INSAN
Jurnal Psikologi dan Kesehatan Mental
http://e-journal.unair.ac.id/index.php/JPKM
p-ISSN 2528-0104 | e-ISSN 2528-5181

RESEARCH ARTICLE / *ARTIKEL PENELITIAN*

Trait Anxiety and Eating Disorder Symptoms: Psychological Inflexibility as Mediator

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ABSTRACT

The prevalence of eating disorder (ED) symptoms is increasing in emerging adults and have negative psychosocial impacts on the individuals. Anxiety has been found to precede the development of ED symptoms. This cross-sectional study aims to investigate the role of psychological inflexibility in the relationship between anxiety and ED symptoms in a sample of 141 female Indonesian emerging adults. Participants completed the adapted version of Trait anxiety subscale of the State-Trait Anxiety Inventory, the Acceptance and Action Questionnaire-II and Eating Attitudes Test-13 to assess trait anxiety, psychological inflexibility, and ED symptoms respectively. Results showed the indirect effect of trait anxiety and ED symptoms with psychological inflexibility as mediator was significant [*b*=0.144, 95%CI:(0.02-0.29)]. This suggests that psychological inflexibility can mediate the relationship between anxiety symptoms and ED symptoms. This finding may help creating prevention initiatives targeting psychological inflexibility for individuals vulnerable with anxiety to prevent the development of ED symptoms.
Keywords: *eating symptoms, psychological inflexibility, trait anxiety*

ABSTRAK

Prevalensi individu dengan gejala gangguan makan pada perempuan *emerging adults* semakin meningkat dan memiliki dampak negatif terkait psikososial pada individu. Kecemasan ditemukan berasosiasi dengan adanya gejala gangguan makan. Studi *cross-sectional* ini bertujuan untuk melakukan investigasi peran dari infleksibilitas psikologis di dalam hubungan antara kecemasan dan gejala-gejala gangguan makan. Studi ini melibatkan 141 wanita Indonesia *emerging adults*. Alat ukur yang digunakan adalah subskala *trait anxiety* dari *State-Trait Anxiety Inventory* untuk mengukur kecemasan, *Acceptance and Action Questionnaire-II* untuk mengukur infleksibilitas psikologis, dan *Eating Attitudes Test-13* untuk mengukur gejala-gejala gangguan makan. Hasil menunjukan efek tidak langsung dari kecemasan dan gejala pola makan dengan infleksibilitas psikologis yang signifikan [*b*=0,144; 95%CI:(0,02-0,29)]. Artinya, tingkat infleksibilitas psikologis memediasi hubungan antara kecemasan dan gejala gangguan makan. Temuan ini dapat membantu menciptakan program-program dengan fokus pada infleksibilitas psikologis individu yang rentan dengan kecemasan untuk menghindari perkembangan gejala gangguan makan.

Kata kunci: *gejala gangguan makan, infleksibilitas psikologis, kecemasan*

INSAN Jurnal Psikologi dan Kesehatan Mental, 2023, Vol. 8(2), 117-147, doi: 10.20473/jpkm.v8i22023.117-147
Submitted: 08/09/2023 Accepted: 22/11/2023 Published: 11/12/2023
Editor: Rahkman Ardi
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INTRODUCTION

Eating disorder (ED) behaviors fall on a spectrum ranging from subthreshold symptoms such as chronic diet, excessive exercise to control body weight, body dissatisfaction, binge eating, and purging, to clinical diagnoses such as anorexia nervosa (AN), bulimia nervosa, and binge-eating disorder (Stice et al., 2013). The increasing prevalence of ED symptoms is alarming in emerging adult women (18-25 years; Santrock, 2013). A systematic review found that 26.4% of emerging adults students engaged in unhealthy weight control behaviors such as vomiting, fasting, excessive exercise, and laxatives or diuretics use at least once per week, while 20.7% of female university students reported engaging in compensatory weight-control behaviors in the past year (Potterton et al., 2020). Goldschmidt et al. (2016) found that symptoms of overeating and binge-eating developed in 7.2% of the samples during the emerging adult phase.

The implications of ED symptoms could be harmful towards physiological and psychological health. ED symptoms in emerging adulthood positively associate with greater depressive symptoms, social isolation, sleep difficulties, and fewer close friends (Mason & Heron, 2016; Potterton et al., 2020). ED symptoms are also risk factors to developing ED diagnoses (McClelland et al., 2020). Meanwhile, clinical diagnoses of AN have one of the highest mortality rates of all psychiatric disorders (Treasure et al., 2010). The psychosocial impacts from ED symptoms highlight the importance of conducting research in variables that contribute to its development for prevention and treatment efforts.

Mental health conditions such as anxiety have been associated with increased risk in ED (Godart et al., 2015). Specifically, trait anxiety, or defined as the general predisposition to appraise situations as threatening, avoid anxiety-provoking situations, and showing high baseline in physiological arousal (Elwood et al., 2012). It has been shown to associate with ED psychopathologies in several studies (Becker et al., 2017; Schaumberg et al., 2021). Trait anxiety has been hypothesized to create vulnerability in EDs (Lilenfeld, 2010; Frank et al., 2023). Forrest et al. (2019) also found that trait anxiety was related to low self-confidence and avoidance of social eating across EDs. In a study, the relationship between body dissatisfaction and eating disorder symptoms was moderated by anxiety (Doumit et al., 2016). Eck and Byrd-Bredbenner (2021) also found an increase in severity of ED as anxiety increases. The results of these studies indicated the contribution of anxious traits on ED behaviors and its severity (Juarascio et al., 2011).

Few explanations were found for the positive relationship between anxiety and ED symptoms. One model proposed that eating behaviors function to control worries and regulate difficult emotions (Leehr et al., 2015; Meule et al., 2021). Behavioral control strategies were often found to serve an individual's inner experiences, especially in individuals with ED who struggle to get rid of it (Fogelkvist et al., 2020). ED symptoms had been theorized to functionally suppress or distract from negative emotions, including anxiety (Hearon et al., 2013; Rosenbaum & White, 2013). More specifically, binge eating acts as a behavioral strategy to regulate emotions or coping with psychological discomfort relating to anxiety (DeBoer & Smits, 2013). Anxiety is viewed as having negative consequences that are difficult to be accepted, thereby challenges provoking anxiety become avoided or suppressed through ED behaviors (Espel-Huynh et al., 2019). Fairburn et al. (1986) have also proposed that engaging in disordered eating behaviors help reduce individual anxiety. Overall, individuals with ED symptoms are more vulnerable to negative consequences of anxiety and eating behaviors serve as means to escape from uncomfortable states of anxiety.

Realizing the rising prevalence of individuals experiencing anxiety in Indonesia where its onset typically starts before emerging adulthood (Setyananda et al., 2021; Center for Reproductive Health et al., 2022), it is important to understand the mechanism of the relationship between anxiety and ED symptoms to prevent the development of ED. One way to explain this relationship is through psychological inflexibility (PI), a transdiagnostic process, described as a pattern in which behavior is excessively controlled by one's thoughts, feelings, and other internal experiences, or to avoid these experiences, at the expense of more effective and meaningful actions (Levin et al., 2014). In the process, the individual is unable to modify behavior effectively when exposed to a stressor or changing environment demands. It encompasses experiential avoidance (EA), one of the sub-core processes of PI, which is the tendency for individual to escape, avoid, control, or decrease difficult thoughts and feelings, regardless of the consequences of actions (Levin et al., 2014; Tavakoli et al., 2019). Therefore, actions are more likely to be misaligned with the individual's goals and values. In this study, EA is used interchangeably with PI.

PI are thought to be behaviors that individuals with anxiety engage in. For example, individuals with panic disorder often resort in avoiding, especially when physiological symptoms were experienced (Zvolensky & Eifert, 2001). Individuals with social anxiety tend to suppress emotions and the self, which interrupt them in having positive experiences and ability to benefit from opportunities that are aligned with their goals (Kashdan & Steger, 2006). Such avoidant responses become a default over time, which may further exacerbate anxiety instead of trying more adaptive ways such as facing their fears. A recent study found an association between low PI and high experience in anxiety levels in college students compared to those with high psychological flexibility (Wang et al., 2023). Tavakoli et al. (2019) found an association between PI and anxious symptomatology in college students, through the individual's need to control and minimize the experience of unwanted feelings, thoughts, or events.

PI has long been theorized to contribute to the development and maintenance of ranging psychological problems, including ED (Masuda et al., 2010; Davies et al., 2013; Levin et al., 2014;). Individuals with AN were found to find difficulty in accepting their emotional responses and were rigid and concerned over controlling their body (Merwin et al., 2010; Davies et al., 2013). Masuda et al. (2010) also found an association between low levels of psychological flexibility (PF) and ED cognitions. Additionally, the relationship between ED cognitions and ED behaviors were found to be moderated by mindfulness, an aspect of PF (Masuda et al., 2012). The process involved is that when individuals exhibit higher EA, they

have greater difficulty in tolerating distress, and therefore tend to pursue immediate actions to avoid the discomfort including eating behaviors. As found by Fahrenkamp et al. (2019), EA mediated greater cognitive restraint and greater levels of emotional eating in adolescent non-clinical samples. Therefore, PI could serve as a mechanism to the development of ED behaviors.

The process of PI in ED is relevant to the *transdiagnostic* theory of ED symptoms where mechanisms maintaining its symptoms involve overevaluation of body weight and shapes, preoccupying thoughts on the body, perfectionism, low self-esteem, and interpersonal difficulties (Fairburn et al., 2003). For example, perfectionism in eating disorder symptoms was described as obsessive over evaluation to reach a certain standard for oneself regarding weight, shape, appearance, and acceptance from others, ignoring all other negative consequences (Fairburn et al., 2003; Schmidt & Treasure, 2006). This rigid thinking reflects PI whereby individuals tend to control their negative thinking even though it evokes uncomfortable emotions. This pattern was also found to be associated with low self-esteem as individuals with ED behaviors evaluate themselves negatively when they fail to meet their goals (Fairburn et al., 2003). An inability to control their thoughts then lead them to use dysfunctional mood modifiers (i.e., starving oneself, purging, or excessive exercise), instead of allowing oneself to accept changes in emotions and cope healthily. This aligns with Andreescu et al. (2023) findings of correlation between disordered eating and deficits in emotional processing and regulation skills in subclinical ED female participants. Additionally, factors such as stressors, occupation concerning body image, and interpersonal relationship difficulties, might create a sense of need to control, and that is through their eating behaviors (Fairburn et al., 2003). Therefore, ED symptoms may arise due to high PI in the individual.

As elaborated, PI could be a mechanism on how individuals with anxiety predict ED behaviors. Espel-Huynh et al. (2019) found a mediating role of EA in the relationship between anxiety sensitivity and ED psychopathology. Meanwhile, Usubini et al. (2022) found that PI mediates the relationship between anxiety and emotional eating in obese patients. However, both studies used a predominantly White sample and patients with primarily severe eating pathology, and Italians and specific to only obese patients with emotional eating symptoms, respectively. Generalisation is thereby limited to the non-clinical Indonesian community. In another study, Mróz et al. (2022) found that women with trait anxiety reported higher cognitive instability (defined as intruding thoughts), and consequently engage in emotional eating or poor dietary behaviors. The study used a measure of impulsivity within a cognitive instability construct and did not constitute other behaviors of PI. The current study aims to close the literature gap through using specific target participants of the Indonesian community and test assessments specifically measuring PI.

Based on these explanations, it is important to understand the psychological mechanism between anxiety and ED symptoms to achieve a more comprehensive understanding about the relationship. Through understanding its mechanism, individuals may become aware of the importance in developing more effective strategies in managing their anxiety to prevent ED symptoms development. A role of PI as mediator may strengthen the link between anxiety and ED symptoms. The explanation is that individuals with PI may resort to avoidant strategies to regulate their anxiety and ED behaviors serve as a way to avoid and control the anxiety. The current study analyzes whether PI mediates the relationship between trait anxiety and ED symptoms using a non-clinical sample of 18-25 year-old women. The sample of emerging adult women is used as psychological problems including ED

symptoms are often experienced during this period due to life challenges and changes including aspects of education, career, and relationships (Santrock, 2019). Exploring this mediatory relationship during emerging adulthood may prevent EDs in adulthood. As known to the authors, this is the first study conducted to explore this mediation model in a non-clinical Indonesian sample. This study aims to bring value for clinicians and treatment designers in preventing and managing ED symptoms in Indonesian women.

METHOD

Research Design

This study was a non-experimental study, defined by Gravetter and Forzano (2012) as a study without any manipulation of independent variable through intervention or treatment. This was a quantitative study involving numerical and statistical data analyses. The data was collected at a one-time period and is therefore cross-sectional. This research was conducted in August 2023. Correlational design and analyses were used in this study to examine the relationship between trait anxiety, PI, and ED symptoms, and also the relationship between trait anxiety and ED with PI as mediator.

Participants

Participants in this study were 141 Indonesian females who have graduated high school with ages ranging from 18 to 25 years, recruited through convenience, non-probability sampling. Participants were invited through social media (WhatsApp, Twitter, and Instagram), to participate through filling in an online questionnaire. The questionnaire included five parts; informed consent, declaration of agreement in participating, demographics, three assessment measures, and debrief. A priori analysis was conducted to find the estimation of sample size using G*Power version 3.1. Statistical analysis used Linear Multiple Regression: Fixed Model, R2 Deviation from Zero with effect size of .31 (predetermined based on a study by Wendell, 2011) with a power size of .95, .5 significance level, and 9 predictors. A minimum sample of 85 was required. Therefore, the obtained sample size was adequate to capture an effect of that size.

Measurements

Trait anxiety was measured using the Indonesian version of the State-Trait Anxiety Inventory (STAI) adapted by Primusanto (2000), originally created by Spielberger et al. (1983). STAI measures two constructs, which are state anxiety and trait anxiety. Only trait anxiety subscale was used because the aim is to measure anxiety predisposition in participants. The Indonesian version is well-validated among university students. Our independent variable anxiety symptoms, measured with a continuous score, is calculated by summing scores for the trait anxiety subtest. The subtest consists of 20 items with 4-point Likert scale, 1=“None at all”, 2=“Somewhat”, 3=“Moderately so”, and 4=“Very much so”. Nine items indicate absence in anxiety (items 21, 23, 26, 27, 30, 33, 34, 36, and 39). Scoring for these items were reversed. The total score for the subtest ranges from 20-80. The higher the score, the more severe anxiety symptoms. This study showed good internal consistency with Cronbach α=0.896 in the trait anxiety subscale.

PI was assessed using the Acceptance and Action Questionnaire-II (AAQ-II) (Hayes et al., 2006). It measures the ability of individuals to fully connect with the present moment, thoughts and feelings, and withstanding behaviors to achieve one’s values and aims. AAQ-II has been adapted by Permadi & Nurwianti (2019) to the Indonesian version. AAQ-II consists of seven items, using a 7-point Likert scale with 1 indicating “Never True” and 7 indicating “Always Right”. Total scores range from 7 to 49, with higher scores indicating higher PI. The Indonesian AAQ-II has been well-validated using a

comprehensibility test, with very good high test-retest reliability (Cronbach α=0.918) (Radyani et al., 2022). This study also indicated good internal consistency (Cronbach α=0.904).

ED symptoms were measured using the Eating Attitudes Test-13 (EAT-13) developed by Devi (2014) and tailored for Indonesian participants. EAT-13 was derived from Eating Attitudes Test-26, originally developed by (Garner et al., 1982). This questionnaire is not used to provide diagnosis and used to assess the risk of development of eating disorders (Papini et al., 2022). EAT-13 consists of 13 items using a 6-point Likert Scale, with the following scores: 1=Always, 2=Usually, 3=Often, 4=Sometimes, 5=Rarely, 6=Never. Answers from scale four to six were scored as 0, three scored as 1, two scored as 2, and one scored as 3. Total score ranges from 0 to 39. Continuous score was used, with higher scores indicating more ED symptoms. EAT-13 is well validated among female teenagers, young adults, and adults. It has good test-retest reliability (Cronbach α=0.763) (Devi, 2014). In this study, good internal consistency was indicated (Cronbach α=0.854).

Sociodemographic factors were assessed to be included as covariates, including socioeconomic status (SES), marital status, occupation, occupation requiring body control, past clinical diagnosis, BMI, stressors experienced in the past six months, 1 month change in eating patterns, and history of eating behaviors. SES was measured using participants' monthly expenditures, and BMI was scored using the formula [weight(kg)/height(m)^2] (World Health Organization, 2010). These factors were decided on the bases of previous research showing significant relationship or effects on ED symptoms and data from similar populations (Raab et al., 2000; Kusuma, 2023). Sociodemographic factors that were significantly related with ED symptoms will be included in the mediation analysis to rule out possibilities of covariate influence on mediation analysis results.

Data Analysis

Data were analyzed using IBM SPSS version 25 and SPSS Macro PROCESS by Hayes version 4. Descriptive statistics and correlation analyses were conducted to explore associations between sociodemographic factors and the outcome variable. Spearman's Rank coefficient has been also used to interpret correlation analyses. Spearman's rank correlation was used to see associations among continuous variables. Before conducting the mediation analysis to test the current study hypotheses, assumption tests of data distribution and descriptive analyses were done for each of the research variables. Score of skewness and kurtosis for each variable that is in between -1.5 and 1.5 indicate a normal distribution (Tabachnick & Fidell, 2019). All variables were shown to have normal distribution except for ED symptoms (EAT-13). Bootstrapping was used to deal with violations of normality (Field, 2013; Hayes, 2004). The mediating role of PI (M) in the relationship between trait anxiety (X) and ED symptoms (Y) was tested using Hayes' Process Model 4 through 5000 bootstrapped samples (Preacher & Hayes, 2008). Sociodemographic factors found to be significantly associated with ED symptoms in the correlation analyses were controlled as covariates in the mediation model. These factors were stressors experienced in the past six months, occupation requiring body control, BMI, and history of ED behaviors. The indirect effect was significant if the 95% CI coefficient did not include zero (Preacher & Hayes, 2008). This study has been approved by the ethics and reviewer team from Universitas Indonesia.

RESULTS

Table 1 summarized the descriptive statistics of participants' sociodemographic. A total of 141 participants were included in the analyses based on the criteria for this research. Participants' ages ranged from eighteen to twenty-five (*M*=22.60; *SD*=2.02). The sample was predominantly Javanese (44.3%), followed with Chinese (14.3%), and Sundanese (11.4%). Predominantly were from the

Province of West Java (34%), followed by DKI Jakarta (30.5%), and Banten (9.2%). Majority were not married (95%), have graduated high school (58.2%), came from low to middle income SES (35.5%), and were students (43.3%). 29 participants had a history of mental illness diagnoses (20.6%) and were no longer experiencing the condition. 107 participants (75.9%) reported having experienced stress in the last six months, with 53 participants reported that stress was quite influential (37.6%) and 36 participants reported being extremely influenced (25.5%).

The average score of BMI within the healthy category was 22.68 (*SD*=5.14), as many as 58.87%. 116 participants (82.3%) did not have the urgency to take care of their body image in their occupation, however 100 participants (70.92%) reported a history of controlling diet or eating patterns. 56 of the 100 participants (56%) were still controlling their eating patterns in the past month and 37 of those (66.07%) were still controlling their eating patterns did it to modify their weight to be more ideal.

Table 1. Sociodemographic Characteristics of Participants

Demographic Data	Descriptive	
	n	*%*
Domicile		
West Java	48	34
DKI Jakarta	43	30.5
Banten	13	9.2
Others (DIY, Kalimantan, Bali, NTT, NTB, Sumatera)	37	26.2
Ethnicity		
Javanese	62	44.3
Chinese-Indonesian	20	14.3
Sundanese	16	11.4
Mixed (e.g.: Javanese-Sundanese)	10	7.1
Others (Betawi, Batak, Melayu, Minang, Bugis, Timor, Sasak, Basemah, Palembang)	33	22.9
Marital Status		
Single	134	95
Married	1	0.7
Married with child	6	4.3
Last Education Level		
High School	50	35.5
Diploma	3	2.1
Undergraduate	82	58.2
Postgraduate	6	4.3
Monthly Expenditure (SES)		
<2.000.0000 (D)	49	34.8
2.000.000-4.000.000 (C)	50	35.5
4.000.000-6.000.000 (B)	24	17
>6.000.000 (A)	18	12.8

Demographic Data	Descriptive	
	n	%
BMI Category		
Underweight (<18.5)	26	18.4
Normal weight (18.5-24.9)	81	57.5
Pre-obesity (25.0-29.9)	21	14.9
Obesity Class I (30.0-34.9)	7	5
Obesity Class II (35.0-39.9)	6	4.3
Occupation		
Student	61	43.4
Private sector employee	45	31.9
Health workers (doctors, nurses, pharmacists, etc.)	9	6.4
Housewife	6	4.3
Government officials	2	1.4
Entrepreneur	7	5
Influencer	1	0.7
Unemployed	10	7.1
Occupation Requiring Body Control		
No	116	82.3
Yes, directly	4	2.8
Yes, indirectly	21	14.9
Stressors in the past 6 months		
No	34	24.1
Yes	107	75.9
No influence	34	24.1
Little influence	18	12.8
Quite influential	53	37.6
Very influential	36	25.5
History of Mental Illness		
No	112	79.4
Yes	29	20.6
Diet or Change in Eating Pattern in the Past 1 Month		
No	73	51.8
Yes	68	48.2
Medical reason	13	9.2
Following patterns of close persons	3	2.1
Lose or gain weight	43	30.5
Cope with life problems	6	4.3
Religious reasons	1	0.7
Others	2	1.4
History of Diet or Change in Eating Pattern		
No	42	29.8
Yes	99	70.2
Medical reason	12	8.5

Demographic Data	Descriptive	
	n	%
Following trend	1	0.7
Lose or gain weight	76	53.9
Cope with life problems	8	5.7
Religious reasons	2	1.4
Others	2	1.4

Table 2 showed the descriptive results on minimum, maximum, mean, and standard deviation for each variables. AAQ-II measured PI and produced a total score ranging 0-49. Mean score for AAQ-II was 31.09 (*SD*=8.62), while the minimum score was 7 and maximum 49. Trait anxiety (TA) measured by STA-I result in one total score with score ranging from 20-80. Mean score of TA was 51.47 (*SD*=9.39), with minimum score of 25 and maximum score of 74. For ED symptoms measured using EAT-13, one total score is produced ranging from 0-39. The mean score of EAT-13 was 6.44 (*SD*=6.52), with minimum score of 0 and maximum score of 31.

Table 2. Descriptive Data of Research Variables

Variable	*Min.*	*Max.*	*M*	*SD*
Psychological Inflexibility	7	49	31.09	8.62
Trait Anxiety	25	74	51.47	9.39
Eating Disorder Symptoms	0	31	6.44	6.52

Correlation analyses can be seen in Table 3. All variables showed significant correlations. Positive correlations were found between the TA, PI, and ED symptoms. Trait anxiety had a strong positive correlation with PI (r=.722; p<.001). TA and ED symptoms also showed positive correlation (r=.248; p<.001), while ED symptoms had a positive correlation with PI (r=.355; p<.001).

Table 3. Correlation Between Variables

Variable	1	2	3
1. Trait Anxiety	-		
2. Psychological Inflexibility	.722**	-	
3. Eating Disorder Symptoms	.248**	.355**	-

*Note. **p<.001*

After testing for normality and correlation between variables, mediation analysis was conducted with trait anxiety as independent variable, ED symptoms as dependent variable, and PI as the mediating variable. Table 4 showed the coefficient model of the mediating relationship between the three variables before and after controlling for covariates respectively. Figure 1 showed the mediation relationship of the three variables after controlling for covariates.

Table 4. Coefficient Model Trait Anxiety and Eating Disorder Symptoms Mediated by Psychological Inflexibility Before and After Controlling for Covariates.

	b	*SE*	95% CI		*p*
Model parameter			*LL*	*UL*	
Model tested: effect of TA (X) on ED symptoms (Y) through					

PI (M) before controlling for covariates					
Total effect (*c*)	.163*	.057	0.050	0.277	.005
Direct effect (*c'*)	.010	.079	0.147	0.167	.900
Indirect effect of PI (*a* * *b*)	.221	.076	0.076	0.381	-
TA to PI (*a*)	.650**	.055	.541	.759	<.001
PI to ED Symptoms (*b*)	.236*	.086	.065	.407	.007
Model tested: effect of TA (X) on ED symptoms (Y) through PI (M) after controlling for covariates					
Total effect (*c*)	.095	.058	-.019	.210	.102
Direct effect (*c'*)	-.005	.074	-.151	.141	.945
Indirect effect of PI (*a* * *b*)	.145	.070	.018	.293	-
TA to PI (*a*)	.556**	.059	.440	.672	<.001
PI to ED Symptoms (*b*)	.181*	.084	.015	.347	.033
BMI	.903	.529	-.144	1.950	.090
Occupation requiring body control	1.206	1.081	-.933	3.344	.267
Stress experienced in the past 6 months	2.346	1.241	-.101	4.801	.061
History of eating behaviors	4.164**	1.142	1.906	6.422	<.001

Note. ***p*<.001, **p*<.01*

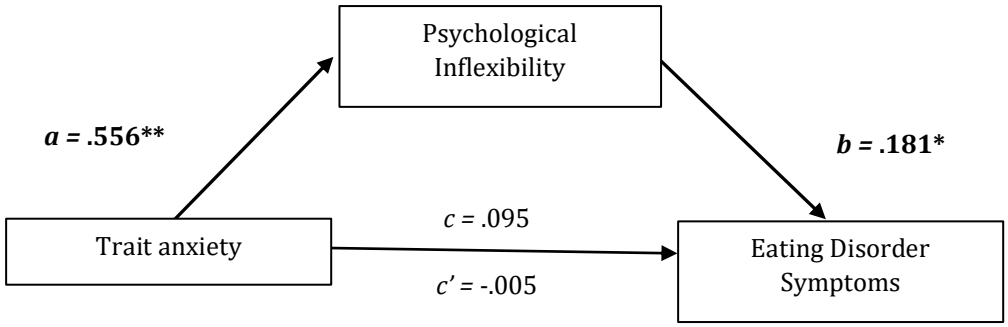


Figure 1. Mediation Model with Trait Anxiety as Independent Variable After Controlling for Covariates

Note. ***p*<0.001. Bold words show the relationship between Trait Anxiety and ED Symptoms with inclusion of PI as mediator.

Before controlling covariates, the total effect (path *c*) of relationship between TA and ED symptoms was statistically significant [*b*=.221; 95%CI:(.05-.28)]. Path *a* showed that TA was significantly associated with PI [*b*=.650, *t*(141)=11.80, 95%CI:(.54-.76); *p*<.001]. Similarly, pathway *b* showed that PI was significantly associated with ED symptoms [*b*=.231, *t*(141)=2.74, 95%CI:(.07-.41); *p*=.007]. However, with PI as mediator, the direct effect (pathway *c'*) showed that TA was no longer associated with ED symptoms (*p*=.900). Finally, an indirect effect indicates that TA and ED symptoms were significantly associated via PI [*b*=.221; 95%CI:(.08-.38)]. The non-significant relationship between TA to ED symptoms may suggest a mediation effect of PI in the model.

Based on figure 1, after controlling for covariates (i.e., stressors experienced in past six months, BMI, history of eating behaviors, and occupation requiring body control), pathway *c'* (direct effect) showed that TA was not significantly associated with ED symptoms (p=.102). Meanwhile, pathway *a* showed that TA was still significantly associated with PI (b=.556; p<.001), and pathway *b* showed that the relationship between PI and ED symptoms was also statistically significant (b=.181; p=.003). The total effect (pathway *c*) was not statistically significant (p=.945). The indirect effect indicates that TA predicts ED symptoms with PI as mediator (b=.144; 95%CI:.02-.29). These results suggested that the relationship between TA and ED symptoms was fully mediated by PI.

DISCUSSION

The current study explored the role of PI mediates the association between trait anxiety and ED symptoms in nonclinical sample of emerging adult women in Indonesia. In preliminary correlation analyses, trait anxiety was positively associated with PI and with ED symptoms. This means that individuals with higher trait anxiety were associated with experiencing more PI and with ED symptoms. In the subsequent mediation analyses, PI was found to significantly mediate the relationship between trait anxiety and ED symptoms. In other words, those with higher levels of trait anxiety may significantly impact the levels of PI. When PI levels are high, meaning coping their anxiety with avoidant strategies, individuals may then have higher risk of developing ED symptoms. Their ED symptoms act as a means to avoid their anxiety. Meanwhile, the relationship between trait anxiety and ED symptoms were no longer significant when controlling for covariates.

First, our finding showed a significant effect of trait anxiety on ED symptoms. This aligns with Kaye et al. (2004) retrospective finding that anxiety disorder occurs before the onset of EDs and Godart et al. (2003) where almost half of women were diagnosed with anxiety disorders before developing EDs. Some studies also suggested that anxiety comorbid with ED (Godart et al., 2015) or may even occur from having ED symptoms (Tanofsky-Kraff et al., 2011). However, this study cannot conclude whether anxiety precedes or predicts ED. After controlling covariates, the mediation analyses showed no relationship between trait anxiety and ED symptoms. This result is inconsistent with most past findings (Juarascio et al., 2011; Godart et al., 2015; Eck & Byrd-Bredbenner, 2021). Alternatively, our result was supported by Anderson (2019) research where no correlation was found between anxiety and ED behaviors (i.e., restraint, eating concern, and binge/purge behaviors) in college women but found with a behavior of weight concern. Similarly, Becker et al. (2017) found a significant relationship between trait anxiety and certain type of eating behaviors, which were excessive exercise and dietary restrictions, but not purging behaviors. Thus, the current study's nonsignificant finding may be attributed to the possibility that engagement in ED behaviors may not necessarily be motivated by anxious traits yet other emotional or psychological factors (Becker et al., 2017). This implies for future research to set apart specific ED symptomatology in determining the impact of trait anxiety on specific eating behaviors.

Our findings may also mean that other variables such as stressors, BMI, history of ED symptoms, and work expectation in body control could play a more important role in the development of ED symptoms. This aligns with the ED transdiagnostic model by Fairburn et al. (2003) stating that the presence of vulnerability factors may increase a sense of control in individuals, and thereby resorting to their eating behaviors. This result supports other research showing these variables as risk factors to developing ED symptoms. Anderson (2019) found that an increase in stress level was correlated with ED behaviors in college women. Stewart et al. (2019) found female athletes were more likely to have ED symptoms through concern in body image that is required. Tao and Sun (2015) have also found higher EAT-26 total scores especially on body dissatisfaction and perfectionism on female ballet students compared to their

nondancing peers. Giel et al. (2021) found individuals with history of ED are at risk for symptom deterioration and relapse especially after pandemic. However, these risks were lowered when a person scored high in emotion regulation strategy. Some studies have also found that BMI plays a risk in ED development, such as low BMI becomes a risk factor in development of disturbed eating in girls and obese becoming a risk for development of eating pathology (Sim et al., 2013). On the other hand, no link was found in previous studies (Fan et al., 2010), due to other behaviors or factors that could mediate the relationship. Future research should warrant regression analyses to explore contributing variables to ED symptoms apart from traits.

Our primary finding also provides preliminary support for a mechanistic relationship between trait anxiety, PI, and ED symptoms. We found that trait anxiety and ED symptoms are only associated when PI is accounted as mediator. This result is supported in the aforementioned study by Espel-Huynh et al. (2019) and Mróz et al. (2022), where those with anxiety may develop eating behavior as means of coping with their stressful situations or engagement in PI. Forrest et al. (2019) also found a link between anxiety and ED symptoms bridged with avoidance. One explanation is that avoidant behaviors strengthen this link through preventing individuals in facing feared situations, and thereby strengthening feared responses and perpetuating unhealthy avoidant behaviors (Koskina et al., 2013). With individuals with ED symptoms being vulnerable to fear conditioning (Strober, 2004), they would be more likely to use food-related avoidant behaviors more frequently (Strober, 2004; Steinglass et al., 2011). This similarly aligns with study findings by Rawal et al. (2010) stating that subclinical ED predicts EA in college students even after controlling for anxiety. In conjunction with previous findings, this study suggests that anxiety may promote PI and consequently ED symptoms, and when ED symptoms become more intense, can lead to anxiety, and the cycle then repeats and intensifies.

This study has several strengths, including the first study known to author to explore mediation effect of PI as a pathway from trait anxiety to the development of ED symptoms in Indonesian emerging adult women. This finding could aid preventive and rehabilitative strategies for individuals with anxiety. This study also utilized sufficient sample size and adequate power to detect significant effects. The homogenous sample of women and specific age range of emerging adults may promote generalisability of the targeted participants. Although the randomisation sample was heterogeneous, where patients differed in their ED symptomatology, the transdiagnostic view has suggested that individuals with ED symptoms move from one diagnosis to another over time (Fairburn et al., 2003). Therefore, the current study using a transdiagnostic sample could be advantageous for generalisability. Finally, the use of a continuous measure for ED symptoms could detect a clinically meaningful variation of symptoms, and thereby may endorse higher statistical power compared to using diagnosis (Luo et al., 2016).

Several limitations occur in this study. First, this is a cross-sectional study, hence causal conclusions cannot be made. These preliminary results may be strengthened through longitudinal analyses to see temporal relationships among study variables. Second, participants were Indonesian women. The generalisability of this finding to other populations such as men and individuals from other countries should be considered. As some studies found no mediation effect of avoidance pattern in the relationship between anxiety and eating behavior in men due to potentially different coping styles across different genders (Rosenbaum & White, 2013; Ernst et al., 2021). Third, data collection method in the form of self-report and convenience sampling might be associated with the possibility of data inaccuracy and sample might be less likely to represent the target population. Majority of the study sample was from Java Island, meanwhile each culture in Indonesia may have different views towards ED behaviors. Finally, types of eating pathologies in the study sample were not differentiated, so the result might have represented one type of attitude and maladaptive eating behavior that is more specific than the other, as some studies found that genetic vulnerability of anxiety is more likely to be found in eating behaviors

with characteristics of anorexia, but not bulimia (Goddard & Treasure, 2013; Taborelli et al., 2013). Future research may explore the relationship using samples with specific eating pathologies.

CONCLUSION

The finding of this study provides further evidence that trait anxiety affects PI and ED symptoms, and that PI fully mediates the relationship between anxiety and ED symptoms using a sample of emerging adult women in Indonesia. This implies that having baseline anxiety would impact one's strategy in regulating their emotions through avoidant strategies, such as ED behaviors. This result highlights the importance of helping individuals find ways to cope with anxiety in healthier ways and to prevent the risk of ED symptoms development. It also provides knowledge for clinicians to incorporate aspects of Acceptance Commitment Therapy that may lower PI levels, for preventive or treatment strategies when dealing with emerging adult Indonesian women with baseline anxiety. When individuals can tolerate and regulate their emotions in more healthier and adaptive ways, they will less likely avoid and gain control through unhealthy eating behaviors and therefore reducing risks of mental and physical harm. Future studies could use diverse samples to increase confidence in generalization of study results. Utilizing a longitudinal approach may also help explore the relationship between the three variables more comprehensively.

Trait Kecemasan dan Gejala Gangguan Makan: Infleksibilitas Psikologis sebagai Mediator

Perilaku gangguan makan atau *eating disorder* (ED) berada pada spektrum dari gejala ED subklinis seperti diet kronis, olahraga berlebihan untuk mengendalikan berat tubuh, ketidakpuasan tubuh, makan berlebihan dan memuntahkan makanan, hingga diagnosis klinis seperti anoreksia nervosa (AN), bulimia nervosa, dan *binge-eating disorder* (Stice dkk., 2013). Meningkatnya prevalensi gejala gangguan makan mengkhawatirkan, khususnya pada wanita *emerging adult* (umur 18-25 tahun; Santrock, 2013). Sebuah ulasan sistematik menemukan bahwa 26,4% pelajar dewasa muda terlibat dalam perilaku pengendalian berat badan tidak sehat seperti muntah, berpuasa, olahraga berlebihan, dan penggunaan obat pencahar atau diuretik setidaknya sekali seminggu. Sementara itu 20,7% mahasiswi dilaporkan terlibat dalam perilaku kompensasi pengendalian berat badan dalam satu tahun terakhir (Potterton dkk., 2020). Goldschmidt dkk. (2016) menemukan bahwa gejala makan berlebihan dan *binge-eating* terjadi pada 7,2% sampel dalam fase dewasa awal.

Implikasi gejala-gejala ED dapat membahayakan kesehatan fisiologis dan psikologis. Gejala ED pada masa dewasa awal berhubungan positif dengan gejala depresi, isolasi sosial, sulit tidur, dan koneksi dengan teman yang lebih sedikit (Mason & Heron, 2016; Potterton dkk., 2020). Gejala-gejala ED juga merupakan faktor risiko berkembangnya diagnosis ED (McClelland dkk., 2020). Sementara itu, diagnosis klinis AN memiliki angka kematian tertinggi di antara seluruh gangguan psikiatri (Treasure dkk., 2010). Dampak psikososial dari gejala ED menyoroti pentingnya melakukan penelitian terhadap variabel-variabel yang berkontribusi terhadap perkembangan ED untuk upaya-upaya pencegahan dan pengobatan.

Kondisi kesehatan mental seperti kecemasan telah dikaitkan dengan peningkatan risiko ED (Godart dkk., 2015). Secara spesifik, *trait* kecemasan yang didefinisikan sebagai kecenderungan dasar untuk menilai situasi sebagai sesuatu yang mengancam, menghindari situasi yang memicu kecemasan, dan menunjukkan kecemasan secara fisiologis yang mendasar (Elwood dkk., 2012), telah ditemukan berhubungan dengan psikopatologi ED dalam beberapa penelitian (Becker dkk., 2017; Schaumberg dkk., 2021). *Trait* kecemasan telah dihipotesiskan menciptakan kerentanan berkembangnya ED (Lilenfeld, 2010; Frank dkk., 2023). Forrest dkk. (2019) juga menemukan bahwa sifat kecemasan berhubungan dengan gejala ED (kepercayaan diri yang rendah dan kecenderungan menghindari makan pada *setting* sosial). Pada satu studi, hubungan antara ketidakpuasan tubuh dan gejala-gejala ED dimoderasi oleh kecemasan (Doumit dkk., 2016). Eck dan Byrd-Bredbenner (2021) juga menemukan adanya peningkatan pada tingkat keparahan ED seiring meningkatnya kecemasan. Hasil dari penelitian-penelitian ini mengindikasikan kontribusi sifat kecemasan terhadap perilaku gejala ED dan tingkat keparahannya (Juarascio dkk., 2011).

Beberapa penjelasan ditemukan terhadap hubungan positif antara kecemasan dan gejala-gejala ED. Suatu model mengusulkan bahwa perilaku-perilaku makan berfungsi untuk mengendalikan rasa khawatir dan meregulasi emosi-emosi sulit (Leehr dkk., 2015; Meule dkk., 2021). Strategi-strategi pengendalian perilaku sering ditemukan untuk melayani pengalaman batin individu, terutama pada individu dengan ED yang kesulitan untuk menghilangkannya (Fogelkvist dkk., 2020). Gejala-gejala ED telah diteorikan secara fungsional untuk menekan atau mengalihkan perhatian dari emosi-emosi negatif, termasuk kecemasan (Hearon dkk., 2013; Rosenbaum & White, 2013). Secara spesifik, *binge*

eating digunakan sebagai strategi perilaku untuk meregulasi emosi dengan ketidaknyamanan psikologis yang berhubungan dengan kecemasan (DeBoer & Smits, 2013). Kecemasan dipandang sebagai konsekuensi negatif yang sulit untuk diterima, sehingga tantangan-tantangan yang menimbulkan kecemasan dihindari atau ditekan melalui perilaku ED (Espel-Huynh dkk., 2019). Fairburn dkk. (1986) juga telah mengemukakan bahwa keterlibatan dalam perilaku-perilaku ED dapat membantu mengurangi kecemasan pada individu. Secara keseluruhan, individu dengan gejala ED lebih rentan terhadap konsekuensi negatif kecemasan dan perilaku-perilaku makan berfungsi sebagai sarana jalan keluar dari keadaan kecemasan yang tidak nyaman.

Prevalensi individu mengalami kecemasan di Indonesia semakin meningkat dan onset terjadi sebelum *emerging adulthood* (Setyananda dkk., 2021; Center for Reproductive Health dkk., 2022). Oleh karena itu, penting untuk memahami mekanisme hubungan antara kecemasan dan gejala-gejala ED untuk menghindari perkembangan ED. Salah satu cara untuk menjelaskan hubungan ini adalah *psychological inflexibility* (PI) atau infleksibilitas psikologis. PI adalah sebuah proses transdiagnostik yang digambarkan sebagai sebuah pola dimana suatu perilaku dikendalikan secara berlebihan oleh pikiran, perasaan, dan pengalaman-pengalaman internal individu tersebut, atau untuk menghindari pengalaman-pengalaman tersebut dengan mengorbankan tindakan-tindakan efektif dan bermakna (Levin dkk., 2014). Pada prosesnya, individu tidak dapat memodifikasi perilaku secara efektif saat terekspos pada sebuah stresor atau perubahan tuntutan lingkungan. Hal ini mencakup *experiential avoidance* (EA), salah satu proses sub-inti dari PI, yaitu kecenderungan seorang individu untuk melarikan diri, menghindar, mengendalikan, atau mengurangi pikiran dan perasaan sulit, terlepas dari konsekuensi tindakannya (Levin dkk., 2014; Tavakoli dkk., 2019). Oleh karena itu, tindakan cenderung tidak selaras dengan tujuan dan nilai-nilai individu. Dalam penelitian ini, EA digunakan secara bergantian dengan PI.

PI dianggap sebagai perilaku yang dilakukan oleh individu dengan kecemasan. Misalnya, individu dengan gangguan panik sering kali menghindar, terutama ketika mengalami gejala fisiologis (Zvolensky & Eifert, 2001). Individu dengan kecemasan sosial cenderung menekan emosi dan diri sendiri, yang mengganggu mereka dalam mendapatkan pengalaman positif dan kemampuan untuk mengambil manfaat dari peluang-peluang yang selaras dengan tujuan mereka (Kashdan & Steger, 2006). Respons penghindaran tersebut dapat menjadi sebuah kebiasaan seiring berjalannya waktu dan dapat memperburuk kecemasan dibandingkan menggunakan cara yang lebih adaptif seperti menghadapi ketakutan mereka. Sebuah studi menemukan hubungan antara tingkat PI rendah dan pengalaman tingkat kecemasan yang tinggi pada mahasiswa dibandingkan individu dengan tingkat PI tinggi (Wang dkk., 2023). Tavakoli dkk. (2019) menemukan asosiasi antara PI dan simtom kecemasan pada mahasiswa, melalui kebutuhan individu untuk mengontrol dan meminimalisasi pengalaman perasaan, pikiran, atau peristiwa yang tidak diinginkan.

PI telah lama dianggap berkontribusi pada pengembangan dan pemeliharaan berbagai masalah psikologis, termasuk ED (Masuda dkk., 2010; Davies dkk., 2013; Levin dkk., 2014). Individu dengan AN ditemukan mengalami kesulitan dalam menerima respons emosional mereka dan *rigid*, serta khawatir terkait dalam mengendalikan tubuh (Merwin dkk., 2010; Davies dkk., 2013). Masuda dkk. (2010) juga menemukan hubungan antara tingkat fleksibilitas psikologis atau *psychological flexibility* (PF) dan kognisi ED. Terlebih lagi, hubungan antara kognisi ED dan perilaku-perilaku ED ditemukan dimoderasi oleh *mindfulness*, suatu aspek dari PF (Masuda dkk., 2012). Ketika individu menampilkan EA lebih

banyak, mereka memiliki kesulitan yang lebih besar dalam toleransi distres, dan akhirnya cenderung melakukan tindakan segera untuk menghindari ketidaknyamanan, termasuk perilaku makan. Seperti yang ditemukan oleh Fahrenkamp dkk. (2019), EA memediasi pengendalian kognitif dan tingkat makan emosional yang lebih besar pada sampel remaja nonklinis. Oleh karena itu, PI dapat berfungsi sebagai mekanisme dalam perkembangan perilaku ED.

Proses PI atas ED relevan dengan teori transdiagnostik dari gejala-gejala ED, dimana mekanisme yang mempertahankan gejala-gejala melibatkan evaluasi berlebihan atas berat dan bentuk tubuh, pikiran-pikiran preokupasi terhadap tubuh, perfeksionisme, harga diri yang rendah, dan kesulitan-kesulitan interpersonal (Fairburn dkk., 2003). Contohnya, perfeksionisme pada gejala ED dapat digambarkan sebagai evaluasi berlebihan yang obsesif untuk mencapai suatu standar tertentu terhadap diri berkaitan dengan berat, bentuk, penampilan, dan penerimaan dari orang lain, mengabaikan semua konsekuensi negatif lainnya (Fairburn dkk., 2003; Schmidt & Treasure, 2006). Pikiran kaku ini merefleksikan PI dimana individu cenderung mengendalikan pikiran negatifnya, meskipun proses tersebut menimbulkan emosi-emosi tidak nyaman. Pola ini juga berhubungan dengan harga diri yang rendah karena individu dengan perilaku gangguan makan mengevaluasi diri mereka secara negatif ketika mereka gagal mencapai tujuan mereka (Fairburn dkk., 2003). Ketidakmampuan dalam mengendalikan pikiran yang membuat mereka terlibat dalam perilaku-perilaku yang dapat mengubah suasana hati mereka (melaparkan diri, memuntahkan makanan, atau olahraga berlebihan) daripada menerima perubahan pada emosi dan mengatasi emosi secara sehat. Hal ini selaras dengan temuan Andreescu dkk. (2023), bahwa terdapat korelasi antara ED dan defisit dalam pemrosesan emosi, serta keterampilan regulasi pada partisipan wanita pada subklinis ED. Terlebih lagi, faktor-faktor seperti stresor, pekerjaan yang berkaitan dengan citra tubuh, dan kesulitan dalam hubungan interpersonal dapat menimbulkan rasa keperluan untuk mengontrol dan hal tersebut didapatkan dengan mengontrol perilaku makan mereka (Fairburn dkk., 2003). Oleh karena itu, gejala ED dapat timbul akibat keterlibatan PI pada individu.

Seperti yang telah diuraikan, PI dapat menjadi mekanisme bagaimana individu dengan kecemasan memprediksi perilaku ED. Espel-Huynh dkk. (2019) menemukan adanya peran mediasi EA dalam hubungan antara sensitivitas kecemasan dan psikopatologi ED. Sementara itu, Usubini dkk. (2022) menemukan bahwa PI memediasi hubungan antara kecemasan dan *emotional eating* pada penderita obesitas. Namun, kedua studi tersebut menggunakan sampel yang didominasi oleh partisipan berkulit putih dan pasien dengan tingkat keparahan gangguan makan yang cukup parah, serta partisipan dari Italia dan spesifik hanya untuk pasien obesitas dengan gejala *emotional eating*. Oleh karena itu, generalisasi dari kedua studi terbatas pada populasi nonklinis di Indonesia. Mróz dkk. (2022) menemukan bahwa wanita dengan sifat kecemasan melaporkan instabilitas kognitif (didefinisikan sebagai pikiran-pikiran intrusif) yang lebih tinggi, akibatnya terlibat dalam perilaku makan secara emosional atau pola makan yang buruk. Studi tersebut menggunakan pengukuran impulsivitas di dalam konstruk instabilitas kognitif dan tidak meliputi perilaku-perilaku PI. Penelitian ini bertujuan untuk menutupi kesenjangan literatur melalui penggunaan target partisipan yang spesifik dari masyarakat Indonesia serta menguji asesmen yang secara khusus mengukur PI.

Berdasarkan penjelasan di atas, penting untuk memahami mekanisme psikologis antara kecemasan dan gejala ED untuk mencapai pemahaman yang lebih komprehensif tentang hubungan keduanya. Melalui pemahaman mekanisme, individu dengan kecemasan dapat menjadi sadar akan pentingnya mengembangkan strategi yang lebih efektif dalam mengelola kecemasan untuk mencegah

perkembangan gejala ED. Peran PI sebagai mediator dapat memperkuat hubungan antara kecemasan dan gejala ED. Penjelasannya adalah bahwa individu dengan PI mungkin menggunakan strategi penghindaran untuk mengatur kecemasan mereka sehingga perilaku ED berfungsi sebagai cara untuk menghindari dan mengendalikan kecemasan. Penelitian ini menganalisis apabila PI memediasi hubungan antara sifat kecemasan dan gejala ED dengan menggunakan sampel nonklinis wanita *emerging adult* di Indonesia (18 – 25 tahun). Sampel wanita *emerging adult* digunakan karena masalah psikologis, termasuk gejala ED, sering dialami pada periode ini akibat tantangan dan perubahan hidup, termasuk pada aspek pendidikan, karier, dan hubungan (Santrock, 2019). Mengeksplorasi hubungan mediasi ini pada masa dewasa awal dapat mencegah ED di masa dewasa. Sebagaimana diketahui peneliti, studi ini merupakan penelitian pertama yang dilakukan untuk mengeksplorasi model mediasi ini pada sampel nonklinis di Indonesia. Penelitian ini bertujuan untuk memberikan manfaat bagi klinisi dan perancang perawatan dalam mencegah dan menangani gejala ED pada wanita Indonesia.

METODE

Desain penelitian

Penelitian ini merupakan penelitian non-eksperimental, sebagaimana didefinisikan oleh Gravetter dan Forzano (2012) sebagai penelitian tanpa adanya manipulasi variabel independen melalui intervensi atau perawatan. Penelitian ini adalah penelitian kuantitatif yang melibatkan analisis data numerik dan statistik. Data dikumpulkan pada satu periode waktu dan oleh karena itu bersifat *cross-sectional*. Penelitian ini dilakukan pada bulan Agustus 2023. Desain dan analisis korelasional digunakan dalam penelitian ini untuk menguji hubungan antara *trait* kecemasan atau sifat kecemasan (TA), PI, dan gejala ED, serta hubungan antara sifat kecemasan dan ED dengan PI sebagai mediator.

Partisipan

Partisipan dalam penelitian ini adalah 141 orang perempuan lulusan SMA dan merupakan warga negara Indonesia dengan rentang usia 18 hingga 25 tahun, yang direkrut melalui *convenience, non-probability sampling*. Partisipan diajak melalui media sosial (WhatsApp, Twitter, dan Instagram) untuk berpartisipasi melalui pengisian kuesioner online. Kuesioner mencakup lima bagian; *informed consent*, pernyataan persetujuan untuk berpartisipasi, demografi, pengisian tiga asesmen tes, dan *debrief.* Analisis apriori dilakukan untuk mencari estimasi ukuran sampel menggunakan G*Power versi 3.1. Analisis statistik menggunakan *Linear Multiple Regression: Fixed Model, R2 Deviation from Zero* dengan *effect size* 0,31 (ditentukan berdasarkan penelitian Wendell, 2011), dengan *power size* sebesar 0,95, tingkat signifikansi 0,5, dan 9 prediktor. Hasil menunjukan sampel minimum 85. Oleh karena itu, ukuran sampel yang diperoleh cukup untuk menangkap efek dari ukuran tersebut.

Pengukuran

Trait kecemasan diukur menggunakan *State-Trait Anxiety Inventory* (STAI) versi bahasa Indonesia yang diadaptasi oleh Primusanto (2000), yang awalnya dibuat oleh Spielberger dkk., (1983). STAI mengukur dua konstruk, yaitu *state anxiety* dan *trait* kecemasan. Hanya subskala *trait* kecemasan yang digunakan karena tujuannya adalah untuk mengukur kecenderungan kecemasan pada partisipan. Versi bahasa Indonesia mempunyai validitas yang baik di kalangan mahasiswa. Gejala kecemasan variabel independen kami diukur dengan skor berkelanjutan, dihitung dengan menjumlahkan skor untuk subtes *trait* kecemasan. Subtes terdiri dari 20 item dengan skala Likert 4 poin, 1="*None at all*", 2="*Somewhat*", 3="*Moderately so*", dan 4="*Very much*". Sembilan item menunjukkan ketidakhadiran kecemasan (item 21, 23, 26, 27, 30, 33, 34, 36, dan 39). Penilaian untuk item-item ini dibalik. Skor total untuk subtes

berkisar antara 20 – 80. Semakin tinggi skornya, semakin parah gejala kecemasannya. Penelitian ini menunjukkan konsistensi internal yang baik dengan Cronbach α=0,896 pada subskala *trait* kecemasan.

PI diukur menggunakan *Acceptance and Action Questionnaire-II* (AAQ-II) (Hayes dkk., 2006). AAQ-II mengukur kemampuan individu untuk sepenuhnya terhubung dengan momen, pikiran, dan perasaan saat ini, serta mengendalikan perilaku untuk mencapai nilai dan tujuan seseorang. AAQ-II telah diadaptasi oleh Permadi & Nurwianti (2019) ke versi bahasa Indonesia. AAQ-II terdiri dari tujuh item, menggunakan skala Likert 7 poin dengan 1 menunjukkan "*Never True*" dan 7 menunjukkan "*Always Right*". Skor total berkisar antara 7 hingga 49, dengan skor yang lebih tinggi menunjukkan PI yang lebih tinggi. AAQ-II bahasa Indonesia telah divalidasi dengan baik menggunakan uji pemahaman, dengan reliabilitas *tes-retest* yang sangat baik (Cronbach α=0,918) (Radyani dkk., 2022). Penelitian ini juga menunjukkan konsistensi internal yang baik (Cronbach α=0,904).

Gejala ED diukur menggunakan *Eating Attitudes Test*-13 (EAT-13) yang dikembangkan oleh Devi (2014) yang dirancang untuk partisipan Indonesia. EAT-13 berasal dari *Eating Attitudes Test*-26, yang awalnya dikembangkan oleh Garner dkk. (1982). Kuesioner ini tidak digunakan untuk memberikan diagnosis dan digunakan untuk menilai risiko berkembangnya gangguan makan (Papini dkk., 2022). EAT-13 terdiri dari 13 item dengan menggunakan Skala Likert 6 poin, dengan skor sebagai berikut: 1="*Always*", 2="*Usually*", 3="*Often*", 4="*Sometimes*", 5="*Rarely*", 6="*Never*". Jawaban dari skala empat hingga enam diberi skor 0, tiga diberi skor 1, dua diberi skor 2, dan satu diberi skor 3. Skor total berkisar antara 0 hingga 39. Skor berkelanjutan digunakan, dengan skor yang lebih tinggi menunjukkan lebih banyak gejala ED. EAT-13 tervalidasi dengan baik di kalangan remaja perempuan, dewasa muda, dan orang dewasa. EAT-13 memiliki reliabilitas *tes-retest* yang baik (Cronbach α=0,763) (Devi, 2014). Dalam penelitian ini, EAT-13 memiliki konsistensi internal yang baik (Cronbach α=0,854).

Faktor-faktor sosiodemografi diukur untuk dimasukkan sebagai kovariat, termasuk status sosial ekonomi (SES), status perkawinan, pekerjaan, pekerjaan yang membutuhkan kontrol tubuh, diagnosis klinis masa lalu, BMI, pemicu stres yang dialami dalam enam bulan terakhir, perubahan pola makan selama 1 bulan, dan riwayat penyakit perilaku makan. SES diukur menggunakan pengeluaran bulanan partisipan dan BMI dinilai menggunakan rumus [berat badan(kg)/tinggi badan(m)^2] (World Health Organization, 2010). Faktor-faktor ini ditentukan berdasarkan penelitian sebelumnya yang menunjukkan hubungan atau efek signifikan terhadap gejala ED dan data dari populasi serupa (Kusuma, 2023; Raab dkk., 2000). Faktor sosiodemografi yang berhubungan secara signifikan dengan gejala ED akan dimasukkan dalam analisis mediasi untuk mengesampingkan kemungkinan pengaruh kovariat terhadap hasil analisis mediasi.

Analisis Data

Data dianalisis menggunakan IBM SPSS versi 25 dan SPSS Macro PROCESS oleh Hayes versi 4. Statistik deskriptif dan analisis korelasi dilakukan untuk mengeksplorasi hubungan antara faktor sosiodemografi dan variabel *outcome*. Koefisien Spearman's Rank juga telah digunakan untuk interpretasi analisis korelasi. Korelasi Spearman's Rank digunakan untuk melihat hubungan antar variabel kontinu. Sebelum melakukan analisis mediasi untuk menguji hipotesis penelitian saat ini, dilakukan uji asumsi sebaran data dan analisis deskriptif untuk masing-masing variabel penelitian. Skor skewness dan kurtosis masing-masing variabel yang berada di antara -1,5 hingga 1,5 menunjukkan adanya distribusi normal (Tabachnick & Fidell, 2019). Semua variabel terbukti memiliki distribusi normal kecuali gejala ED (EAT-13). Bootstrapping digunakan untuk menangani pelanggaran normalitas (Field, 2013; Hayes, 2004). Peran mediasi PI (M) dalam hubungan antara sifat kecemasan (X) dan gejala ED (Y) diuji menggunakan Hayes' Process Model 4 melalui 5000 sampel bootstrap (Preacher & Hayes, 2008). Faktor-faktor sosiodemografi ditemukan berhubungan secara signifikan dengan gejala ED dalam

analisis korelasi, dikontrol sebagai kovariat dalam model mediasi. Faktor-faktor tersebut adalah stresor yang dialami dalam enam bulan terakhir, pekerjaan yang memerlukan pengendalian tubuh, BMI, dan riwayat perilaku ED. Pengaruh tidak langsung menjadi signifikan jika koefisien CI 95% tidak termasuk nol (Preacher & Hayes, 2008). Penelitian ini telah diterima oleh tim kaji etik dan *review* dari Universitas Indonesia.

HASIL PENELITIAN

Tabel 1 menunjukkan statistik deskriptif dari faktor-faktor sosiodemografi partisipan. Sebanyak 141 partisipan dilibatkan dalam analisis berdasarkan kriteria penelitian. Usia partisipan adalah delapan belas hingga dua puluh lima tahun (M=22,60; SD=2,02). Sampel didominasi suku Jawa (44,3%), diikuti oleh Tionghoa (14,3%), dan Sunda (11,4%). Mayoritas berasal dari Provinsi Jawa Barat (34%), DKI Jakarta (30,5%), dan Banten (9,2%). Mayoritas tidak menikah (95%), pendidikan terakhir SMA (58,2%), dari kategori SES rendah (35,5%), dan berstatus pelajar (43,3%). 29 peserta memiliki riwayat diagnosis penyakit jiwa (20,6%) dan tidak lagi mengalami kondisi tersebut. Sebanyak 107 partisipan (75,9%) dilaporkan mengalami stres dalam enam bulan terakhir, 53 peserta melaporkan stres yang dialami cukup berpengaruh (37,6%), dan 36 peserta melaporkan sangat terpengaruh (25,5%).

Rata-rata skor BMI yang masuk kategori sehat adalah 22,68 (SD=5,14) yang berjumlah 58,9%. Sebanyak 116 partisipan (82,3%) tidak memiliki urgensi untuk menjaga citra tubuh dalam pekerjaannya, namun sebanyak 100 peserta (70,9%) melaporkan adanya riwayat pengendalian diet atau pola makan. 56 dari 100 peserta (56%) masih mengontrol perilaku makannya dalam satu bulan terakhir dan 37 orang (66,1%) yang masih mengontrol pola makan dengan tujuan mengubah berat badannya agar lebih ideal.

Tabel 1. Karakteristik Sosiodemografi Partisipan

Data Demografis	Deskriptif	
	n	%
Domisili		
Jawa Barat	48	34
DKI Jakarta	43	30,5
Banten	13	9,2
Lainnya (DIY, Kalimantan, Bali, NTT, NTB, Sumatera)	37	26,2
Suku		
Jawa	62	44,3
Tionghoa	20	14,3
Sunda	16	11,4
Campur (e.g.: Jawa-Sunda)	10	7,1
Lainnya (Betawi, Batak, Melayu, Minang, Bugis, Timor, Sasak, Basemah, Palembang)	33	22,9
Status Pernikahan		
Belum menikah	134	95
Menikah	1	0,7
Menikah dan memiliki anak	6	4,3
Pendidikan Terakhir		

Data Demografis	Deskriptif	
	n	%
SMA	50	35,5
Diploma	3	2,1
S1	82	58,2
S2	6	4,3
Pengeluaran Bulanan (SES)		
<2.000.0000 (D)	49	34,8
2.000.000-4.000.000 (C)	50	35,5
4.000.000-6.000.000 (B)	24	17
>6.000.000 (A)	18	12,8
Kategori BMI		
Underweight (<18.5)	26	18,4
Normal (18.5-24.9)	81	57,5
Pre-obesity (25.0-29.9)	21	14,9
Obesity Class I (30.0-34.9)	7	5
Obesity Class II (35.0-39.9)	6	4,3
Pekerjaan		
Murid	61	43,4
Pegawai sektor swasta	45	31,9
Tenaga kesehatan (dokter, perawat, apoteker, dll.)	9	6,4
Ibu rumah tangga	6	4,3
Pejabat pemerintah	2	1,4
Pengusaha	7	5
Influencer	1	0,7
Tidak bekerja	10	7,1
Pekerjaan yang Membutuhkan Kontrol Tubuh		
Tidak	116	82,3
Ya, secara langsung	4	2,8
Ya, secara tidak langsung	21	14,9
Stresor di 6 bulan ke belakang		
Tidak	34	24,1
Ya	107	75,9
Tidak ada pengaruh	34	24,1
Sedikit pengaruh	18	12,8
Cukup berpengaruh	53	37,6
Sangat berpengaruh	36	25,5
Sejarah Penyakit Jiwa		
Tidak	112	79,4
Ya	29	20,6
Diet atau Perubahan Pola Makan dalam 1 Bulan Terakhir		
Tidak	73	51,8
Ya	68	48,2

Data Demografis	Deskriptif	
	n	%
Alasan medis	13	9,2
Mengikuti pola orang-orang terdekat	3	2,1
Menurunkan atau menambah berat badan	43	30,5
Mengatasi permasalahan hidup	6	4,3
Alasan agama	1	0,7
Lainnya	2	1,4
Sejarah Pola Makan atau Perubahan Pola Makan		
Tidak	42	29,8
Ya	99	70,2
Alasan medis	12	8,5
Mengikuti tren	1	0,7
Menurunkan atau menambah berat badan	76	53,9
Mengatasi permasalahan hidup	8	5,7
Alasan agama	2	1,4
Lainnya	2	1,4

Tabel 2 menunjukkan hasil deskriptif minimum, maksimum, mean, dan standar deviasi untuk masing-masing variabel penelitian. PI yang diukur menggunakan AAQ-II menghasilkan satu skor total dengan rentang skor 0 – 49. Skor rata-rata AAQ-II adalah 31,09 (SD=8,62), sedangkan skor minimum adalah 7 dan maksimum 49. *Trait* Kecemasan (TA) yang diukur dengan STA-I menghasilkan satu skor total dengan skor berkisar antara 20 – 80. Skor rata-rata TA adalah 51,47 (SD=9,39), dengan skor minimum 25 dan skor maksimum 74. Untuk gejala ED yang diukur menggunakan EAT-13, dihasilkan satu skor total yang berkisar antara 0 – 39. Skor rata-rata EAT-13 adalah 6,44 (SD=6,52), dengan skor minimum 0 dan skor maksimum 31.

Tabel 2. Data Deskriptif Variabel-Variabel Penelitian

Variabel	*Min.*	*Max.*	*M*	*SD*
Infleksibilitas Psikologis	7	49	31,09	8,62
Trait Kecemasan	25	74	51,47	9,39
Gejala Gangguan Makan	0	31	6,44	6,52

Analisis korelasi dapat dilihat pada tabel 3. Seluruh variabel menunjukkan korelasi yang signifikan. Korelasi positif ditemukan antara gejala TA, PI, dan ED. Sifat kecemasan memiliki korelasi positif yang kuat dengan PI (r=0,722; p<0,001). Gejala TA dan DE juga menunjukkan korelasi positif (r=0,248; p<0,001), sedangkan gejala ED berkorelasi positif dengan PI (r=0,355; p<0,001).

Tabel 3. Korelasi Antar Variabel

Variabel	1	2	3
1. *Trait* Kecemasan	-		
2. Infleksibilitas Psikologis	0,722**	-	
3. Gejala Gangguan Makan	0,248**	0,355**	-

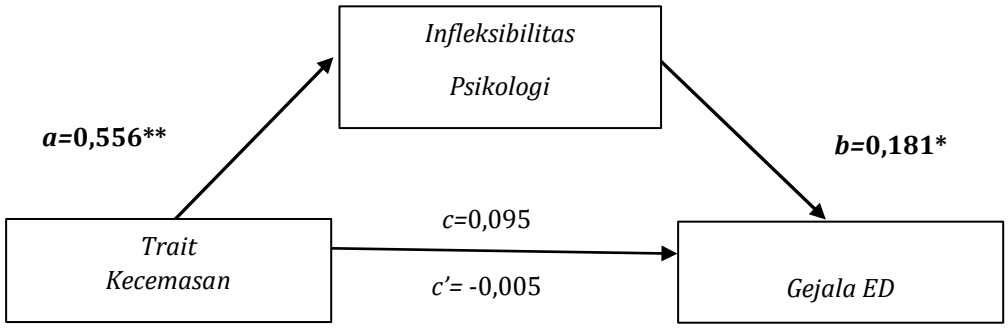
*Catatan. **p<0,001*

Setelah dilakukan uji normalitas dan korelasi antar variabel, dilakukan analisis mediasi dengan TA sebagai variabel independen, gejala ED sebagai variabel dependen, dan PI sebagai variabel mediasi. Tabel 4 menunjukkan model koefisien hubungan mediasi ketiga variabel masing-masing sebelum dan sesudah melibatkan kovariat. Gambar 1 menunjukkan hubungan mediasi ketiga variabel setelah kovariat dilibatkan.

Tabel 4. Model Koefisien *Trait* Kecemasan dan Gejala ED dimediasi oleh Infleksibilitas Psikologis Sebelum dan Sesudah Kontrol Kovariat

Model parameter	*b*	*SE*	95% CI		*p*
			LL	*UL*	
Efek TA (X) terhadap Gejala ED (Y) melalui PI (M) sebelum kontrol kovariat					
Efek total (c)	0,163*	0,057	0,050	0,277	0,005
Efek langsung (c')	0,010	0,079	0,147	0,167	0,900
Efek tidak langsung PI (a * b)	0,221	0,076	0,076	0,381	-
TA ke PI (a)	0,650**	0,055	0,541	0,759	<0,001
PI ke Gejala ED (b)	0,236*	0,086	0,065	0,407	0,007
Efek TA (X) terhadap Gejala ED (Y) melalui PI (M) setelah kontrol kovariat					
Efek total (c)	0,095	0,058	-0,019	0,210	0,102
Efek langsung (c')	-0,005	0,074	-0,151	0,141	0,945
Efek tidak langsung PI (a * *b*)	0,145	0,070	0,018	0,293	-
TA ke PI (*a*)	0,556**	0,059	0,440	0,672	<0,001
PI ke ED Symptoms (*b*)	0,181*	0,084	0,015	0,347	0,033
BMI	0,903	0,529	-0,144	1,950	0,090
Pekerjaan membutuhkan kontrol tubuh	1,206	1,081	-0,933	3,344	0,267
Stres dialami di 6 bulan terakhir	2,346	1,241	-0,101	4,801	0,061
Riwayat perilaku makan	4,164**	1,142	1,906	6,422	<0,001

Note. **p<0,001, *p<0,01*



Gambar 1. Model Mediasi dengan *Trait* Kecemasan sebagai Variabel Setelah Kontrol Kovariat

Catatan. **p<0,001. Kata-kata yang dicetak tebal menunjukkan hubungan antara *Trait* Kecemasan dan Gejala ED dengan dimasukkannya PI sebagai mediator.

Sebelum kontrol kovariat, total efek (jalur *c*) dari hubungan antara TA dan Gejala ED signifikan secara statistik [*b*=0,221; 95%CI:(0,05-0,28)]. Jalur *a* menunjukkan bahwa TA secara signifikan berhubungan dengan PI [*b* =0,650; t(141)=11,80, 95%CI:(0,54-0,76); *p*<0,001]. Demikian pula, jalur *b* menunjukkan bahwa PI secara signifikan berhubungan dengan gejala ED [*b*=0,231; t(141)=2,74; 95%CI:(0,07-0,41); *p*=0,007]. Namun dengan PI sebagai mediator, efek langsung (jalur *c'*) menunjukkan bahwa TA tidak lagi berhubungan dengan gejala ED (*p*=0,900). Terakhir, efek tidak langsung mengindikasikan bahwa TA dan gejala ED secara signifikan berasosiasi via PI [*b*=0,221; 95%CI:(0,08-0,38)]. Hubungan yang tidak signifikan antara TA dan gejala ED dapat menunjukkan adanya efek mediasi dari PI pada model.

Berdasarkan Figur 1, setelah kontrol kovariat (*i.e.,* stres dialami 6 bulan terakhir, BMI, riwayat perilaku makan, dan pekerjaan yang membutuhkan kontrol tubuh), jalur *c'* (efek langsung) menunjukkan bahwa TA tidak berhubungan dengan gejala ED secara signifikan (*p*=0,102). Sementara itu, jalur *a* menunjukkan bahwa TA masih dapat berhubungan dengan PI secara signifikan (*b*=0,556; *p*<0,001), dan jalur *b* menunjukkan bahwa hubungan antara PI dan gejala ED juga signifikan secara statistik (*b*=0,181; *p*=0,003). Efek total (jalur *c*) tidak signifikan secara statistik (*p*=0,945). Efek tidak langsung mengindikasikan bahwa TA memprediksikan gejala ED dengan PI sebagai mediator (*b*=0,144; 95%CI:0,02-0,29). Hasil penemuan ini mengindikasikan bahwa hubungan antara TA dan gejala ED dimediasi penuh oleh PI.

DISKUSI

Penelitian ini mengeksplorasi peran PI memediasi hubungan antara sifat kecemasan dan gejala ED pada sampel nonklinis wanita *emerging adult* di Indonesia. Dalam analisis korelasi awal, kecemasan berhubungan positif dengan PI dan gejala ED. Hal ini menunjukkan individu dengan kecemasan lebih tinggi berhubungan dengan pengalaman PI dan gejala ED. Dalam analisis mediasi berikutnya, PI ditemukan memediasi hubungan antara sifat kecemasan dan gejala ED. Dengan kata lain, individu dengan tingkat kecemasan lebih tinggi dapat berdampak pada level PI secara signifikan. Ketika level PI tinggi (koping kecemasan dengan strategi-strategi penghindaran), individu dapat berisiko lebih tinggi dalam pengembangan gejala ED. Gejala-gejala ED bertindak sebagai sarana untuk menghindari kecemasan mereka. Sementara itu, hubungan antara kecemasan dan gejala ED tidak lagi signifikan saat kovariat dikontrol.

Pertama, temuan kami menunjukkan pengaruh signifikan dari sifat kecemasan terhadap gejala ED. Hal ini sejalan dengan temuan retrospektif Kaye dkk. (2004) bahwa gangguan kecemasan terjadi sebelum timbulnya ED dan Godart dkk. (2003) dimana hampir separuh wanita didiagnosis menderita gangguan kecemasan sebelum mengalami ED. Beberapa penelitian juga menunjukkan bahwa kecemasan berhubungan dengan ED (Godart dkk., 2015) atau bahkan mungkin terjadi karena gejala ED (Tanofsky-Kraff dkk., 2011). Namun, penelitian ini tidak dapat menyimpulkan apabila kecemasan mendahului atau memprediksi ED. Setelah kontrol kovariat, analisis mediasi menunjukkan tidak ada hubungan antara sifat kecemasan dan gejala ED. Hasil ini tidak konsisten dengan sebagian besar temuan sebelumnya (Juarascio dkk., 2011; Godart dkk., 2015; Eck & Byrd-Bredbenner, 2021). Secara alternatif, hasil kami didukung oleh penelitian Anderson (2019) yang tidak menemukan korelasi antara kecemasan dan perilaku ED (yaitu menahan diri, kekhawatiran terhadap makan, dan perilaku *binge* atau memuntahkan makanan) pada mahasiswi, akan tetapi ditemukan dengan perilaku kekhawatiran berat badan. Demikian pula, Becker dkk. (2017) menemukan hubungan yang signifikan antara sifat kecemasan dan jenis perilaku makan tertentu, yaitu olahraga berlebihan dan pembatasan makan, tetapi tidak pada perilaku memuntahkan makanan. Dengan demikian, temuan penelitian yang tidak signifikan ini dapat dikaitkan dengan kemungkinan bahwa keterlibatan dalam perilaku ED belum tentu dimotivasi oleh kecemasan, tetapi oleh faktor emosional atau psikologis lainnya (Becker dkk., 2017). Hal ini berarti

penelitian selanjutnya perlu memisahkan gejala ED tertentu dalam menentukan dampak kecemasan terhadap perilaku makan tertentu.

Temuan kami juga dapat berarti bahwa variabel lain seperti faktor stresor, BMI, latar belakang gejala ED, dan ekspektasi upaya untuk mengendalikan tubuh dapat memainkan peran lebih penting dalam perkembangan gejala ED. Hal ini sejalan dengan model transdiagnostik ED oleh Fairburn dkk. (2003) yang menyatakan bahwa adanya faktor kerentanan dapat meningkatkan rasa kontrol pada individu, dan dengan demikian menghasilkan perilaku makan mereka. Hasil ini mendukung penelitian lain yang menunjukkan variabel-variabel tersebut sebagai faktor risiko timbulnya gejala ED. Anderson (2019) menemukan bahwa peningkatan tingkat stres berkorelasi dengan perilaku ED pada mahasiswi. Stewart dkk. (2019) menemukan atlet wanita lebih mungkin mengalami gejala ED melalui perhatian pada citra tubuh yang diekspektasikan terhadap mereka. Tao & Sun (2015) juga menemukan skor total EAT-26 yang lebih tinggi terutama pada aspek ketidakpuasan tubuh dan perfeksionisme pada siswi balet dibandingkan dengan rekan-rekan mereka yang tidak bergelut dalam bidang balet atau menari. Giel dkk. (2021) menemukan individu dengan riwayat ED berisiko mengalami gejala yang memburuk dan *relapse* terutama setelah pandemi, akan tetapi risiko ini menurun ketika seseorang mendapat skor tinggi dalam strategi regulasi emosi. Beberapa penelitian juga menemukan bahwa BMI berperan dalam risiko terjadinya ED, seperti BMI yang rendah menjadi faktor risiko terjadinya gangguan makan pada anak perempuan dan obesitas menjadi risiko terjadinya patologi makan (Sim dkk., 2013). Di sisi lain, tidak ada hubungan yang ditemukan dalam penelitian sebelumnya (Fan dkk., 2010), karena perilaku atau faktor lain yang dapat memediasi hubungan tersebut. Penelitian selanjutnya dapat melakukan analisis regresi untuk eksplorasi variabel yang berkontribusi terhadap gejala ED selain dari sifat kecemasan.

Penemuan utama penelitian ini memberikan dukungan awal untuk hubungan mekanistik antara kecemasan, PI, dan gejala ED. Kami menemukan bahwa sifat kecemasan dan gejala ED hanya berhubungan ketika PI menjadi mediator. Hasil ini didukung oleh penelitian Espel-Huynh dkk. (2019) dan Mróz dkk. (2022), dimana individu dengan kecemasan dapat mengembangkan perilaku makan sebagai cara mengatasi situasi stres atau keterlibatan mereka dalam PI. Forrest dkk. (2019) juga menemukan hubungan antara kecemasan dan gejala ED yang dijembatani oleh perilaku penghindaran. Salah satu penjelasannya adalah bahwa perilaku menghindar memperkuat hubungan ini dengan mencegah individu menghadapi situasi yang ditakuti. Dengan demikian, hal tersebut dapat memperkuat respons rasa takut dan perilaku menghindar tidak sehat yang terus menerus terjadi (Koskina dkk., 2013). Individu dengan gejala ED rentan terhadap pengondisian rasa takut (Strober, 2004), maka mereka akan lebih cenderung melakukan perilaku penghindaran terhadap makanan (Strober, 2004; Steinglass dkk., 2011). Hal ini juga sejalan dengan temuan Rawal dkk. (2010), yang menemukan bahwa subklinis ED memprediksi EA pada mahasiswa bahkan setelah kontrol variabel kecemasan. Sehubung dengan temuan sebelumnya, penelitian ini menunjukkan bahwa kecemasan dapat memicu PI dan gejala ED, dan ketika gejala ED menjadi lebih intens, dapat menyebabkan kecemasan. Siklus tersebut kemudian berulang dan semakin intens.

Penelitian ini memiliki beberapa kelebihan, termasuk penelitian pertama yang diketahui peneliti, mengeksplorasi efek mediasi PI sebagai jalur dari sifat kecemasan kepada perkembangan gejala ED pada wanita Indonesia *emerging adult.* Temuan ini dapat membantu strategi pencegahan dan rehabilitatif bagi individu dengan kecemasan. Penelitian ini juga menggunakan ukuran sampel dengan *power size* yang adekuat untuk mendeteksi efek-efek signifikan. Sampel perempuan yang homogen dan rentang usia spesifik dapat mempromosikan generalisasi terhadap target partisipan. Meskipun randomisasi sampel bersifat heterogen, dimana pasien-pasien berbeda pada simtom ED, pandangan transdiagnostik telah menunjukkan bahwa individu dengan gejala ED berpindah dari satu diagnosis ke diagnosis lainnya seiring waktu (Fairburn dkk., 2003). Oleh karena itu, penelitian saat ini yang

menggunakan sampel transdiagnostik dapat bermanfaat untuk generalisasi. Terakhir, penggunaan pengukuran gejala ED yang berkelanjutan dapat mendeteksi variasi gejala yang bermakna secara klinis, sehingga dapat mendukung kekuatan statistik yang lebih tinggi dibandingkan menggunakan diagnosis (Luo dkk., 2016).

Beberapa keterbatasan terjadi dalam penelitian ini. Pertama, penelitian ini bersifat *cross-sectional*, sehingga kesimpulan kausal tidak dapat dilakukan. Hasil awal ini dapat diperkuat melalui analisis longitudinal untuk melihat hubungan temporal antar variabel penelitian. Kedua, partisipan adalah perempuan. Generalisasi temuan ini pada populasi lain seperti laki-laki dan individu dari negara lain harus dipertimbangkan. Hal ini dikarenakan misalnya, beberapa penelitian tidak menemukan efek mediasi pola penghindaran dalam hubungan antara kecemasan dan perilaku makan pada pria karena kemungkinan gaya koping yang berbeda pada gender yang berbeda (Rosenbaum & White, 2013; Ernst dkk., 2021). Ketiga, metode pengumpulan data dalam bentuk *self-report* dan *convenience sampling* mungkin dikaitkan dengan kemungkinan data yang tidak akurat dan kemungkinan sampel kurang mewakili populasi sasaran. Mayoritas sampel penelitian berasal dari Pulau Jawa, sedangkan setiap budaya di Indonesia mungkin memiliki pandangan berbeda terhadap perilaku ED. Terakhir, jenis patologi makan dalam sampel penelitian tidak dibedakan, sehingga hasilnya mungkin mewakili satu jenis sikap dan perilaku makan maladaptif lebih spesifik dibandingkan yang lain karena beberapa penelitian menemukan bahwa kerentanan genetik terhadap kecemasan lebih mungkin terjadi pada perilaku makan dengan karakteristik anoreksia tetapi bukan bulimia (Goddard & Treasure, 2013; Taborelli dkk., 2013). Penelitian di masa depan dapat mengeksplorasi hubungan menggunakan sampel dengan patologi makan tertentu.

SIMPULAN

Temuan penelitian ini memberikan bukti lebih lanjut bahwa sifat kecemasan memengaruhi gejala PI dan ED, dan bahwa PI sepenuhnya memediasi hubungan antara kecemasan dan gejala ED dengan menggunakan sampel wanita *emerging adult* di Indonesia. Hal ini mengimplikasikan bahwa kecemasan awal dapat berdampak pada strategi seseorang dalam mengatur emosinya melalui strategi penghindaran, seperti perilaku ED. Hasil ini menyoroti pentingnya membantu individu menemukan cara mengatasi kecemasan dengan cara yang lebih sehat dan untuk mencegah risiko perkembangan gejala ED. Hal ini juga memberikan pengetahuan bagi klinisi untuk melibatkan aspek *Acceptance Commitment Therapy*, yang dapat menurunkan tingkat PI, untuk mencegah dan merawat ketika menghadapi wanita dewasa Indonesia dengan kecemasan. Ketika individu dapat toleransi dan mengatur emosi dengan cara yang lebih sehat dan adaptif, kemungkinan untuk menghindar dan mengendalikan melalui perilaku makan tidak sehat dapat menurun, sehingga mengurangi risiko permasalahan fisik maupun psikologis. Penelitian selanjutnya dapat menggunakan sampel yang beragam untuk meningkatkan keyakinan dalam generalisasi hasil penelitian. Pendekatan analisis longitudinal juga dapat membantu mengeksplorasi hubungan antara ketiga variabel secara lebih komprehensif.

ACKNOWLEDGEMENTS / *UCAPAN TERIMA KASIH*

We would like to thank the supervisor of this study, Dini Rahma Bintari, and colleagues who have provided support during the process of this research. We would also like to thank participants who took their time in participating in this study. / *Penulis mengucapkan terima kasih kepada pembimbing penelitian ini, Dini Rahma Bintari, dan rekan-rekan yang telah memberikan dukungan selama proses*

penelitian ini. Penulis juga mengucapkan terima kasih kepada para partisipan yang telah meluangkan waktunya untuk berpartisipasi dalam penelitian ini.

DECLARATION OF POTENTIAL CONFLICTS OF INTEREST / *DEKLARASI POTENSI TERJADINYA KONFLIK KEPENTINGAN*

Asaelia Aleeza and Dini Rahma Bintari do not work for, be a consultant of, own any stock of, or receive funds from any company or organization that will profit from this manuscript, and have disclosed that they have no affiliations other than those stated above. / *Asaelia Aleeza and Dini Rahma Bintari tidak bekerja, menjadi konsultan, memiliki saham apa pun, atau menerima dana dari perusahaan atau organisasi manapun yang akan memperoleh keuntungan dari naskah ini, dan telah mengungkapkan bahwa mereka tidak memiliki afiliasi selain yang disebutkan di atas.*

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