

**The MIXADAPT Scale:
A Measure of Marketing Mix Adaptation to the Foreign Market***

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ABSTRACT

This study presents a four-dimensional multi-item scale for assessing the degree of marketing mix adaptation to the foreign market (the MIXADAPT scale). The scale shows evidence of reliability as well as convergent, discriminant and nomological validity in samples of Portuguese and British exporters. Additionally, the scale reveals factorial similarity and factorial equivalence across the two samples. The findings are used to generate managerial and theoretical implications as well as directions for future research.

Keywords: Cross-Country Study; Export Marketing Program; Measurement; MIXADAPT Scale

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The extent to which the marketing mix elements should be adapted/standardized to the foreign market has been the subject of a spirited, on-going discussion for several decades (cf., Jain 1989; Griffith et al. 2000). Despite the existing intense research and managerial interest, recent articles show that the adaptation/standardization topic is still ambiguous and remains an unresolved issue among international business academics and practitioners. The most recent literature review on the topic (Theodosiou and Leonidou 2003:167-168) suggests that the prevailing ambiguity is due to inadequate research designs, weak analytical techniques, and inappropriate conceptualization, operationalization and measurement of marketing strategy adaptation/standardization. These authors conclude that four major issues need to be addressed in order to ensure that future research in this area moves forward. First, a greater reliance on previous studies is required, as the vast majority have been conducted in isolation, leading to a great heterogeneity of the findings. Second, there is a need for a greater attention to conceptualization and measurement of constructs, using appropriate analytical methods, since much of the previous research cannot be replicated due to the employment of single-item measures or constructs that have not been properly validated. Third, there is a need for a greater focus on a single product, or product line, exported to a single overseas market (i.e. the product-market venture level) as the simultaneous use of different products and markets will lead to inaccurate measures. Fourth, research leads to view marketing strategy along a continuum varying from pure standardization to pure adaptation because this construct needs to be aligned with the different contingent forces. In this paper we aim to address all four of these research needs while developing a four-dimensional multi-item scale of marketing mix adaptation to the foreign market (the MIXADAPT scale).

We consider as the unit of analysis an individual product-market export venture of the firm in order to assess the continuum varying from pure standardization to pure adaptation marketing strategies. We also expect to contribute to the international business literature by paying particular attention to issues of validity and reliability. In doing so, it is expected with the MIXADAPT scale to enhance the quality of future empirical exporting research on marketing mix adaptation, and simultaneously make it more comparable. Additionally, since previous research has tended to focus mostly on *single* aspects of the marketing mix, while using mostly *US firms*, it is also our goal to contribute to the field by considering the adaptation of *all* four marketing-mix aspects, while using the experience of *non-US* (Portuguese and British) based firms. At the practitioner level, our main goal is to help managers in the development of tactical and strategic decisions by providing a basis to assess export marketing strategies.

In this paper we start by discussing previous international business literature in the adaptation/standardization topic. In the second part of the paper, the MIXADAPT scale is tested and developed. Results are then presented and discussed. Finally, we consider the research limitations, implications for theory and managerial practice, and future research directions.

THEORETICAL BACKGROUND

The issue of adaptation/standardization first emerged in the international business literature during the 1960s and initially focused on advertising strategies. It was argued that advertising campaigns could be standardized across European countries in the same way they were standardized across states in the U.S. (Elinder 1961, 1965). In other words, standardization defenders argued that people are basically the same despite demographic, ethnic, cultural, and psychographic characteristics across different nations. Therefore, a standardized advertising approach founded on basic appeals (e.g., mother-child relationship, desire for a

better life, beauty, health, and freedom) might be effective across different countries in the same way it might be across different U.S. regions. At this time, global markets (e.g., the European Economic Community and the European Free Trade Association) were beginning to emerge, raising the need for an international advertising presence. Subsequent empirical research in this area indicated that the most successful advertising campaigns were those in which managers were able to find the appropriate balance between adaptation and standardization. Using a case study approach, Dunn (1966) demonstrated that key market and economic data (e.g., degree of competition, level of education, standard of living, adequate distribution in the country, and economic development) should be taken into consideration to find the *appropriate* balance between adaptation and standardization.

Through Buzzell (1968), the adaptation/standardization topic was expanded from an exclusive advertising approach to the other areas of international business. This fact can be observed across the findings of several early studies. For example, with regard to the degree of product adaptation, whereas Sorenson and Wiechmann (1975) found a strategy with low adaptation, Karafakioglu (1986) found that firms were practicing a highly adapted strategy. With respect to promotion, while Sorenson and Wiechmann (1975) found a degree of promotion adaptation below average, Akaah (1991) found a high degree. With regard to the degree of price adaptation, whereas Sorenson and Wiechmann (1975) reported a low level of adaptation, Schuster and Bodkin (1987) reported higher adaptation. Similarly, with regard to distribution, while Sorenson and Wiechmann (1975) found a lower degree of distribution adaptation, Karafakioglu (1986) found a higher level. After much further discussion and research in the following decades, the existence of a continuum between the two limits was clearly recognized.

Nowadays, the view widely accepted in the literature is that either standardization or adaptation of marketing programs can enhance performance if implemented under

appropriate conditions (Katsikeas et al. 2000; O’Cass and Julian 2003). Since this study is focused on the degree of adaptation of the four marketing-mix elements, we now present a summary of the benefits of adapting each of the marketing-mix elements (cf. Leonidou et al. 2002). First, with regard to product adaptation, the benefits lie in the existence of a customer-orientated strategy, because the exporter systematically assesses the behavior of the buyer and the characteristics of the host market (Douglas and Wind 1987). Moreover, firms may achieve a greater profitability because a good match between product and market may lead to greater customer satisfaction, which in turn may result in greater pricing freedom. Additionally, product adaptation is associated with more creativity and innovation as a result of the pressure imposed by host market requirements, which may result in extra products for the domestic and overseas market (McGuinness and Little 1981).

Second, the arguments in favor of promotion adaptation include the differences in government policies, communication infrastructures, competitive practices, and so forth, among nations (Keegan 1995). Third, the reasons that justify price adaptation are: economic, politico-legal, and related to price controls; tariffs, taxes, and other financial trade barriers; distribution, marketing, and transportation costs; distribution channels’ costs and margins; market demand; and competitors’ pricing strategy. Finally, distribution adaptation may take place in response to variations in business environments (e.g. legislation, and economic conditions), and differences in distribution infrastructures (e.g. number of middlemen, and types of outlets).

Overall, the key arguments used in favor of an adaptation strategy are mainly related to the characteristics associated with any host country, such as politico-legal, economic (e.g. purchasing power and economic situation), socio-cultural (e.g. religion, customs, traditions, education, language and taste), and technological environments (Lages and Jap 2003). Another key argument for adaptation is that a standardized strategy tends to be product/price

oriented. According to Douglas and Wind (1987), all the marketing-mix factors must be taken into consideration, and the strategy cannot be exclusively product/price oriented. There is an increasing desire for multiple product features, quality and service rather than for low prices. This idea is also supported by Cavusgil and Zou (1994) who suggest that companies, which are product-orientated, are more vulnerable to attacks from foreign competition. If a company adopts a standardized strategy, although it may achieve lower production costs, there will always be competitors that are willing to offer what the consumers desire across markets.

Nevertheless, and despite this extensive list of benefits associated with adaptation, one may not assume that an adapted strategy is always advisable. As mentioned by some of the early standardization supporters, there are also benefits associated with standardization. For example, as a consequence of considerable economies of scale across several organizational areas (e.g. production and marketing) resulting from a standardized strategy, there will be customers preferring standardized products because firms are able to provide lower prices while pushing quality and reliability up (Levitt 1983). Moreover, the existence of a consistent product image across markets may enable firms to offer more competitive products. Some empirical evidence also shows that price standardization might improve export performance (Lages and Montgomery 2003). This assertion might be particularly true if the domestic market price tends to be lower than competitive prices in the export market or if the exporting firm is able to take advantage of a currency advantage.

In this paper we follow the most recent approach to this debate, which recognizes both advantages and disadvantages associated with adaptation/standardization. The assumption of this perspective is that “no strategy is the best across situations and each strategy can be the best in a particular condition” (Wang 1996:103) because the adequate degree of adaptation is contingent upon a variety of internal and external factors (see: Jain

1989; Zou and Cavusgil 1996; Theodosiou and Leonidou 2003). Similarly to the most recent studies in the field, we also agree that what exists is a continuum between the two extremes, pure standardization and pure adaptation, where pros and cons exist with each strategy.

METHOD

Exporting researchers have been using many different measures to assess marketing mix adaptation. This is because there is no consensus on its conceptual and operational definitions, with several approaches and definitions being suggested (Theodosiou and Leonidou 2003; Zou et al. 1997). In the following pages, we develop and operationalize a measurement scale for the degree of marketing mix adaptation using four dimensions: 1) product adaptation; 2) promotion adaptation; 3) price adaptation; and 4) distribution adaptation.

Conceptual Definitions and Unit of Analysis

In recent years, two approaches to the degree of adaptation/standardization have been typically used: adaptation of marketing programs (program-oriented adaptation) and adaptation of marketing processes (process-oriented adaptation). Marketing processes are concerned with the procedures followed by a company in developing marketing decisions, i.e. the intellectual method used for approaching a marketing problem, analyzing it, and synthesizing information in order to make a decision. Adaptation of a marketing program is related to the adaptation of various aspects of the marketing mix, such as product, promotion, price and distribution (Sorenson and Wiechmann 1975; Kreutzer 1988; Jain 1989). Although this research paper develops exclusively a measurement scale for marketing program adaptation, future development of a measurement scale for marketing process adaptation is strongly encouraged (see Griffith et al. 2000), since this is another area requiring valid and reliable scales.

Previous research dealing with the adaptation of marketing program tends to examine (1) marketing strategies that are applied to different world markets, or (2) domestic marketing strategies that are applied to foreign markets (Cavusgil and Zou 1994; Zou et al. 1997). The first perspective requires a comparison of the marketing strategies used for various international markets. The concern is the exploration of the differences in the marketing mix elements across different world markets (Picard et al. 1988; Samiee and Roth 1992). The second approach regards the extent to which it is possible to implement the domestic strategies in foreign markets. This requires an observation of the differences between strategies used for home and foreign markets. Although there is a lack of research on the application of domestic marketing programs to foreign markets (Cavusgil and Zou 1994; Shoham and Albaum 1994), this is considered to be the most advisable approach in order to avoid confused and inaccurate measures (Cavusgil and Zou 1994; Zou and Stan 1998; Theodosiou and Leonidou 2003). The current study will follow this approach. Similarly to Cavusgil and Zou (1994), our focus is on the marketing strategy defined for a single *export venture*. This approach of a single product or product line exported to a single foreign market will allow future researchers using these measures to associate marketing mix adaptation more precisely with its antecedents and outcomes.

We see marketing strategy adaptation along a continuum varying from pure standardization to pure adaptation. Product adaptation is conceptualized as the degree to which the product (brand name, design, labeling, and variety of the exporting product line) differs between the domestic and export market. Similarly, promotion adaptation is defined as the adjustment of the domestic promotional program (advertising theme, media channels for advertising, direct marketing, promotion objectives, budget for promotion) to the export market. Pricing adaptation refers to the degree to which the pricing strategies (determination of pricing strategy, concession of credit, price discounts policy, margins) for a product differ

across national boundaries. Finally, distribution adaptation reflects the adjustment of distribution (criteria to select the distribution system, transportation strategy, budget for distribution, and distribution network) to the export market.

The Research Setting

Our research setting is two developed countries that are members of the EU (Portugal and the U.K.). Research within this arena is particularly pertinent as the EU is the world's largest exporter of goods, maintaining a stable share of approximately one fifth of total world exports (intra-EU trade excluded) since 1990 (European Commission 2000).

In line with previous research in international marketing (e.g. Styles 1998; Zou et al. 1998) we brought into play two countries to test our scales. Despite selecting both countries for convenience, these countries are similar enough for the same dimensions be relevant, but different enough for the possibility of substantial variation (Styles 1998). A key similarity is the fact that both Portuguese and British economic growth depends heavily on the exporting success of national firms. Moreover, the majority of trade is with other EU countries. The main differences across both countries are the language, cultural roots and values.

Survey Instrument Development

Churchill's (1979) traditional approach to scale development was used. As noted by this author, in order to increase reliability and decrease measurement error it is more advisable to use multi-item scales than single-item scales. Although some might suggest that it is possible to measure marketing mix adaptation with a single variable, we argue that it is advisable to construct a scale based on a set of dimensions with multiple items. In this way it is possible to better capture the complexity of export marketing strategy. Hence, in order to develop the research instrument we combine a list of items from the exporting literature with additional indicators resulting from exploratory interviews.

All the items used to build the product adaptation and price adaptation scales have been extensively used across different studies (see Theodosiou and Leonidou 2003: 159). With regard to promotion adaptation, in addition to the three items frequently used in the literature - advertising theme, media channels and budget for promotion - (see Theodosiou and Leonidou 2003: 160), two items - direct marketing and promotion objectives - emerged from the exploratory interviews. Similarly, with regard to distribution adaptation we brought into the final instrument one item resulting from the exploratory interviews - distribution network. The other three items - criteria for selection of distribution channels (Beamish et al. 1993; Shoham 1996), transportation strategy and distribution budget (Zou et al. 1997) - were taken from existing literature in export marketing.

The questionnaire used in Portugal was initially developed in English and then translated into Portuguese. The content and face validity of the items were assessed by four judges (university lecturers in marketing); each judge was asked to evaluate how representative each item was of the final construct. Both surveys were revised according to their comments. It was then given to a pretest sample of fifteen managers involved in export operations. The pretest results were used to further refine the questionnaire. In order to avoid translation errors, the questionnaire was back-translated into English by a different researcher (Douglas and Craig 1983). A full listing of the final items and their scale reliabilities for Portugal and the U.K. can be found in Table 1. The average internal reliability (Cronbach alpha) for the Portuguese sample was .86 and for the British sample .92.

Data Collection Procedure

Portugal

A sample of 2,500 firms was randomly generated from a government agency database of ICEP-Portugal (1997). This database of 4,765 Portuguese exporters was the most

comprehensive and up-to-date database available in the Portuguese market at the time of data collection (1999). The pretest results indicated a strong need for an incentive to motivate the respondents to participate. Thus, the cover letter stated that in return for a completed survey, respondents would be provided with a report of the final results as well as a list of contacts for potential overseas importers or clients.¹ Additionally, confidentiality was assured.

In the first mailing, a cover letter, a questionnaire, and an international postage-paid business reply envelope were sent to the person responsible for exporting in each of the 2,500 Portuguese firms. This missive was followed by a second mailing that included a reminder letter and a reply envelope. Of the sample of 2,500 Portuguese managers, 29 stated that they no longer exported and 119 questionnaires were returned by the postal service. These firms had either closed down or moved without leaving a forwarding address. Thus, the sample size was reduced to 2,352. Of these, 519 questionnaires were returned, a 22% response rate.

United Kingdom

A sample of 1,564 British enterprises was randomly generated from a database “British Exports 2000” (Reed Business Information 2000) provided by the British Chamber of Commerce. An incentive was stated in the cover letter: in return for a completed questionnaire, the findings would be available after the completion of the study. Confidentiality was also assured.

As in the Portuguese survey, a cover letter, a questionnaire and a postage-paid business reply envelope were sent to the person responsible for exporting in each of the British firms under study. Unfortunately, in contrast to the Portuguese survey, it was not possible to obtain governmental funding to conduct the research. Consequently, due to lack of financial resources, a reminder mailing was not sent out.

¹ This list is generated used on-line information, mainly information available on websites of several

The data collection was conducted in 2002. Out of the 1,564 exporters we received 111 replies, which represents a raw response rate of 7% (111/1,564). In order to identify the problems associated with this low raw response rate, we used Menon et al.'s (1999) method. Similarly to Menon et al. (1999) we contacted 100 randomly chosen respondents to determine nondeliverable and noncompliance rates, and then assess final response rates. We determined that 34% of the mailings were nondeliverable because of incorrect address; an additional 40% did not reach the person responsible for the export operations in the firm; and 4% of the respondents reported a corporate policy of not responding to academic surveys. Hence, in line with Menon et al.'s (1999) method, the total of 111 usable returned questionnaires represents a 31% effective response rate, which is quite satisfactory, given that average top management survey response rates are in the range of 15%-20% (Menon, Bharadwaj, and Howell 1996).

Assessment of Non-Response Bias and Data Profile

Non-response bias was tested by assessing the differences between the early and late respondents with regard to the means of all the variables for both samples (Armstrong and Overton 1977). Early respondents were defined as the first 75% of the returned questionnaires, and the last 25% were considered to be late respondents. These proportions approximate the actual way in which questionnaires were returned. No significant differences among the early and late respondents were found, suggesting that response bias was not a significant problem in the study.

The entire size range of firms is represented in the sample. Both Portuguese and British exporting industries are primarily composed of SMEs. Of the exporting firms represented in the sample, 5% of Portuguese firms and 6% of British companies have more

Chambers of Commerce, where a list of importers is normally listed by sector.

than 500 employees. Regarding the Portuguese sample, the average annual export sales of these firms ranged from USD \$350,000 - \$1.5M. With regard to the British sample, the average annual export sales of these firms ranged from USD \$470,000 - \$1.6 M.

Both surveys were directed to individuals who were primarily responsible for exporting operations and activities. The job title of these individuals included president, marketing director, managing director, and exporting director. Since the unit of analysis is a specific export venture, it is expected that responding executives have detailed knowledge of the degree of marketing program adaptation to a specific foreign market. Respondents in both countries were also asked to indicate their degree of experience in exporting on a scale where 1=none and 5=substantial. The mean response for Portugal was 3.6 (sd=.84, range 1 to 5) and for the U.K. was 3.8 (sd=.93, range 1 to 5). Collectively, this indicates that although the title of the respondents' positions may be wide-ranging, the individuals appear to have knowledge and are experienced with exporting in general.

DATA ANALYSIS

Assessment of Scale Validity and Reliability

Churchill's (1979) approach to scale development has been expanded by Gerbing and Anderson (1988) with the use of Confirmatory Factor Analysis (CFA). We employed CFA to assess the measurement properties of the existing scales, using full-information maximum likelihood (FIML) estimation procedures in LISREL 8.3 (Jöreskog and Sörbom 1993). CFA provides a better estimate of reliability than coefficient alpha (Steenkamp and Van Trijp 1991). The reason is that while coefficient alpha assumes that different indicators have equal factor loadings (λ) and error variances (δ), CFA takes into account the differences among the existing indicators (Styles 1998).

In this paper we separate the analysis of Portuguese and British data because data collection occurred in two different years while using different types of incentives. Therefore, it is possible that managerial perceptions of performance might be different in the two countries. As can be seen in Table 1, convergent validity is evidenced by the large and significant standardized loadings of each item on its intended construct (average loading size was .77 for the Portuguese sample, and .86 for the British sample). As shown in Table 1, all constructs present the desirable levels of composite reliability (Bagozzi 1980) and present discriminant validity (Fornell and Larcker 1981). Discriminant validity was also evidenced by the correlation estimates between any two constructs (Jöreskog and Sörbom 1993). No correlation includes a value of 1 (Anderson and Gerbing 1988) and the highest correlation is for price and distribution (Portugal: .441; U.K.: .557).

Insert Table 1 about here

Cross-cultural validation

In order to assess cross-national validation we tested 1) factorial similarity, 2) factorial equivalence, and 3) measurement equivalence (cf. Mullen 1995; Singh 1995), a procedure frequently used in the international business literature (e.g. Brady and Robertson 2001; Cadogan et al. 1999; Styles 1998).

Factorial Similarity

The first step was to test factorial similarity across the Portuguese and British samples using LISREL 8.3 (Jöreskog and Sörbom 1993). Two measurement models were developed for each sample (see Table 1). Each item is restricted to load on its pre-specified factor, with the error variances and factor loadings allowed to correlate freely. The chi-square for both models is significant (Portugal: $\chi^2=325.18$, 113df, $p=.00$; U.K.: $\chi^2=174.19$, 113df, $p=.00$).

Since the chi-square statistic is sensitive to sample size, we also assessed additional fit indices: the Non-Normed Fit Index (NNFI), the Comparative Fit Index (CFI) and the Incremental Fit Index (IFI). All the fit indices for the Portuguese sample (NNFI= .94, CFI= .95 and IFI= .95) present satisfactory values. Similarly, with regard to the British sample, the NNFI, CFI and IFI are .94, .95, and .95, respectively, suggesting that the model fits the data well. These results reveal that the MIXADAPT scale reveals factorial similarity, i.e. the scale items load very well on the same constructs across nations.

Factorial Equivalence

After testing for factorial similarity, we assessed factorial equivalence. The model initially estimated involved a four-construct multi-indicator specification, whereby the factor loadings were set to be invariant across the Portuguese and British sample and the error variances were allowed to differ (see Table 2: Model A). Despite the significant chi-square for this model ($\chi^2=547.81$, 249df, $p=.00$), the fit indices are very satisfactory (NNFI= .94, CFI= .95 and IFI= .95). This model was compared to a two-group model in which both factor loadings and error variances are set free for each country data set (see Table 2: Model B). This model also presents a significant chi-square ($\chi^2=529.81$, 232df, $p=.00$) and very satisfactory fit indices (NNFI= .94, CFI= .95 and IFI= .95). The chi-square difference test between Model A and Model B is non-significant ($\Delta\chi^2 =18$; $\Delta df=17$; ns). This reveals factorial equivalence, as it suggests that the factor loadings across the two nations are the same within the statistical bounds set.

Measurement Equivalence

The final step was to test for measurement equivalence, in order to check if factor loadings and error variances were invariant for the two groups. In order to test full metric equivalence, we used a constrained model (see Table 2: Model C) in which we assumed that factor

loadings and error variances were invariant for the two groups. Despite the significant chi-square ($\chi^2=664.55$, 266df, $p=.00$), the model presents a good fit (NNFI= .90, CFI= .91 and IFI= .91). However, we found that the resulting chi-square difference test is significant ($\Delta\chi^2=135$, $\Delta df=34$, $p<.01$) and, hence, full metric equivalence cannot be established.

Insert Table 2 about here

DISCUSSION AND CONCLUSIONS

Our validation across the Portuguese and British samples indicates that the MIXADAPT scale reveals factorial similarity and factorial equivalence, but does not present measurement equivalence. The inexistence of measurement equivalence suggests that there are some differences in the way respondents have addressed the questions.

The first threat to measurement equivalence might derive from the fact of data being collected in two different years, as well as on the different types of incentives administered in the two countries, which may influence respondents' willingness to answer the questionnaire. The second threat to measure equivalence is associated with the possibility of existing scalar inequivalence due to language differences between Portuguese and British managers. Nevertheless, this situation was largely minimized by the pretest that took place (cf. Douglas and Craig 1983) as well as by the relative straightforward nature of the questions (Styles 1998).

A third threat to measurement equivalence is associated with the contextual variables (Douglas and Craig 1983; Craig and Douglas 2000). It is possible that when Portuguese and British respondents selected their export venture, they elected different types of products and exporting markets. For example, while Portuguese respondents might rely more on traditional (e.g., textiles and shoes) and less on Hi-Tec products, this situation is much less likely to occur with British exporters. Similarly, while British firms are typically international firms,

Portuguese exporting firms are typically dependent on a neighboring country (Spain). Styles (1998) also suggests that different levels of familiarity and experience of managers with export operations might be another problem to measurement equivalence. However, this does not seem to be a concern with this study. As previously discussed, when managers rated their degree of experience in exporting, the mean response for Portugal (mean=3.6; sd=.84, range 1 to 5) and for the U.K. (mean=3.8; sd=.93, range 1 to 5) were very similar.

Research Limitations

This research presents some limitations. The first limitation is that, as is the case with other studies in international business, our findings may be biased as a result of using self-report and perceptual data (Skarmeas et al. 2003), particularly if we consider that data were collected in two different years with different types of incentives administered in the two countries. A second limitation is that our scale does not present measurement equivalence. Nevertheless, this finding does not seem surprising given the significant cultural differences between Portugal and the U.K. As stated by Zou et al. (1998: 51), “should the factor structure, the item-factor loadings, and the error variances be all identical, there would be no need to distinguish exporters from the two countries because they would simply become the same group.” A third limitation is that our research instrument (i.e. the questionnaire) may have created common method variance. However, if common method bias exists, then a CFA containing all constructs should produce a single method factor (Podsakoff and Organ 1986). The goodness-of-fit indices (*Portugal*: NNFI=.44, CFI=.55, IFI=.55; *United Kingdom*: NNFI=.35, CFI=.44, IFI=.44) indicate a poor fit for both models, which suggests that biasing from common method variance is unlikely. Finally, the fourth limitation is related to the size of the British sample. The British sample size is small, and consequently these results should be regarded as suggestive rather than conclusive.

Implications and Future Research Directions

Major advances in export marketing will only be made possible by means of a more integrated approach to conceptualizing and measuring marketing mix adaptation. Despite 40 years of research on this topic, an integrated approach to marketing program adaptation measurement is still lacking.

Our research seeks to capture practical knowledge within a theoretical framework. More specifically, while building on previous research and preliminary interviews, this paper creates the MIXADAPT scale that assesses marketing mix adaptation to the foreign market using the four marketing-mix dimensions: adaptation of product, promotion, price and distribution. Instead of treating the MIXADAPT scale as a unidimensional construct, various measurement units for each of the four dimensions are presented.

From a practitioner perspective, different reasons justify the need for a sound evaluation of marketing mix adaptation. The MIXADAPT scale might be instrumental in defining export marketing actions. Moreover, it is required to clearly define and assess the marketing programs prior to the evaluation of export marketing programs' outcomes (e.g. financial performance as an outcome of promotion adaptation to the foreign market). Without a proper operationalization of marketing program adaptation, it will not be possible to achieve competitive advantage and ultimately enhance a firm's performance in the international arena. Hence, the MIXADAPT scale presented here may assist managers in clarifying actual marketing programs as well as in assisting managerial planning directions.

Several research directions for the export marketing literature can be extracted from this research. First, there is a "relatively weak operationalization of the marketing strategy construct" (Leonidou et al. 2002: 57). Through the MIXADAPT scale we expect to contribute to theory development by providing a unified measure for capturing marketing mix adaptation specifically, which will contribute to a greater consensus in future literature

exploring this topic (Theodosiou and Leonidou 2003). Second, international marketing researchers might also use this scale as a basis to simultaneously assess how past marketing strategy impacts on performance, as well as how past performance impacts on strategy (see: Lages 2000; Lages and Montgomery, *forthcoming*), as strategic decisions are motivated by a combination of proactive and reactive behaviors (March and Sutton 1997). Otherwise, researchers will continue to question if the difference among existing findings are a consequence of marketing mix adaptation operationalization or a consequence of its antecedents and consequences. Third, the refinement and replication of the MIXADAPT scale across different countries and industries is recommended. Finally, the development of a measurement scale for adaptation-standardization of marketing processes is strongly encouraged, since this is another controversial area requiring a valid and reliable scale as an essential basis for further development of the literature on the topic.

TABLE 1:
CFA RESULTS FOR PORTUGUESE AND BRITISH SAMPLES

Notes:

α = Internal reliability (Cronbach 1951)

$\rho_{vc(n)}$ = Variance extracted (Fornell and Larcker 1981)

ρ = Composite reliability (Bagozzi 1980)

Dimensions of Marketing Mix Adaptation	Items	Portugal			United Kingdom		
		$\alpha/\rho_{vc(n)}/\rho$	Stand. Item-Loading	T-value	$\alpha/\rho_{vc(n)}/\rho$	Stand. Item-Loading	T-value
PROD	Product Adaptation to the Foreign Market Scale: 1=No Adaptation; 5=Extensive Adaptation	.81/.52/.81			.91/.72/.91		
PROD1	Product brand name	.69	16.38	.85	10.92		
PROD2	Product design	.78	19.10	.89	11.61		
PROD3	Product labeling	.74	17.74	.87	11.33		
PROD4	Variety of the exporting product line	.65	15.24	.78	9.49		
PROM	Promotion Adaptation to the Foreign Market Scale: 1=No Adaptation; 5=Extensive Adaptation	.89/.64/.90			.94/.77/.94		
PROM1	Advertising theme	.82	21.95	.90	12.10		
PROM2	Media channels for advertising	.83	22.28	.87	11.39		
PROM3	Direct marketing	.71	18.01	.85	10.94		
PROM4	Promotion objectives	.81	21.69	.92	12.50		
PROM5	Budget for promotion	.82	21.86	.83	10.67		
PRIC	Price Adaptation to the Foreign Market Scale: 1=No Adaptation; 5=Extensive Adaptation	.85/.59/.85			.91/.73/.91		
PRIC1	Determination of pricing strategy	.69	16.86	.88	11.37		
PRIC2	Concession of credit	.72	17.85	.82	10.17		
PRIC3	Price discounts policy	.81	21.27	.82	10.29		
PRIC4	Margins	.85	22.50	.89	11.78		
DIST	Distribution Adaptation to the Foreign Market Scale: 1=No Adaptation; 5=Extensive Adaptation	.87/.63/.87			.91/.71/.91		
DIS1	Criteria for selection	.80	20.91	.87	11.20		
DIS2	Transportation strategy	.77	19.67	.87	11.16		
DIS3	Distribution budget	.79	20.56	.82	10.25		
DIS4	Distribution network	.82	21.72	.82	10.29		

Portugal (n=519): $\chi^2=325.18$, 113df, p=.00; NNFI= .94, CFI= .95, IFI= .95

U.K. (n=111): $\chi^2=174.19$, 113df, p=.00; NNFI= .94, CFI= .95, IFI= .95

TABLE 2
CFA RESULTS FOR TWO-GROUP MODEL

Dimensions of Marketing Mix Adaptation	Model A Factor loadings invariant and error variances variant				Model B Factor loadings and error variances variant				Model C Factor loadings and error variances invariant	
	Portugal		U.K.		Portugal		U.K.		Portugal &U.K.	
	Stand. Item- Loading	Error variance	Stand. Item- Loading	Error variance	Stand. Item- Loading	Error variance	Stand. Item- Loading	Error variance	Standardized Item-Loading	Error variance
PROD:										
PROD1	.73	.51	.73	.28	.70	.52	.84	.27	.72	.48
PROD2	.81	.38	.81	.21	.78	.39	.91	.21	.80	.35
PROD3	.77	.43	.77	.29	.73	.44	.90	.28	.77	.41
PROD4	.67	.59	.67	.35	.66	.59	.72	.36	.67	.55
PROM:										
PROM1	.83	.34	.83	.14	.84	.35	.79	.14	.83	.31
PROM2	.83	.34	.83	.18	.85	.34	.76	.18	.83	.31
PROM3	.73	.54	.73	.17	.74	.54	.67	.17	.73	.47
PROM4	.82	.37	.82	.11	.84	.37	.77	.11	.83	.32
PROM5	.82	.36	.82	.22	.83	.35	.74	.23	.82	.33
PRIC:										
PRIC1	.73	.51	.73	.27	.69	.53	.86	.23	.72	.48
PRIC2	.74	.50	.74	.28	.73	.50	.77	.29	.73	.46
PRIC3	.81	.37	.81	.24	.83	.35	.73	.25	.81	.34
PRIC4	.85	.28	.85	.21	.85	.29	.86	.19	.85	.27
DIST:										
DIST1	.80	.40	.80	.14	.83	.39	.68	.15	.81	.35
DIST2	.78	.44	.78	.17	.79	.44	.71	.16	.78	.39
DIST3	.80	.39	.80	.24	.81	.40	.72	.24	.80	.37
DIST4	.82	.35	.82	.22	.85	.35	.69	.22	.82	.33
Fit Indices	$\chi^2=547.86$, 249df, p=.00 NNFI= .94; CFI= .95; IFI= .95				$\chi^2=529.75$, 232df, p=.00 NNFI= .94; CFI= .95; IFI= .95				$\chi^2=664.55$, 266df, p=.00 NNFI= .90; CFI= .91; IFI= .91	

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