Abstract:
The paper presents on the base of psychological and consumer behaviour literature the proposition of consumer perfectionism multidimensional scale. The scale is based on theoretical concepts of Frost with colleagues and Hamachek. Presented results are coming from preliminary research on purpose sample of 150 students. Factor analysis (EFA) and (CFA) allowed to identify five first order factors: concern over mistakes, doubts about action, organization, impact of parents, and personal standards resembling six factors of Frost Multidimensional Perfectionism Scale (FMPS) in consumer behaviour context. The impact of parents factor combines: parental expectations and parental criticism from the original FMPS questionnaire. Also two second-order factors: Adaptive perfectionism and Maladaptive perfectionism were identified. Preliminary study allowed to propose reliable and valid scale for measurement of consumer facets of perfectionism. Results from the study were compared with consumer decision-making styles in SPDZ form by Macik, based on Sproles and Kendall approach. Connections between consumer perfectionism (for first- and second-order factors, as well as for the general consumer perfectionism are discussed in the paper) providing explanation of those perfectionism facets in terms of better known consumer decision-making styles, and proving convergent and discriminant validity of the proposed scale.

Keywords: consumer perfectionism, perfectionism dimensions, multidimensional measurement scale, scale development, consumer decision-making styles.
1. INTRODUCTION

Perfectionism is a trait affecting a lot of human behaviours, including consumer purchasing decisions. In psychology perfectionism, is usually treated as a personality trait (such traits can be defined as habitual patterns of behaviour, thought, and emotion) characterized by a person's striving for flawlessness and setting excessively high performance standards, accompanied by overly critical self-evaluations and concerns regarding evaluations by others.

Striving for perfectionism in consumption has many facets, ranging from the tendency to perfectly rationalize buying processes and to avoid mistakes by looking for objectively the best products to meet personal high standards as well as standards taken from the family home.

This article attempts to investigate the internal dimensions of consumer perfectionism with new multidimensional scale derived from psychological concepts of perfectionism. The link between consumer perfectionism with specific consumer behaviour e.g. for choices of brands and products is also mentioned.

1.1. Perfectionism in psychology

Interest in researching perfectionism stems from psychology, from the Alfred Adler (1927). There were built numerous theories of perfectionism since then, usually distinguishing the "good" and the "bad" perfectionism. Adler (1927) described the "good" (healthy) perfectionist as a person defining difficult but feasible goals and "bad" (neurotic) one - as striving for unrealistic, unenforceable aims. In later developed concepts both two-factor conceptualization (Hamachek, 1978; Frost et al., 1993), as well as theories and tools with a larger number of dimensions (Frost et al., 1990; Hewitt and Flett, 1991) have been developed, although there was a focus on the negative effects of perfectionism - stressing for instance that the perfectionist has the feelings that what he does is never good enough, and he recognizes a failure to achieve even 95% of what planned, that cannot have positive effects (Szczucka, 2010).

In the Hewitt and Flett approach (1991), perfectionism has three independent dimensions: self-oriented perfectionism (SO), other-oriented perfectionism (OO) and the socially-prescribed (SP) one. High scores in all three dimensions are in this approach an indicator of pathology. In turn, the Frost et al. (1990) identified six dimensions of perfectionism: personal standards (PS), concern over mistakes (CM), doubts about action (D), organization (O), parental expectations (PE), parental criticism (PC), of which the personal standards and organization have a positive connotation, and the other dimensions – negative one.

Currently popular is two-dimensional approach of perfectionism, confirming empirically the concepts of Hamachek (1978), initiated by Frost et al. (1993), according to them it can be distinguished:

− perfectionistic strivings – or adaptive perfectionism (also called: normal, healthy, good, self-oriented perfectionism), which manifests as commitment to excellence, focus on personal high standards and is associated with positive results of actions;
− perfectionistic concerns - otherwise maladaptive perfectionism (also called: neurotic perfectionism, unhealthy, bad, socially induced etc.), which is characterized by a fear of mistakes, doubts in the quality of own actions, feeling a sense of social pressure to be perfect or negative reactions to imperfection.

Perfectionism is also one of Raymond Cattell's 16 Personality Factors. Perfectionists are, in terms of that construct, people that are organized, compulsive, self-disciplined, socially precise, exacting will power, controlled, and self-sentimental (Cattel, 1996).

1.2. Perfectionism in consumer behavior research

In consumer behaviour studies perfectionism a construct used rather rare. In previous studies it was usually treated as one of the decision-making styles in the approaches derived from the work of Sproles and Kendall (1986) and continued more recently (Bauer, Sauer, & Becker, 2006; Leng Chan Yie & Botelho, 2010). In Poland this approach has been used in the research by Maćik or under his direction (R. Maćik & Maćik, 2009; Maćik et al., 2011; Maćik 2013). Perfectionism as a decision-making style is characterized by proneness to purchase high quality products and consumer propensity to
spend extra money or own time to find and get the expected high quality. The perfectionistic consumer buys usually carefully comparing the available opportunities, and above all, do not allows the compromise on the quality of purchased goods, looking for technical perfection, extraordinary design of the product or its packaging.

In quality of services research also selected elements of mentioned approaches (Frost et al, 1990; Hewitt and Flett, 1991) were used. Such studies are typically confronted an experienced level of performance with of expectations of the service, and perfectionism as a trait proved to be one of the main factors determining the level of expectations regarding the quality of service. Strong links were found in this area with the dimension of other-oriented perfectionism (Hewitt and Flett approach) and the dimension of concern over mistakes – from Frost and colleagues approach (Kopalle i Lehmann, 2001).

In this paper multidimensional scale of consumer perfectionism is proposed and preliminary tested. It was assumed that some of the dimensions of consumer perfectionism affect consumer perceived risk of buying and suggest ways of minimizing it by making certain choices. Also some possible applications of the scale are mentioned.

2. METHOD AND SUBJECTS

This study is preliminary attempt to construct and test the multidimensional scale measuring perfectionism in consumer behaviour context. At this stage of research scale statements are in Polish. English version of the scale is planned.

The main objective of the study was to test the measuring tool being developed, on the base of Frost and his teams approach (Frost et al, 2000; Frost et al, 2003). In addition, a consumer decision-making styles questionnaire has been used in 10 dimensional version by Maćik (2013) as external criterion to assess the accuracy of the scale being developed.

2.1. Scale development procedure

The consumer perfectionism scale has been developed in the Polish language as an adaptation of partial paraphrase ant travesty types of the Frost Multidimensional Perfectionism Scale - FMPS (Frost et al, 1990), with additional usages of revised FMPS-R scale and shortened - FMPS-24 form developed by Khawaja and Armstrong (2005). Paraphrase is an adaptation of a research tool with maintaining the original psychometric properties, including factor structure, and the travesty is developing a new research tool referring to the original theoretical concept (Drwal, 1995).

The aim was to reconstruct a scale with FMPS dimensions, allowing, however, for less than 6 factors (solution with 5 factors was also desirable). Translation and changing the context of the scale required significant modifications of the original one, including corrections of the statements. Some of corrections were based on the Polish Questionnaire of Adaptive and Maladaptive perfectionism (PAD) by Szczucka (2010).

2.2. Sample and data collection

The data have been collected through online survey (CAWI), about 15 minutes long, at the turn of the years 2013/2014, on the purpose sample of 150 university students, studying in Lublin, Poland. The sample was selected in order to eliminate the influence of age and professional status on the test results.

Sample structure is as follows: 64.7% of subjects were female, and 35.3% male. Mean age of the subjects was 23.09 years with standard deviation of 1.996 years. Average declared income was close to 1400 PLN (approximately 335 EUR) with standard deviation of about 990 PLN (approximately 237 EUR), although exactly 30% of subjects refused to answer on this question. 33.8% of subjects were inhabitants of villages, 27.5% towns up to 200 thousand inhabitants, and 38.7% cities over 200 thousands inhabitants.
3. RESULTS

3.1. Consumer perfectionism scale factorial structure

This preliminary research has been conducted with experimental version of the scale consisting with 35 items taken from different versions of mentioned FMPS and PAD scales, and translated (for FMPS based ones) with the change of the context (for all items) to the consumer behavior issues.

The responses were subject to exploratory factor analysis (EFA) by using principal components method with the Oblimin rotation (allowing for oblique factors, as it was expected that factors will be correlated), and confirmatory factor analysis (CFA). Those procedures allowed to extract five factors converging consumer perfectionism in the sense of the 6 dimensions of the original FMPS. On the basis of factor analyses and reliability analyses following dimensions have been obtained: concern over mistakes (CM), doubts about action (D), organization (O), impact of parents (P) and personal standards (PS). The impact of parents (P) factor combines: parental expectations (PE) and parental criticism (PC) from the original FMPS questionnaire. Structure of the factorial design used for CFA is shown on Picture 1.

Picture 1: CFA results for proposed 5 factor solution with measures of fit

Source: Own research.
Also two factorial interpretation is possible as suggested by Frost et al. (1993), which has been confirmed by performing CFA with second-order factors – Picture 2.

**Picture 2: CFA results for proposed 5 factor solution with measures of fit**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
<th>Evaluation</th>
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</thead>
<tbody>
<tr>
<td>Chi-square of (before 2 or 3 better)</td>
<td>1.433</td>
<td>Good</td>
</tr>
<tr>
<td>p (not significant better)</td>
<td>0.000</td>
<td>Bad</td>
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<tr>
<td>GFI (above 0.9 is a good fit)</td>
<td>0.803</td>
<td>Bad</td>
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<tr>
<td>AGFI (above 0.8 is a good fit)</td>
<td>0.780</td>
<td>Bad</td>
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<tr>
<td>RMSEA (0.05 or less better)</td>
<td>0.054</td>
<td>Good</td>
</tr>
<tr>
<td>PCLOSE (not significant better)</td>
<td>0.308</td>
<td>Good</td>
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</table>

Source: Own research.

Factor analysis suggests possibilities to improve the structure of particular dimensions and whole scale with future research.

### 3.2. Consumer perfectionism scale reliability

After exploratory factor analysis (EFA) there were 24 items left, after removing the statement ambiguous in language and having low or cross-factor loadings. This number of items has been used for confirmatory factor analysis (CFA). As a result of both steps, the dimensions of the scale (and also the scale as a whole) is characterized by adequate or high reliability (Cronbach's alpha values above 0.7 for the three dimensions of first order, both second-order dimensions and the full scale, and also for the remaining dimensions close to 0.7). Since near all of the dimensions are (on the level of indexes constructed as means from the items included) stronger correlated to the whole scale than to
the any of the other factors, it is possible to use also the general level of consumer perfectionism as
general indicator of this trait.

<table>
<thead>
<tr>
<th>Table 1: Reliabilities and correlations between dimensions</th>
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<td>Dimen-</td>
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<tr>
<td>MALAD</td>
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<tr>
<td>ADAPT</td>
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<tr>
<td>General</td>
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</tbody>
</table>

* p < 0.05    ** p < 0.01


3.3. Consumer perfectionism and consumer decision-making scales

The preliminary study also used a questionnaire of consumer decision-making styles, called SPDZ with 10 dimensions (Maćik, 2013) as the external criterion to assess the convergent and differential validity. This scale has been described in detail in Maćik (2013), hence due to the limited volume of this paper, the detailed description is omitted. It should be recalled that the perfectionistic style (PERF) from SPDZ is characterized by the consumer desire to buy the best products, including the propensity for spending substantial effort to find them and get - as a result of the high standards and expectations for the characteristics of the products considered to buy. Correlations between dimensions of consumer perfectionism and consumer decision-making styles according to SPDZ is shown in table 2.

| Table 2: Correlations between consumer perfectionism dimensions and consumer decision-making styles |
|--------------------------------------------------|--------------------------------|
| Consumer perfectionism dimensions               | Consumer decision-making styles |
| PER  | BC | NFC | RSC | PVC | IMP | CO | HBL | COMP | ECO |
| CM   | 0.143 | 0.304 | 0.243 | 0.092 | 0.115 | 0.222 | 0.152 | 0.072 | 0.435 | 0.277 |
| O    | 0.295 | -0.114 | 0.000 | -0.039 | 0.037 | -0.452 | -0.029 | 0.045 | -0.344 | 0.073 |
| D    | 0.139 | 0.162 | 0.100 | 0.135 | 0.070 | 0.306 | 0.345 | 0.167 | 0.277 | 0.237 |
| P    | 0.381 | 0.076 | 0.086 | 0.013 | -0.002 | -0.011 | 0.070 | 0.061 | 0.121 | 0.088 |
| PS   | 0.311 | 0.357 | 0.349 | 0.077 | -0.048 | 0.036 | 0.180 | 0.187 | 0.379 | 0.292 |
| MALAD | 0.279** | 0.249** | 0.194* | 0.119 | 0.121 | 0.214* | 0.239** | 0.131 | 0.376** | 0.273** |
| ADAPT | 0.387** | 0.098 | 0.193* | 0.039 | 0.031 | -0.318** | 0.096 | 0.136 | -0.045 | 0.248** |
| General | 0.416 | 0.238 | 0.241 | 0.096 | 0.092 | 0.010 | 0.228 | 0.165 | 0.270 | 0.318 |

* p < 0.05    ** p < 0.01

Used shortcuts:

Source: Own elaboration.
A high score on the concerns over mistakes scale (CM) should result in a consumer preference to seek "safe" choices: products known to the buyer, traditional, and preference for market-leading brands, accepting the current fashion trends, and avoiding the things custom-made and absolute novelties, where is not known if they will be accepted by the market. Such choices minimize the risk of mistake, that is resulting in feelings of guilt, regret and understated self-esteem. In this preliminary study, low, although significant correlations with the following consumer decision-making styles are confirming the above interpretation: brand consciousness (BC), novelty and fashion consciousness (NFC) - in terms of adaptation to the fashion to not to stand out from the others, and sensitivity to ecology (ECO) - defined as preferences such as for traditional food. Also connections with the compulsive (COMP) and impulsive (IMP) styles, are reasonable, according to the common situation of feeling guilt, remorse after unplanned purchases, the effects of which turn out to be not as good as the consumer thought during shopping.

A high score on the organization scale (O) shoud be associated with a preference for planned purchases - often to the smallest detail, with the rational choices, including a preference for high quality products. Negative correlations obtained in the present study with compulsive (COMP) and impulsive (IMP) styles, and also positive correlation with the perfectionistic style (PERF), are confirming these assumptions.

In turn, intensified tendency to doubts about own actions (D) should be associated, as in the case of CM dimension, with preference for choices not giving an opportunity to regret after decisions, the choice of products known to the buyer, who is convinced that, despite his effort he does not achieve the desired results, so his efforts will not be effective. The resulting correlation with the style of confusion by overchoice (CO) confirms the mentioned assumption. Correlations with styles ECO, IMP and COMP should be interpreted as in the case of concerns over mistakes (CM) dimension.

Pronounced result on the scale of parental impact (P) means a strong belief, gained from the family home, that is worth buying only products that meet accepted standards, are durable, and close to perfection. In preliminary study there was achieved quite high (compared to other relationships) positive correlation between the severity of this dimension of consumer perfectionism with perfectionism as a decision-making style (PERF).

A high score on the scale of personal standards (PS) means the preference for the searching and acquiring products and services that meet the high standards of the functional characteristics, including aesthetics. For achieving high standards in this area helps the preference for known good brands and quick acceptance of new products, even at a very early stage of their life cycle. People with a high score in PS scale are more likely than others to change owned products to their new versions, e.g. for consumer electronics products - and fast acquisition of market novelties becomes for them a kind of compulsion.

The personal standards scale (PS) is semantically the closest analogue of perfectionist style (PERF) from the set of consumer decision-making styles (SPDZ), although it has not the highest correlation with this dimension. In addition, it is significantly correlated with brand consciousness (BC), novelty and fashion consciousness (NFC), a compulsive style (COMP) and eco-consciousness (ECO). These relationships are consistent with expectations. Somewhat weaker correlations were found for personal standards with following decision-making styles: confusion by overchoice (CO) and habitual brand loyal style (HBL). In these cases, these relationships are interpreted as cognitive desire to meet the standards without excessive effort - this ensures loyalty to the brand, recognized as exceptional, and rejecting alternatives outside the known set - for example, replacing the previous iPhone by its new version, without considering other brands/systems, because of strong belief that the iPhone has no real competition).

Maladaptive perfectionism as a derived second-order factor is connected with more of negative perceived consumer decision making styles: compulsive (COMP), impulsive (IMP), confused by overchoice (CO), and brand conscious (BC). Those tendencies are often connected with not rational choices, and consumer decision mistakes, which leads to dissatisfaction and regret. It is also correlated with perfectionistic style (PERF), fashion and novelty consciousness (NFC) and eco-consciousness (ECO), that cannot be perceived as having negative connotations.
Adaptive perfectionism is correlated more with perfectionism as consumer decision-making style (PERF), with eco-consciousness (ECO), fashion and novelty consciousness (NFC), and – negatively – with impulsiveness (IMP). Those connections are reasonable as characterizing the person having higher score in this dimension as a rather rational consumer, aware of sellers practices and good knowing own needs.

The general result on the consumer perfectionism scale of is most strongly associated with the perfectionistic style of consumer decision-making (PERF), which proves the convergent validity of the proposed scale. Stronger correlations are also present with eco-conscious style (ECO), as well as sensitivity to the novelty and fashion (NFC), brand consciousness (BC), and confusion by overchoice (CO) as previously explained.

4. CONCLUSION AND LIMITATIONS

At this stage, proposed consumer perfectionism scale seems to be a promising tool for measuring the previously poorly explored aspects of personality determining consumer behaviour, although there is a need for the implementation of this scale on more diversified demographically and larger sample, because rather small and homogeneous sample not gives the opportunity to make conclusions about other age groups than university students – this is obvious limitation of presented research. Replication of the results on other consumer groups and in other countries – possibly using planned English version of the scale is needed.

Although presented preliminary study confirmed the usefulness of the proposed scale measuring consumer perfectionism and proved its reliability, there are possibilities to further improve the scale. For example you can consider a combination of the dimensions CM (concerns over mistakes) and D (doubts about actions) - factorial separate, but similar in terms of obtained dependencies. Also more detailed study of second-order scale factors – adaptive and maladaptive perfectionism facets is promising.

Studying consumer perfectionism and its dimensions will allow to explain consumer choices, that can have numerous practical implications. For instance it can be expected that for perfectionistic consumer the known brand will be better indication of product quality than for less perfectionistic one. Also in circumstances of not known brand the perfectionistic consumer more frequently will use a heuristic to make decision on the base of product (of package) design.

REFERENCE LIST


