoidance. The current study explored the relationships between maladaptive daydreaming, coping styles, and frustration intolerance (including discomfort and emotional intolerance) in a general population. The sample was divided into two subgroups: maladaptive daydreamers (MDers) and non-maladaptive daydreamers (non-MDers) based on the cutoff score in the Maladaptive Daydreaming Scale-16 (MDS-16). Three hundred seventeen individuals participated in the study, including 142 MDers. The results showed significantly higher levels of frustration intolerance (U = 9952.00, $p < .01$) and avoidance-focused strategies (U = 10170.00, $p < .01$) among the MDers. Non-MDers scored significantly higher on the Emotional support-seeking scale (U = 16117.50, $p < .001$). Additionally, the network analysis proved differences in the variables' dynamics: only in the MDers network MD exhibited significant edges with avoidant coping (0.05), discomfort intolerance (0.10), entitlement (0.07), and emotional intolerance (0.10). Entitlement was the variable of the highest expected influence in both subgroups studied. The current study proposes clinical implications: as emotional intolerance may serve as an essential factor in maintaining engagement in maladaptive daydreaming, the role of discomfort intolerance and its links to avoidance should be of significant focus in MD therapy.

Keywords Maladaptive daydreaming · Frustration intolerance · Discomfort intolerance · Coping strategies

Introduction

The past two decades have introduced an increased understanding of maladaptive daydreaming (MD), described as a need to daydream that replaces human interactions and disturbs everyday life, including work and school activities or interpersonal relationships (Somer, 2002). Such daydreams are detailed and may have complex, movie-like plots. Real-life movements or facial expressions often accompany them. Daydreams offer a place to fulfill fantasies, find companionship, and enhance one's mood (Somer, 2002). However, it can lead to fear of being discovered and

seen as strange (Somer et al., 2016a). Feelings of wasting time, embarrassment, and the intrusiveness of daydreams may result in distress (Bigelsen & Schupak, 2011). Given that MD can be used to modify one's emotional state, gets in the way of other areas of a person's life, and can often be seen as uncontrollable (Somer et al., 2016a), some researchers suggest that MD may be conceptualized through the lens of behavioral addiction (cf. Pietkiewicz et al., 2018), while others propose to link it with dissociation symptoms (Ross et al., 2020).

Maladaptive daydreaming can lead to more stress by neglecting relationships, responsibilities, and the need for growth. Once the dreamer decides to reconnect with the real world, they will face a new dose of stress, which can be dealt with by repeatedly daydreaming (Schimmenti et al., 2019). Furthermore, the moment of ending one's MD session and coming back to reality can also be unpleasant: it can activate the realization of missed opportunities that passed by while one was daydreaming and be followed by

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deep regret (Pietkiewicz et al., 2018), which can deter one from trying to stop daydreaming in the near future. That results in a vicious cycle of using MD as an escapist and avoidant strategy, especially among persons who are unable to regulate emotions and have difficulties with discomfort intolerance (Pyszkowska et al., 2023).

Somer et al. (2016a) pointed out that maladaptive daydreaming can be an enticing form of escaping from discomfort, including unpleasant emotions and thoughts, as it provides an easy way of achieving one's goals as long as one keeps on daydreaming. Frustration intolerance beliefs (e.g., "I cannot stand not getting what I want") have been linked with emotion dysregulation and avoidance (Schetsche & Mustaca, 2021; Filippello et al., 2014); therefore, it may be yet another significant factor in developing MD. Frustration intolerance has been proposed by Rational Emotive Behaviour Therapy (REBT, Ellis, 2003; Harrington, 2005a) as a multidimensional construct related to emotional tension resulting from a perceived threat to the comfort of life and achieving desired outcomes. Four factors of frustration intolerance have been distinguished. First, emotional intolerance manifests in the belief that emotional distress is overwhelmingly difficult to manage and must be swiftly alleviated or avoided. Second, discomfort intolerance, is characterized by thoughts related to a demand for comfort and ease, along with an expectation for life to be free of any inconvenience. Third, entitlement reflects a need for the world to be fair, an expectation for immediate gratification, and a belief that others should indulge one's desires. Fourth, achievement, is evident in the beliefs regarding the maintenance of high standards, even when such standards impede progress, coupled with an intolerance for the frustration of these standards. Moreover, each of the factors appears to predict different mental disturbances uniquely. According to Harrington (2006) and Stanković and Vukosavljević-Gvozden (2011), emotional intolerance is linked to anxiety, discomfort intolerance to depression, entitlement to anger, achievement frustration to anxiety, and anger. Emotional intolerance and discomfort intolerance have been significantly associated with several dysfunctional coping behaviors, including behavioral and cognitive avoidance, self-harm, procrastination, and overusing medication (Harrington, 2005b) Also an association between frustration intolerance beliefs and behavioral addictions has also been found, in particular with Internet addiction (Kewalramani & Pandey, 2020; Lu et al., 2019), and Internet gaming addiction (Lin et al., 2021).

Although MD has been conceptualized as a dysfunctional form of imaginative involvement (Pietkiewicz et al., 2018), little is still known about links between MD and coping strategies other than avoidance or escapism (Somer, Abu-Rayya, Schimmenti et al., 2020b; Pyszkowska et al.,

2023). One of the potential strategies associated with maladaptive daydreaming can be reflective coping, as it relies on using imagination to play out different possible ways of solving problems (Schwarzer & Taubert, 2002) and was conceptualized as part of the proactive approach to coping (Greenglass et al., 1999). Reflective coping is a part of the proactive approach to coping. Following Schwarzer and Taubert (2002), the Proactive Coping Theory (PCT) is based on the temporal distinction of coping styles. PCT consists of 4 coping types – reactive coping (coping with harm or loss experienced in the past), anticipatory coping (coping with immediate threat happening shortly), preventive coping (dealing with uncertain threats that may happen in distant future), and proactive coping (seeing upcoming stressors as potential self-promoting challenges). Furthermore, as discussed by Greenglass and colleagues (1999) in the present the person can implement such strategies as emotional support seeking (temporary regulation of distress by disclosing feelings, seeking companionship and evoking empathy) and avoidance coping (delaying actions in demanding situations).

Research shows that behavioral addictions (BA) are negatively linked with proactive and preventing coping, and positively linked with avoidant coping (Sleczka et al., 2016; Thomas et al., 2011). Similarly to other BAs, MD can act as a disturbing factor in developing proactive and preventive coping styles as the daydreaming activity takes up most of the maladaptive daydreamers' time, preventing them from planning or preparing for problem-solving (Pietkiewicz et al., 2018).

The current study

This study aims to extend previous research on maladaptive daydreaming by exploring the relationship between MD, coping styles, and frustration intolerance (including discomfort and emotional intolerance) in a general population. Beliefs regarding one's ability to withstand frustration may translate into implementation of certain coping styles and furthermore underline the reliance on maladaptive daydreaming in everyday life. The study was designed to compare two types of persons: maladaptive daydreamers and those who do not engage in this activity. The groups were divided based on the score obtained in the Maladaptive Daydreaming Scale-16 (Somer et al., 2016c). It was hypothesized that maladaptive daydreamers, when compared to those who do not engage in MD, would (a) exhibit higher levels of frustration intolerance, avoidant coping, and reflective coping, and (b) have lower levels of proactive, preventive coping, and emotional support seeking. In order to develop a deeper understanding of the dynamics

between coping, frustration intolerance, and MD, a network analysis was designed.

Methods

Measures

Maladaptive daydreaming

The Maladaptive Daydreaming Scale-16 was used (MDS-16, Somer et al., 2016c; Polish translation by Magdalena Jadczak, cf. Somer et al., 2015) to measure the intensity of MD symptoms. MDS-16 consists of 16 items (e.g., "Some people feel distressed or concerned about the amount of time they spend daydreaming. How distressed do you currently feel about the amount of time you spend daydreaming?") and has an answer scale ranging from 0% (Never) to 100% (Very often) with 10% increments. The score is calculated as an average of the answers to each item. A score of 40 was used as a cut-off point, classifying persons who scored above 40 points into the MDer group based on Soffer-Dudek's (2021) recommendation. Cronbach's α for the current study is 0.92.

Proactive coping

Proactive Coping Inventory (PCI; Greenglass et al., 1999; Polish adaptation by Pasikowski et al., 2002) was used to measure the coping style preference of participants. It consists of 55 items, including seven subscales, five of which are used in this study. PCI has a 4-point Likert answer scale. Subscales related to hypotheses proposed in this study included: (a) proactive coping (α = 0.78; example item: "After attaining a goal, I look for another, more challenging one."), (b) preventive coping (α = 0.81; example item: "I plan my strategies to change a situation before I act."), (c) emotional support seeking (α = 0.76; example item: "Others help me feel cared for."), (d) avoidant coping (α = 0.67; example item: "When I have a problem I like to sleep on it."), (e) reflective coping (α = 0.79; example item: "Before tackling a difficult task I imagine success scenarios.").

Frustration intolerance

Frustration–Discomfort Scale (FDS; Harrington, 2005a, Polish translation by Nowacki) was used to measure the frustration intolerance as a sum score of the questionnaire's 28 items. The scale consists of four subscales, each involving seven items: a) discomfort intolerance (α = .80), entitlement (α = .71; example item: "I can't stand having to persist at unpleasant tasks"), emotional intolerance (α = 0.77; " I

can't bear disturbing feelings"), and achievement (α = 0.71; example item: " I can't bear the frustration of not achieving my goals"). Cronbach's α coefficients for the whole scale was α = 0.88.

Participants

Using a snowball sampling method, participants were recruited online via adverts distributed through the social media communities. The study was advertised as exploratory research regarding various coping strategies and difficulties in frustration tolerance. The criteria for being included in the study were: (a) the ability to speak Polish fluently and (b) being over 18 years old. It was conducted via Lime Survey, and each person was informed it was a voluntary and anonymous study. All participants provided informed consent and were provided with the researcher's e-mail address if they noticed any negative repercussions of the study participation The results were gathered as a part of a master thesis project between december 2021 and November 2022. The research was approved by the University of Silesia Ethics Committee in Katowice (KEUS251/05.2022).

Three hundred seventeen individuals participated in the study (233 women, 70 men, 14 people of other genders). After collecting the data, the participants were divided into two subgroups (maladaptive daydreamers– MDers, and control group– non-maladaptive daydreamers, non-MDers) based on the score obtained in the Maladaptive Daydreaming Scale-16 (Soffer-Dudek, 2021). There were 142 MDers (100 women, 31 men, and 11 people of other genders) and 175 people in the control group (133 women, 39 men, and three people of other genders). A chi-square test showed that there were significant differences in the gender distribution among the two groups (χ^2 (2, $N = 317$) = 6.79, $p = .033$). People not identifying with the gender binary were more likely to be MDers than non-MDers while proportions of women and men in both groups were similar. Participants marked their ages from 18 to 60, with the average for MDers being M = 24.56, SD = 6.32, and for the control group M = 24.65, SD = 7.27). Sample characteristics are presented in Table 1.

Data analysis

The quantitative approach was applied. The Shapiro-Wilk W test was conducted to determine the normality rates of the variables studied. Correlations were conducted using the Spearman correlation analysis. The U Mann-Whitney's test was conducted to establish differences between the MDers and the control group.

Additionally, network models were estimated using the Qgraph package of JASP software. The network consists of nodes, which represent the independent variables and edges

Table 1 Sample sociodemographic data

	MDers (N=142)	non-MDers (N=175)
Age (M, SD)	24.56 (6.32)	24.65 (7.27)
Gender		
Male	21.83%	22.29%
Female	70.42%	22.29%
Other	7.75%	1.71%
Education		
Secondary	21.13%	12.00%
Student	47.89%	60.00%
Tertiary	30.99%	28.00%
Place of residence		
Small town (less than 50.000 citizens)	26.06%	30.29%
Middle-sized town (between 50.000 and 150.000 citizens)	23.24%	16.00%
City (over 150.000 citizens)	50.70%	53.71%

representing the pairwise correlations between the nodes after controlling for all other nodes in the network. The graphical lasso based on the Extended Bayesian Information Criterion (EBICglasso; Friedman et al., 2007; Foygel & Drton, 2010) was used to shrink small edges to zero. Given the non-normal distribution of MDS-16 scores among the MDers and the control group, a nonparanormal transformation was used (Han et al., 2009). The graphical illustration of the network shows stronger connections in the form of thicker edges i.e. larger partial correlation. The layout was based on the Fruchterman-Reingold algorithm that forced strongly correlated nodes closer together (Fruchterman & Reingold, 1991). The expected influence (EI) was used to measure the node's centrality, which is calculated as a sum of edge weight of a given node. Given the presented networks contained both positive and negative edges, it was more appropriate to use a centrality measure taking it into account. Central nodes are seen as crucial in understanding the changes in the network due to their interconnectedness with other nodes (Robinaugh et al., 2016). A nonparametric

bootstrapping sampling method was used to measure centrality to test the network's stability (Isvoranu et al., 2022). To test the dynamic of the relationship between different aspects of frustration intolerance, MD and coping the subscales of FDS were used in the analysis.

The analyses were conducted with JASP v 0.18.1 software (JASP Team, 2023). For all statistical tests, we considered an α level of 0.05 to be statistically significant.

Results

First, a correlation analysis, including a whole sample, was conducted. The summary of the results, including the W Shapiro-Wilk normality test, is presented in Table 2.

Maladaptive daydreaming was positively correlated with avoidant coping ($r=.21$, $p<.001$), frustration intolerance–full scale ($r=.26$, $p<.001$), discomfort intolerance ($r=.29$, $p<.001$), emotional intolerance ($r=.24$, $p<.001$), and achievement ($r=.12$, $p<.05$); also, it was negatively correlated with emotional support seeking ($r=-.25$, $p<.001$). Frustration intolerance ($r=.28$, $p<.001$), including discomfort intolerance ($r=.39$, $p<.001$), emotional intolerance ($r=.25$, $p<.001$), and entitlement ($r=.19$, $p<.001$), exhibited weak to moderate associations with avoidant coping.

Then, two groups (MDers vs. non-MDers) were compared. The results of Mann-Whitney's U test are shown in Table 3.

The MDers scored significantly higher on the avoidant coping subscale (U=10170.00), the overall score of frustration intolerance (U=9952.00), discomfort intolerance (U=9236.50), and emotional intolerance (U=10051.50) subscales. The non-MDers scored significantly higher on the emotional support-seeking subscale (U=16117.50).

In the next step, a network analysis was carried out for the (1) MDers and (2) non-MDers (control group), with three groups of variables distinguished: (1) maladaptive daydreaming (red nodes), (2) coping strategies (green nodes), (3) frustration

Table 2 Spearman's correlations and the results of the Shapiro-Wilk test

|	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	W
1. Maladaptive daydreaming	—										0.98*
2. Proactive coping	−0.01	—									0.99
3. Preventive coping	−0.06	0.33***	—								0.98
4. Avoidant coping	0.21***	0.08	−0.09	—							0.96*
5. Reflective coping	0.09	0.32***	0.59***	−0.04	—						0.98*
6. Emotional support seeking	−0.25***	0.37***	0.19***	0.02	0.02	—					0.98*
7. Frustration intolerance – full scale	0.26***	0.03	0.02	0.28***	0.08	−0.10	—				0.99*
8. Discomfort intolerance	0.29***	−0.17**	−0.19***	0.39***	−0.04	−0.12*	0.74***	—			0.99*
9. Emotional intolerance	0.24***	−0.05	0.07	0.25***	0.06	−0.08	0.80***	0.48***	—		0.98*
10. Entitlement	0.11	0.12*	0.03	0.19***	0.07	−0.06	0.79***	0.50***	0.47***	—	0.99*
11. Achievement	0.12*	0.23***	0.15**	0.03	0.14*	−0.02	0.67***	0.25***	0.41***	0.49***	0.99*

* $p<.05$, ** $p<.01$, *** $p<.001$; W - Shapiro-Wilk normality test W statistic

Table 3 Between-group differences, Mann-Whitney's U test

|	MDers			non-MDers			U	r
	M	SD	Me	M	SD	Me		
Maladaptive daydreaming	57.43	13.67	54.36	25.82	9.64	27.50	0.00***	-1.00
Proactive coping	35.91	5.65	36.00	36.09	5.04	36.00	12921.50	0.07
Preventive coping	27.54	4.82	28.00	28.17	4.29	29.00	13654.00	0.10
Avoidant coping	8.53	1.86	9.00	7.91	1.81	8.00	10170.00**	−0.18
Reflective coping	31.70	4.94	32.00	30.67	4.45	31.00	11266.00	−0.09
Emotional support seeking	12.39	2.93	13.00	13.95	3.25	15.00	16117.50***	0.30
Frustration intolerance – total score	97.83	15.31	99.00	93.30	13.70	94.00	9952.00**	−0.20
Discomfort intolerance	25.18	5.25	26.00	23.18	4.67	23.00	9236.50***	−0.26
Emotional intolerance	25.03	5.39	25.00	23.34	4.97	24.00	10051.50**	−0.19
Entitlement	24.82	4.62	25.00	24.71	4.50	25.00	12077.50	−0.03
Achievement	22.80	4.04	23.00	22.07	4.32	22.00	11041.00	−0.11

* $p < .05$, ** $p < .01$, *** $p < .001$
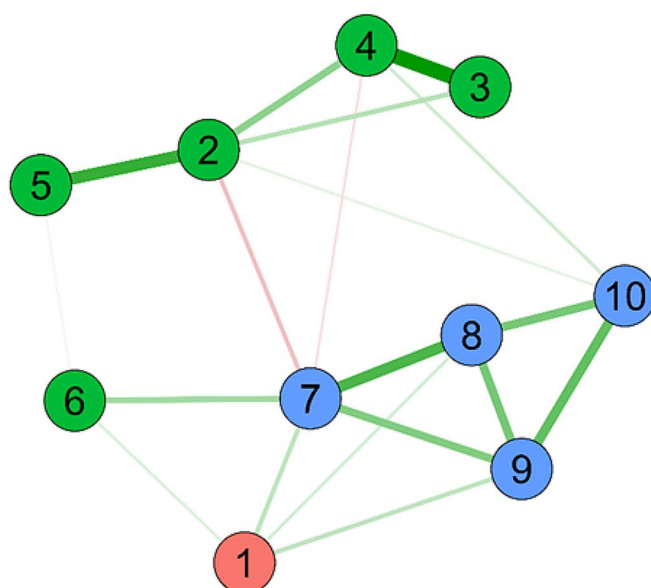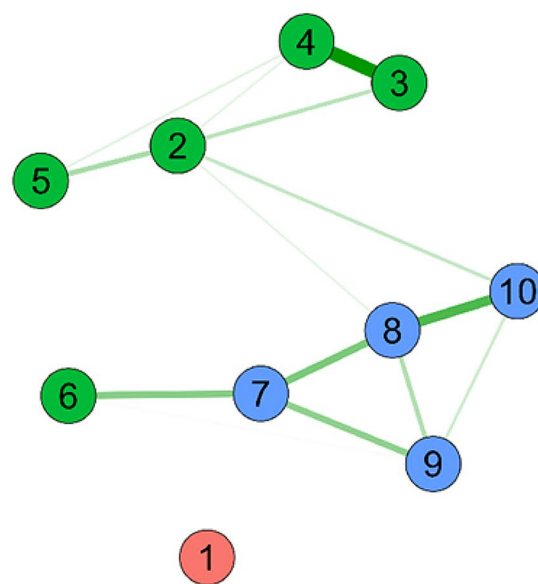
Fig. 1 Network analysis for both study groups. Legend: red nodes: 1. MDS–16 score; green nodes: 2. Proactive coping, 3. Reflective Coping, 4. Preventive coping, 5. Emotional Support Seeking, 6. Avoidant coping; blue nodes: 7. Discomfort Intolerance, 8. Entitlement, 9. Emotional intolerance, 10. Achievement

intolerance (blue nodes). The bootstrapping method of 5,000 samples was applied. Figure 1 shows the network plots.

In the MDers' network, 19 of the 45 possible edges were nonzero, with 14 in the control group. In both groups, most variables were positively connected. Maladaptive daydreaming showed no significant connections in the control group. For the MDers' group, it has significant edges with avoidant coping (0.05), discomfort intolerance (0.10), entitlement (0.07), and emotional intolerance (0.10). Although the connection between the variables was weak, the positive edges indicate that the higher intensity of MD symptoms is accompanied by higher levels of avoidant coping, discomfort intolerance, entitlement, and emotional intolerance.

The two nods with the highest EI centrality were emotional intolerance (EI = 1.27) and entitlement (EI = 1.39) in the MD group. It could be expected that changes in emotional intolerance and entitlement in this group would lead to biggest changes in other network variables. In the control group, those were entitlement (EI = 1.33) and discomfort intolerance (EI = 0.98). For the MDers, the strongest connections were exhibited between reflective–preventive coping (0.42), proactive coping–emotional support seeking (0.33), achievement–discomfort intolerance (0.29). For the control group, the most robust edges were obtained between reflective–preventive coping (0.51), achievement–entitlement (0.35), entitlement–discomfort intolerance (0.26).

Discussion

The study aimed to explore differences between maladaptive daydreamers and those who do not engage in MD in the context of coping styles and frustration intolerance. The results broaden the current knowledge regarding psychological mechanisms underlying MD and highlight potential individual differences between MDers and non-MDers. Clinical implications and future research directions are also discussed.

Maladaptive daydreaming and avoidant coping

The results showed that the MDers scored significantly higher than the non-MDers in avoidant coping strategy. Additionally, maladaptive daydreaming showed significant associations with avoidant coping in the network analysis only in the MDers plot. This aligns with previous research reporting that MDers often daydream to escape their problems (Somer et al., 2016a) and suppress unpleasant emotions (Pyszkowska et al., 2023). It has been reported that for some MDers, daydreaming can be an escape from complicated, often traumatic, circumstances they went through, e.g., in childhood (Somer et al., 2020a). Furthermore, the MDers scored significantly higher than the non-MDers in the discomfort and emotional intolerance scales (and the FDS total score). It is in line with prior studies showing that emotional and discomfort intolerance scales correlate with other dysfunctional coping, including avoidance (Harrington, 2005b).

Maladaptive daydreaming, entitlement and emotional intolerance

For both groups, entitlement (its mean score did not vary significantly) was the factor with the most expected influence. On the one hand, Somer et al. (2016b) suggest that MDers often turn to daydreaming to fantasize about being appreciated and gratified quickly; therefore, the results obtained may support this hypothesis. On the other hand, as it was significant in both groups studied, entitlement cannot be considered as a specific or crucial factor for developing or maintaining MD. Perhaps entitlement, understood as a pervasive feeling of deservingness, exaggerated expectations, and vulnerability to distress (Grubbs & Exline, 2016), is a transdiagnostic– or simply human– self-oriented predisposition accompanying coping strategies and easing discomfort. Furthermore, it has been shown that the relationship between entitlement and addictive behaviours differs across genders (Ko et al., 2008) - as the current study consisted predominantly of women, it may have been impossible to identify such a relationship. Additionally, for the MDers, emotional intolerance is second when it comes to centrality.

The non-acceptance of emotions as they are and using daydreaming as a strategy to manage them aligns with previous research on maladaptive daydreaming (Greene et al., 2020; Pyszkowska et al., 2023), where daydreaming was presented as linked to emotional dysregulation and a self-soothing method directed at suppressing emotional discomfort (Regis, 2013). The rise of emotions can become an activating even for the beliefs related to one's inability to withstand them and furthermore regulate them, which results in implementation of MD and avoidant strategies. The network analysis showed that in both groups studied, avoidant coping exhibited relationships with discomfort intolerance, with no direct link with emotional intolerance. In previous studies, discomfort intolerance and deficits in emotional regulation abilities have been linked with avoidance (McHugh et al., 2013); therefore, it can be hypothesized that the beliefs regarding lack of ability to stand the hassle of taking care of one's emotions is a more critical factor than intolerance of emotions itself.

Maladaptive daydreaming and emotional support seeking

The hypothesis concerning emotional support seeking has been supported. The MDers showed lower inclinations for seeking support from others, discussing their emotional state, or wanting to spend quality time together when difficulties arise compared to non-MDers. It can be linked with emotional dysregulation in this population as the accessibility to one's emotional states is impaired among the MDers (Greene et al., 2020), as well as social isolation and childhood loneliness often seen in this population (Somer et al., 2016a). As the current study sample consists in majority of participants identifying as women, it should be noted that support seeking has been shown as an activity dependent on gender of the seeker. The relationship between mental health and support appears to have stronger relationship with mental health for women than men (Harandi et al., 2017). Furthermore, as the MDer group had higher numbers of people not identifying with gender binary the results may be related to the reported difficulties people identifying as transgender may experience with finding supportive communities that would be a safe space to seek support (Moolchaem et al., 2015).

Maladaptive daydreaming and future oriented coping

The hypothesis regarding the differences in the future-oriented coping styles, e.g., proactive and preventive coping, was not supported. The Proactive Coping Scale considers possibilities for future growth and changing

one's perspective about setbacks (Greenglass et al., 1999). Although MDers report using daydreaming as a creative outlet and a source of inspiration, when the output of creative behaviors is measured, they score lower than the control group (West & Somer, 2019)– and it can be similar in the context of proactive coping. Both preventive and reflective coping focus on actual actions to safeguard one's future and family safety or dwelling on one's experiences, and this concern does not seem to differentiate MDers and the control group. Given that MDers create complex worlds, often driven by impossible aspects such as suddenly becoming a secret agent fighting terrorism or what-if scenarios imagined in the past (Pietkiewicz et al., 2018; Somer et al., 2016b), maladaptive daydreaming has no links with the proactive coping. Additionally, the safety concern could be universal for both MDers and non-MDers. The reflective and preventive coping scales have the most potent edge in both groups, which could be explained by the importance of imagining the possible solutions for prevalent problems in both scales.

Clinical implications

The current study allows for proposing clinical implications. As emotional intolerance may serve as an essential factor in maintaining engagement in maladaptive daydreaming, the role of discomfort intolerance and its links to avoidance cannot be omitted. Therefore, interventions aimed at lowering daydreaming for MDers might focus on emotional regulation competencies, including mindfulness and Dialectical Behaviour Therapy (DBT) interventions (cf. Lotan et al., 2013; Muhomba et al., 2017). Previous intervention among MDers using mindfulness exercises such as attention and acceptance, remaining present while unpleasant emotions arise, body scan, and self-monitoring through daydreaming diary provided positive results (Herscu et al., 2023). Providing MDers with skills necessary for coping with unpleasant emotions may prove especially important as MD can be seen as a stress-relief strategy (Regis, 2013). Additionally, focusing on cognitive schemas connected to entitlement may prove beneficial– an area in which schema therapy has shown positive results (Taylor et al., 2017). Therapists rely on empathic confrontation when working with entitled behaviour and supports the client whenever they admit a flaw or experience a feeling of inferiority (Young et al., 2003). It should be noted that previous studies have shown comorbidity between MD and depression, ADHD (Somer et al., 2017), borderline personality disorder (Pyszkowska et al., 2023), or diminished emotional regulation abilities (Greene et al., 2020; Pyszkowska et al., 2023). Therapeutic interventions may need to include treating the underlying problems while approaching MD as their visible consequence.

Limitations and future research

Despite its strengths, the current study has its limitations. First, the sample consisted mainly of university students and young adults identifying as women, although both groups were similar. It is consistent with maladaptive daydreaming being more prominent among younger generations and women (Soffer-Dudek & Theodor-Katz, 2022). Nevertheless, this study's results cannot be fully generalized for older persons and people identifying as men as the relationships between the variables may differ in such samples. Second, the current study used only one general factor considering maladaptive daydreaming (the Maladaptive Daydreaming Scale-16), not taking into account more distinct features of MD (fantasies' themes, frequency of MD sessions, situational contexts when MD occurs) and psychological aspects of MD (e.g., dissociation, PTSD, affective symptoms). Hence, future research should focus on these additional aspects. Third, the study was cross-sectional and cannot be informative about situational contexts regarding MD, and particular coping strategies applied when MD occurs. Therefore, further projects should be aimed at qualitative and experimental aspects of MD to enable a deeper and more precise understanding of the MD phenomena in terms of coping. Fourth, the study took place as the Covid pandemic was ending in Poland. Previous longitudinal study has shown that symptoms of MD were not related to the Covid exposure and the the authors proposed that while MDers adapted to the challanges of the pandemic daydreaming may be less related to proximal stressors and more of a result of distant developmental roots in childhood (Musetti et al., 2023). Nevertheless, in the future studies the issue of strong external stressors should be addressed.

Conclusion

The current study explored the differences between maladaptive daydreamers and the control group regarding coping styles and frustration intolerance. The results proved higher levels of frustration and discomfort intolerance and avoidance-focused strategies among MDers, adding to the existing body of research in this area (Musetti et al., 2021; Green et al., 2020). Furthermore, they demonstrated that the cognitive processing of one's internal stimuli (discomfort and emotion intolerance) or external events (entitlement) may be connected to MD symptoms and coping strategies - a view in line with the cognitive-behavioural model of psychopathology (Hupp et al., 2008). Activation of a belief may elicit emotions and behaviour, but it is a part of an ongoing process as emotions and behaviour may become further

activating events. The results allow for clinical implications and further understanding of MD phenomena.

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Declarations

Ethics approval The research was approved by the University of Silesia Ethics Committee in Katowice (KEUS251/05.2022).

Patient consent All Participants provided informed consent.

Conflict of interest The Authors declare no conflict of interest.

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