The Development of Indonesian Multidimensional Perfectionism Scale for Senior High School Students

Shahnaz Safitri[1] & Melly Preston[2]
{shahnazsafitri@ui.ac.id, prestonmelly@gmail.com}

Faculty of Psychology Universitas Indonesia, Kampus UI Depok, West Java, Indonesia

Abstract: Perfectionism is generally defined as a personality trait in which a person is strictly adhering to the standards ones have while putting importance to fulfill impossibly high standards. As a tremendous number of people possessing this trait, perfectionism has received considerable interest which made its definition gradually evolves. Starting from the view of perfectionism as a unidimensional and pathological construct, currently perfectionism is commonly viewed as a multidimensional construct which covers both intrapersonal and interpersonal facets of an individual. However, the fact that perfectionism is largely influenced by culture is still under-researched, especially in a collectivist country like Indonesia. In addition, Indonesian students are prevalent for being a perfectionist where it interferes with their academic and career functioning. Therefore, the presence of measurement of perfectionism which adheres to the current theoretical development is crucial in the Indonesian context. This paper explains the development of Indonesian Multidimensional Perfectionism Scale (IMPS), where we found that the IMPS is reliable and valid in terms of construct validity and have representative items for a multidimensional perfectionism.

Keywords: Perfectionism, Other-oriented perfectionism, Self-oriented perfectionism, Socially-prescribed perfectionism

1 INTRODUCTION

Perfectionism is renowned as the terminology used to refer to a personal characteristic of being strict in following an impossibly high standard for one's work. Starting as a folk nomenclature in daily life, the fact that numerous people are possessing this trait makes perfectionism receive considerable attention from academician in the recent years [1]. The earliest definition found is stated by Hollender [2], in which he defined perfectionism as the need for an individual to demand and push for a high-quality performance of one's or other's work beyond what is actually required. Later on, the ongoing interest in perfectionism has made its definition gradually evolves [3].

The early conceptualization of perfectionism sees it as a simple unidimensional construct which unfortunately has pathological consequence [3]. In this regard, perfectionism is often depicted as a trait causing and rooted in anxiety. The early studies exploring perfectionism using this approach found that it is associated with various maladjustment, starting from some types of personality disorders such as depression, eating disorders, and severe maladjustment, to some physical deficiencies of chronic pain and illnesses [4]. Furthermore in the realm of education, perfectionism is found to result in the decreased satisfaction for academic attainment, the degree of motivation to achieve, and also followed by the decrease in the actual academic achievement [1]. In addition to academic performance, perfectionism also affects the extension of academic pursuit in which it disturbs the individual's attempt on building their aspired future career, be it in their career choice, career planning, and also career development [5].

The passage of times further shapes the approach taken in examining perfectionism to be more positive. Some researches in this topic started to highlight that perfectionism can be a dual-sword with a different behavior consequence. They distinguish perfectionism as a two kind, one is negative perfectionism and the second is positive (healthy) perfectionism [2]. The earliest researcher which is also the most cited author proposing this distinction is Hamachek [6] in which he depicted that the negative perfectionism is neurotic since it is capturing the need of individuals to achieve a high standard of work but always feel that they fail to do so. On the other hand, the positive (healthy) perfectionism is considered to be normal and also adaptive, which yield a feeling of satisfaction when individual succeed at attaining a high qualification of one's work [6]. However, in practice, this distinction is theoretically problematic. For example, the healthy perfectionism depicts the need of an individual to strive for excellence in one's work or achievement striving, which is different from merely seeking for perfection Green, 2000 as cited in [2][4].

Hewitt *et al.* [7] further elaborate the conceptualization of perfectionism by breaking it into its corresponding dimensions. They criticized and noted that the early definition of perfectionism from the unidimensional approach tends to focus merely on self-directed cognitions with limited regard to individual interpersonal aspects. Furthermore, it is this interpersonal aspect which is actually found to be contributing to an individual having adjustment difficulties with other people. This potentiality of perfectionism consists of the personal and interpersonal component are further derived from the contemporary research which highlights the presence of private self and versus public self. Their team developed a new theory of perfectionism which consist of three dimensions, namely (1) self-oriented perfectionism, (2) otheroriented perfectionism and (3) socially prescribed perfectionism. Thus, Hewitt *et al.* [7] advocated for an alternative point of view in exploring perfectionism as a multidimensional construct.

With this new perspective of multidimensional perfectionism, Hewitt *et al.* [7] develop the Multidimensional Perfectionism Scale (MPS) containing 45 items to assess perfectionism within each dimension. These dimensions the MPS are derived from exploratory factor analysis which yield three factors for each dimension. In addition, these dimensions as found are also congruent across typical populations, clinical populations, and subclinical populations. All these current development of multidimensional perfectionism with its respective theoretical background shed some lights that the tendency to measure perfectionism as a narrow construct only results in the potential blind spot of the nature of perfectionism. The early consideration of perfectionism as merely pathological [3] is actually not the case according to the empirical findings from Hewitt *et al.* [7] definition of perfectionism.

Beside the work of Hewitt *et al.* [7], there are also another group of researchers who found that perfectionism is better viewed as a multidimensional construct. These researchers are Frost, Marten, Lahart, and Rosemblate who in 1990 develop a measure of multidimensional perfectionism too with the exact scale name as created by Hewitt *et.al* [7], entitled as Frost Multidimensional Perfectionism Scale (FMPS). The difference is the FMPS consists of 35 items measuring 6 factors of Personal Standards, Parental Criticism, Concern over Mistakes, Doubt about Actions, Parental Expectations, and Organization [8].

It is said that both FMPS by Frost *et.al* (1990) and MPS by Hewitt *et al.* [7] are widely known and used to measure the multidimensional perfectionism [9]. However, there are still unresolved issues regarding the use of FMPS in compare to MPS. The first issue is the fact that FMPS and its factors are established by studying only female participants as an undergraduate student. Thus, the sample considered in the original version of FMPS was still limited of representativeness [10]. This is further related to the second issue of the structure of the test. FMPS factors structure is largely influenced by the sample characteristics examined, in which to date there is still no consensus of the total factors actually counted in FMPS. Commonly analyzed using CFA, the perfectionism factors of the early FMPS often fail to be replicated across different samples. Beside the six factors created in the original version of FMPS, the replication studies conducted usually yielded a factor of three to five [11]. For example, a study by Lee and Park [5] conducted in Korean male sample found the FMPS factor of five, even after carefully adapting the language used and the influence of culture. A series of study of [12] prior to Lee and Park [5] insisted that FMPS is a perfect measure of perfectionism with only four factors.

In addition, it is also common to the items of FMPS to be spread broadly across the factors, in which the items not loaded on its respective factors or cross-loaded on several factors. Therefore, the stability of FMPS is still in question and need further exploration [11]. Since FMPS stands for a multidimensional measure of perfectionism, a stable psychometric property of the factors measured is crucial [12]. In contract, the MPS scale by Hewitt *et al.* [7] are found to consistently yield the three factors across typical populations, clinical populations, and subclinical populations which make it a more widely use and accepted measure of multidimensional perfectionism.

As already hinted before, the construct of perfectionism is largely influenced by the culture where individuals spend their life. Therefore, the attempt to seek if the perfectionism as a construct originally studied in Western culture has the same aspects and equivalence in non-western culture is needed to get a full understanding of perfectionism [5]. In other words, the difference of culture might influence the defining line of the construct itself, so that what is taken as perfectionist behavior in one culture might become an adaptive response of living daily life in another culture. The question of the validity of a construct across culture is also needed since it is known that tremendous psychological constructs available are often interpreted from the Eurocentric point of view, in which perfectionism is included.

Research by [13] highlighted that the perfectionism as possesses by Asian students are stemmed from the collectivistic culture roots. Collectivist culture as common among the eastern countries shapes the nature of perfectionism into more socially oriented than the West. In this case, students are told that high achievement in the academic realm is meaningful and highly praised, not only to oneself but also to one's family and community. Furthermore, the attempt to make their parents feel proud is further taken as a personal obligation. Another research by Lee and Park [5] highlights that the parents of Asian students and Asian American students are more likely to be thought as demanding to their children in terms of achievement, in which they tend to hold an authoritarian parenting style. This notion is gathered when these parents are compared to Caucasian American parents.

Given the fact that achievement is a pressing issue demanded by parents to children, it is not surprising that the students from eastern culture upbringing might perceive being a perfectionist as one of the ways of life. Thus,

these students often look at being perfectionist positively as a fruit of persistent effort toward learning. As a conclusion, [13] stated that the culture as one aspect shaping the nature of perfectionism has been under-researched, especially among East countries with collectivist culture. This fact includes Indonesia as one of the eastern countries with collectivist culture. Therefore, there are still information gaps which need further investigation. The attempt to explore perfectionism especially in Asian culture is also proposed by Lee and Park [5] considering the result of their study on Korean sample which yielded a very different picture of perfectionism compared to the original theoretic assumptions from Western culture.

To date, there is still no measurement for a multidimensional construct of perfectionism being constructed for the Indonesian population, especially for senior high school students. On the other hand, the need for such a measure is increasing. It is prevalent in Indonesia high school students to be indecisive about their future career and educational aspirations due to perfectionism [14]. Not only in Indonesia, this phenomenon is prevalent in which it is already stated before that perfectionism are found to be one major contributing factors in the student's difficulty when choosing, planning, and developing an adequate career as aspired [5]. Especially in Indonesia, since students must choose their career path as early as 10th grade, the multidimensional measure of perfectionism is crucial to help students become better informed of their perfectionism, related to its source and also to the career counseling.

By using the multidimensional approach and measure of perfectionism, a better understanding in terms of the possible multi-sources of perfectionism by students, parents, and school counselors will result in a very different treatment. A perfectionist tendency coming from oneself to strive for excellence will yield to a different behavioral consequence compared to the tendency to please others or the tendency to push other people for fulfilling one's standard. But all of this will only feasible if the measure of multidimensional perfectionism is established first to the considered students [10].

Based on the background explained, this study re-examines perfectionism as possess by Indonesian student, by including various dimensions of perfectionism as stated by Hewitt and Flett [4]. The context of Indonesian students is therefore being addressed, by developing an Indonesia Multidimensional Perfectionism Scale (IMPS) to be specifically used for Indonesia senior high school students. All these goals are broken down into several research objectives as follow:
a)   To create an Indonesia Multidimensional Perfectionism Scale with representative items according to Hewitt *et al.*, [4].
b)   To create a reliable Indonesia Multidimensional Perfectionism Scale with high internal consistency.
c)   To create a valid measure of Indonesia Multidimensional Perfectionism Scale according to Hewitt *et al.*, [4] in terms of construct validity.

2   LITERATURE REVIEW

According to Hewitt *et al.* [7], perfectionism consists of three dimensions named self-oriented, other-oriented, and socially-prescribed perfectionism. The first is self-oriented perfectionism in which it depicts the individual tendency to set for oneself high standards in evaluating the quality of one's work. Having a high score on this dimension will yield a picture of individual frequently conduct self-evaluation [4]. In addition, this tendency also includes the behavior of anxiety, self-blaming, censoring one's behavior to meet one's standard of performance, as well as striving to avoid failures [7]. At the positive side, selforiented perfectionism has been found to correlate to higher self-esteem, being more conscientious, and having approach type of goal orientation [1].

The second dimension is the other-oriented perfectionism which refers to the attribute of setting high standards for evaluating others' work. Thus, individuals with this perfectionism tend to criticize others or demand them to conform to their personal standards. In facing a failure, this tendency often leads to the act of blaming others for mistakes, an absence of trust, and feelings of hostility [7]. In some cases, other-oriented perfectionism is a hint for a personality disorder of extra-punitive behavior. However, on a more positive view, this perfectionism can also be one hint for an individual's leadership potential in motivating others [4].

The third dimension is socially prescribed perfectionism, in which it refers to the tendency to fulfill an external, determined standard. A high score on this dimension makes the individual feel unsatisfied if they cannot fulfil the standard even though it is unrealistic [4]. This tendency is also likely to entail the individual belief that other people harshly pressure them to be perfect. Since those standards are excessive and uncontrollable, therefore it is not surprising that people in this type of perfectionism are more vulnerable for depression, anxiety, and fear of failure [4].

Based on the dimension stated above, it is clear that all the three dimensions are distinctive to each other which can be contrasted according to some key characteristics. It is said that the first difference is on the motivational force behind each dimension. The self-oriented perfectionism is a result of an internal drive of the individual to achieve high standards for oneself. The otheroriented perfectionism is also an internally driven

perfectionism in which individual pushes others for the standard fulfillment. On the other hand, the socially-prescribed perfectionism is externally oriented for it is a result of the need to follow the standard as available from one's surroundings [4]. The second characteristic which differentiates these three dimensions is the degree of controllability as perceived by the individual. As happens for motivation, both the selforiented and other-oriented perfectionism have the same attribute in terms of controllability. An individual with high self-oriented and other-oriented perfectionism tend to perceive that things are going under their control, in which they can take action to change or manipulate them according to their standards. On the other hand, individual with a high socially-prescribed perfectionism tend to perceive that they have less control for what is happening for themselves but they still need to answer those uncontrollable expectations derived from the surroundings [7]; [4]. Below is Table 1 which contain the summary of the three dimensions of perfectionism with its respective differences.

Table 1: Summary of perfectionism dimensions.

Characteristic		Controllability	
		High	Low
Motivation	Internal	Self-oriented & Other-oriented perfectionism	
	External		Sociallyprescribed perfectionism

The measurement of the multidimensional perfectionism is therefore can be drawn as below:
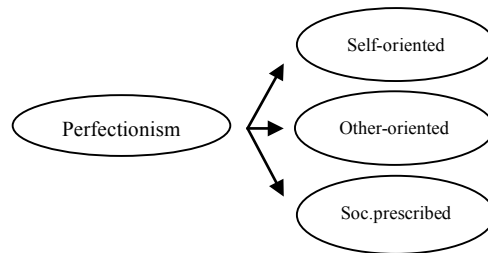

Figure 1: The measure of perfectionism.

3 METHOD

3.1 Participant

This study is delivered to 219 high school students as participants which consist of female (67.6%) and male (32.4%). As all the participants are high school students, they are all in the adolescent period which is confirmed by their age range of 15-18 years (M = 16.58; SD = 0.512). All of the participants were studying in one leading senior high school in the capital city of Jakarta.

3.2 Instruments

We use the original version of the Multidimensional Perfectionism Scale [7] as a basis in constructing the IMPS. In creating the scale, we convert the items into Indonesian language using back-translation, coupled with expert judgment from two school psychologists to review the items created. In addition, we also test the items' readability by delivering it to 10 high school students as the targeted test user. After the adaptation process has been done, it results in the 45-items IMPS scale with the same number of 15 items for each dimension.

 Apart from the original MPS with sevenpoint Likert scale, the IMPS use six-point Likert scales, starting from 1 for "very disagree" to 6 for "very agree". This is done to make the items easy to understand by excluding the possible mid-point or neutral answers [15]. The sample items are as follow:

Table 2: Sample item of IMPS for each dimension.

Dimension	Item
Self-oriented perfectionism	I strive to be as perfect as I can be.
Other-oriented perfectionism	Everything that others do must be of the top-notch quality.
Sociallyprescribed perfectionism	I find it difficult to meet other expectation of me

3.3 Procedure

Data collection was done using a crosssectional approach based on purposive sampling where the participant is targeted to those who more likely possessing the construct measured [16]. Data is gathered through printed questionnaires which delivered directly in face to face encounter between researchers and the participants during the school time in school visitation. We first contacted the leading senior high school's principal to get approval to conduct the study. After getting permission, the printed questionnaire of IMPS is then delivered to the participants to be filled according to the instruction given. For every questionnaire filled where each participant can only answer one questionnaire, we give a reward to them.

3.4 Analysis

We use confirmatory factor analysis (CFA) using Lisrel version 8.0 and corrected item-total correlation (CrIT) using SPSS version 17.0 to determine the scale construct validity. Prior to conduct the CFA, we make sure that the construct theoretical model is supported by the data by examining the model fit. A good model fit is indicated by a non-significant chi-square score with a p-value above 0.05 [17]. [8] further add that the ratio of chi-square score per degree of freedom (df) around 1-5 is commonly acceptable as am an indicator of model fit. In addition to chi-square, a Root Mean Square Error of Approximation (RMSEA) value is also analyzed in which we set its value to be less than .05 as a bottom line [17]. After a fit model is established, the analysis is gone further to explore the scale construct validity. In selecting the best items to measure the targeted construct, we use the factor loading cut-off score at 0.200 and t-value at 1.96 [17]. In addition to CFA, we also use the corrected item-total correlation (CrIT) as a part of the item discrimination index in which it examines if the test as a whole and each of its items measure the same construct. For CrIT, the cut-off score is 0.200 to select the items [18]. After carefully examining the test validity, we then seek out the test reliability using internal consistency approach. The method chosen is Cronbach alpha to determine the homogeneity of the items in each scale dimensions with a polytomous type of response [19].

4 RESULT AND DISCUSSION

The validity testing was conducted on a sample of N = 219. We conducted a separated CFA for each dimension of IMPS to test its quality in capturing a multidimensional nature of perfectionism. We found the total valid IMPS items are 35 items in total which are shown in Table 3.

Table 3: IMPS construct validity.

Dimension	N. of items	Chi-Square	P-value	RMSEA
Self-oriented perfectionism	15	73.17	0.051	0.037
Other-oriented perfectionism	10	41.89	0.091	0.038
Sociallyprescribed perfectionism	10	29.16	0.140	0.037

Table 4: The 35-items of IMPS and its respective psychometric properties.

No.	Observed variable	T-value	Factor loading	Significant	CrIT
	Self-oriented perfectionism				
1	SELF1	9.130	0.570	Yes	.860
2	SELF6	12.780	0.740	Yes	.858
3	SELF8	9.050	0.570	Yes	.862
4	SELF12	10.030	0.630	Yes	.859
5	SELF14	13.040	0.750	Yes	.856
6	SELF15	12.890	0.750	Yes	.853
7	SELF17	10.210	0.620	Yes	.860
8	SELF20	9.80	0.610	Yes	.857
9	SELF23	6.510	0.420	Yes	.864
10	SELF28	11.040	0.670	Yes	.854
11	SELF32	7.330	0.470	Yes	.868
12	SELF34	7.360	0.470	Yes	.865
13	SELF36	5.90	0.390	Yes	.866
14	SELF40	10.410	0.640	Yes	.856
15	SELF42	7.340	0.480	Yes	.869
	Other-oriented perfectionism				
16	OTHER3	3.880	0.250	Yes	.311
17	OTHER4	5.960	0.540	Yes	.211
18	OTHER10	3.980	0.260	Yes	.248
19	OTHER16	7.420	0.480	Yes	.427
20	OTHER19	2.870	0.200	Yes	.228
21	OTHER22	5.040	0.360	Yes	.274
22	OTHER26	7.930	0.610	Yes	.363
23	OTHER27	5.420	0.370	Yes	.368
24	OTHER29	7.960	0.680	Yes	.327
25	OTHER43	5.540	0.460	Yes	.246
26	OTHER2	1.460[*]	0.110[*]	No	.194[*]
27	OTHER7	2.680	0.170[*]	No	.133[*]
28	OTHER24	2.050	0.160[*]	No	.164[*]
29	OTHER38	-1.400[*]	-0.110[*]	No	-.008[*]
30	OTHER45	1.470[*]	0.110[*]	No	.163[*]
	Socially-prescribed perfectionism				
31	SOCIAL5	7.320	0.520	Yes	.751
32	SOCIAL9	6.530	0.450	Yes	.743
33	SOCIAL13	9.780	0.650	Yes	.723

34	SOCIAL18	6.310	0.470	Yes	.757
35	SOCIAL21	7.510	0.520	Yes	.738
36	SOCIAL31	8.270	0.570	Yes	.722
37	SOCIAL33	8.660	0.550	Yes	.725
38	SOCIAL35	6.910	0.460	Yes	.733
39	SOCIAL39	8.440	0.560	Yes	.711
40	SOCIAL41	4.650	0.350	Yes	.729
41	SOCIAL11	0.470*	0.030*	No	-.006*
42	SOCIAL25	2.100	0.160*	No	.120*
43	SOCIAL30	-1.670*	-0.120*	No	-.102*
44	SOCIAL37	1.570*	0.110*	No	.020*
45	SOCIAL44	1.590*	0.110*	No	.104*

Notes: * the coefficient is below the required standard (i.e factor loading ≥ 0.200; t value > 1.96; CrIT ≥ 0.200)

On the dimension of self-oriented perfectionism, we acquired a model fit after doing 35 modifications and found that all of the 15 items are valid to measure self-oriented perfectionism dimension. The model fit is indicated with the non-significant chisquare score of 73.17 (p-value 0.051), the chisquare/df ratio of 1.33, and the RMSEA value of 0.037 (less than 0.05). In addition, the 15 items selforiented perfectionism have factor loadings ranging from 0.390 to 0.750 (t value > 1.96) with CrIT value ranging from 0.853 to 0.868 as shown in Table 4.

For other-oriented perfectionism, a model fit is acquired after 13 modifications and eliminating 4 items. The final model fit has a non-significant chisquare score of 41.89 (p-value 0.091), the chisquare/df ratio of 1.35, and the RMSEA value of 0.038 (less than 0.05). The elimination of 4 items is due to the low factor loading value for respective items, coupled with the t-value the 1.96 as a cut-off score. After eliminating those 4 items, further analysis of CrIT also yielded 1 item with CrIT value below 0.2. Thus, in total, we eliminated 5 items from the other-oriented perfectionism which yielded 10 items remain for future use. The 10 items otheroriented perfectionism have factor loadings ranging from 0.200 to 0.680 (t value > 1.96) with CrIT value ranging from 0.211 to 0.427. Therefore, these 10items are considered as valid to measure otheroriented perfectionism.

For socially-prescribed perfectionism, the model fit is acquired after 14 modifications and a total of 5 items elimination. The final fit model has chi-square score of 29.16 with p-value 0.140, the chi-square/df ratio of 1.32, and the RMSEA value of 0.037 (less than 0.05). The 5 items eliminated have factor loading below 0.2 with t-value less than 1.96. After eliminating these 5 items, we went further to analyze the CrIT value which results in all 10 items of socially-prescribed perfectionism have CrIT value above 0.2. In addition, the 10 items sociallyprescribed perfectionism have factor loadings ranging from 0.350 to 0.650 (t value > 1.96) with CrIT value ranging from 0.711 to 0.757. Therefore, these 10 items are valid to measure sociallyprescribed perfectionism dimension

In total, the 35-item IMPS consists of selforiented, other-oriented, and socially-prescribed perfectionism yields a Cronbach's alpha (α) value of α = 0.869 for self-oriented perfectionism, α = 0.632 for other-oriented perfectionism, and α of 0.754 for socially-prescribed perfectionism. Therefore, fullscale IMPS has a satisfactory reliability coefficient in terms of internal consistency.

From the psychometric analysis explained above, each dimension of the IMPS is found to be valid to measure the multidimensional perfectionism. Thus, the current IMPS can contribute to be the additional measurement of perfectionism, which covers a broad perspective of perfectionism as coming from self and individual interpersonal relationship. However, the current study still has some limitation. The first limitation lies in testing the IMPS with a restrictive sample which only accommodate senior high school students from the capital city of Jakarta, Indonesia. Note that this sample is gathered using purposive sampling at one leading senior high school to picture a senior high school students' population with enough tendency for academic excellence, thus making them more likely to build a perfectionist trait. However, this specific portrayal also brings the issue of generalization for the IMPS to measure the same construct on other subpopulation of senior high school students. Thus, further research is advisable for IMPS to be tested and validated in another different sub-group of senior high school students.

The second limitation is on the level of factor loading applied to select the items. [17] stated that for ±200 number of the sample included in the research, the adequate level of factor loading should be 0.40. However, we

use 0.20 as a standard level of factor loading to select the appropriate item because this current cut-off has already yielded satisfactory items as shown by the Cronbach's alpha coefficient for each dimension. In addition, using factor loading of 0.40 as the requirement not only reduces the number of item in each dimension but also its Cronbach's alpha value. Given this fact, combined with the qualitative property of the scale, therefore we choose factor loading 0.20 as the satisfactory cut-off for selecting items. To counterbalance this lesser cut-off value, the use of standard cut-off for t-value and a high coefficient for CrIT as a later procedure in selecting items help to gather the qualified items for IMPS.

5   CONCLUSIONS

From the analysis conducted from the data, we conclude that IMPS (a) has a representative items from the behavior domain of perfectionism as stated by Hewitt *et al.*, [7], (b) is a reliable measure in terms of internal consistency, and (c) is valid to measure the corresponding construct in terms of construct validity. Therefore, the Indonesia Multidimensional Perfectionism Scale has achieved its all study objectives as stated earlier.

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