MARKETING SCALES HANDBOOK

Multi-Item Measures
for Consumer Insight Research

VOLUME

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GORDON C. BRUNER II

Marketing Scales Handbook

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Multi-Item Measures
for Consumer Insight Research

Volume 10

(sample)

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Preface

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How exciting it is to publish the tenth volume of the *Marketing Scales Handbook* series! I did not imagine when I began working on the first volume that I would still be immersed in the activity 30 years later, even after retiring from academia. The problem when I began was how to write the book and get it published. After all of this time, the work has become more routine and yet, there are still challenges (as mentioned below).

Indeed, I found myself more discouraged while working on this volume. Instead of it becoming more common over time for authors of journal articles to use higher quality scales and provide information about them, that was not the case. I am especially concerned with the number of scholars who throw together scales and not borrow measures used previously by others in the field. In other words, there is still far too much recreating the wheel! Also, I am alarmed with the authors who mash up some items they think measure a construct even though the face validity is suspicious since the items appear to measure what others have treated as distinct constructs. Although I could have confronted more authors and requested justification for their scales, I have chosen instead to ignore them. I do not want to give credence to measures for which I have strong reservations.

As for the future, I can not state with strong certainty that more books will be published. It has been several years now since I retired from academia and the pull to change my priorities is growing. Having said that, I have already begun gathering source articles for scales to be included in the next volume and I will soon begin reviewing the measures. If I decide not to produce another volume, I assume the reviews I write will be added to the database at *MarketingScales.com*. The point is that if you do not find something in this book that you are looking for, please search for it at the website.

Good luck in your research!

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* As with Volumes 5-9, it is expected that this book will be released in proprietary format for sales by major suppliers of e-resources to university libraries.

Acknowledgements

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As with previous volumes, I thank my wife for understanding the time and effort I put into this work. That is doubly true now that I have been retired for several years and could be traveling more or hanging out with my growing brood of grandchildren.

May your measures always be valid!

Fort Worth, Texas
February 2019

Introduction

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Volumes 1 to 9 of this series contained multi-item scales that had been included in articles published in six of the top marketing journals between 1980 and 2015. (See the table below for the six journals.) This tenth volume of the series covers the scales that were reported in articles published in 2016 and 2017. As with the earlier books, this one should not be viewed simply as a revision of the previously published material, in fact, the contents of this volume are new. While that does not necessarily mean a scale was first reported during that time period, it does mean that none of the scales in this volume were in a previous volume of this series. If users are looking for something and not finding it in this book, check out the full database at *MarketingScales.com* where several thousand scales are available.

Similar to Volumes 4 to 9, this volume is composed entirely of scales that were used in **scholarly research of "consumers" or similar groups of respondents, e.g., viewers,** patients, donors, citizens, etc. Fortunately, hundreds of the scales in this volume are amenable for use in a wide variety of studies and with all sorts of people, including those in an organizational context when studying administrators or employees.

To be included in this volume, scales had to be composed of three or more items, have an acceptable level of psychometric quality, and be reflective measures rather than formative. There were three other criteria used as well. As described below, one was a constraint imposed at the scale level, one was a constraint at the construct level, and the final one had to do with time.

At the scale level, many measures reported in recent articles were not included in this volume because they were the same or very similar to ones that had been reviewed in previous volumes. Those reviews from previous volumes scales can be found in the database at MarketingScales.com. In many cases, recent uses of older scales are cited in those online reviews.

Another criterion used to focus the work was at the construct level. The question asked was, how many unique, alternative measures of a construct have already been reviewed and are housed in the repository at *MarketingScales.com*? Having alternative measures of the same construct is useful to researchers so that they can compare the various characteristics and choose the scale that best suits their needs. But, at some point, the endless review of alternative measures of the same construct is not the best use of time. While there was no hard and fast rule to guide this constraint, suffice it to say that the greater the number of different measures of a construct that have already been reviewed, the less likely that yet another measure was reviewed for this volume.

The final major criterion used to manage the workload was to focus on articles from a

two-year period. This was begun with Volume 7 because there are limits to the number of pages a printer such as Kindle Direct Publishing will allow for paperback books. With that in mind, an initial examination was conducted of over 600 articles published in six top marketing journals during 2016 and 2017. (The journals are specified in the table on the next page.)   From that group, 213 articles received more scrutiny because they appeared to have measures of the type focused on in the series. After closer examination, some of those articles were dismissed because the measures they included did not meet enough of the stated criteria or the authors did not respond to requests for more information.   Ultimately, there were 174 articles from the marketing literature that received the greatest attention and provided the 402 scales that are reviewed in this volume.

Assigning names to scales is more challenging than might be imagined. It is not as simple as calling measures the same thing as the users did. In some cases, the authors of an article did not give their measure a name as such but merely referred to it generally, e.g., *the attitude scale used in the field survey*. Other times, a scale was given a name by authors that made sense in the context of their particular study but was more widely known with a more general construct name or one that would make more sense to readers, e.g., *promotion depth* vs. *Discount Size*. In general, scales were assigned names here based on the constructs they appear to measure. More specifically, several things were taken into account when deciding what to call each scale: what did the creators of the measure call it; what a common name among marketing scholars for the construct being measured; how have similar measures of the construct been referred to in previous volumes of this series; and, does a name need to be reduced due to length?

As for quickly finding scales of interest, the Table of Contents is useful place to start. Also, a Subject Index is provided at the back of the book. As useful as it can be, keep in mind that creating an Index is a difficult task.   The result is quite imperfect given that the available space permits each scale to be associated with just a few keywords. If you need more assistance in finding scales of interest, consider using the search function at MarketingScales.com. It should help you see how measures are categorized in the full database which, in turn, may help you locate measures in this book that will suit your research needs.

Finally, the layout of reviews is the same as in the most recent volumes. Description of the information found in the various sections of each review are provided in the table on the next page.

TABLE
Scale Review Format

A name for each scale is given at the top of the page on which a review begins. Several issues are taken into account when assigning a name. (See the discussion in the Introduction for more details.) In a few cases, multiple scales have been given the same name because they appear to measure the same construct, e.g., Social Media Usage, Task Enjoyment, Willingness to Purchase.

Just below the scale name are a few sentences that succinctly describe the construct being assessed and the number of items composing the measure. If known, the number of points on the rating scale and the response format (e.g., Likert, semantic differential) are described as well.

ORIGIN:

Some information about the creation of the scale is provided in this section, if known. In a substantial portion of cases, the source of the scale was not stated by the authors of the article. While in many of those cases the authors were the likely creators of the scale, it is not always true. Sometimes when authors of an article do not cite a scale's source, it leaves the impression that the measure is original even though some digging reveals that they borrowed it from someone else. The opposite also occurs far too often. Specifically, authors describe their scale as having been "adapted" from a certain source. Yet, when a comparison is made between the "adapted" scale and the cited one, little resemblance is found. This information is noted when relevant.

RELIABILITY:

For the most part, reliability is described in terms of internal consistency, most typically with Cronbach's alpha or construct reliability. In the few cases where it is known, a scale's temporal stability (test-retest correlation) is reported as well. For those unfamiliar with these statistics, higher numbers are generally better. With particular regard to internal consistency, a statistic below .70 indicates that a scale is not reliable enough for testing theory. Very few scales of low reliability are included in the book.

VALIDITY:

There are several types of validity and no single study is expected to fully validate a scale. While it is hoped that authors of each study would provide at least some evidence of a scale's validity, the reality is the opposite. Most articles reviewed for this volume have not included evidence of a scale's validity. (The reason for this systemic omission is unknown.) At the other extreme, a few authors have provided so much information in their articles about a scale's validation process that the work is merely summarized and readers are urged to consult the cited article for more details.

COMMENTS:

This section of a review is used only occasionally. For example, if something about a scale is judged to be deficient then readers may be urged in this section to exercise caution in using the scale. Another example is that in many cases a scale was phrased by its creators for use in a particular

context, but it is noted that with a little modification the scale could be usable in other contexts.

REFERENCES:

Every source cited in a review is referenced in this section. The six journals that were closely examined for articles with scales are the *Journal of Advertising*, the *Journal of the Academy of Marketing Science*, the *Journal of Consumer Research*, the *Journal of Marketing,* the *Journal of Marketing Research, and* the *Journal of Retailing.* Citation of additional journals, books, proceedings, and other sources are provided when relevant to a review. As stated in the Acknowledgements, the scale users themselves were contacted in many cases but many did not respond. If they did respond and provide useful information, they are cited.

I TEMS:

The statements, adjectives, or questions composing a scale are listed in this field and are generally referred to as the *scale items*. Also, an indication of the response format is provided in this section unless it is has been adequately specified in the description at the beginning of the review. For example, many of the measures were merely described by authors of the source articles **as "Likert-type"** and the verbal anchors of the response scales were not stated. Unless stated otherwise in this section, the extreme anchors **of "Likert-type" scales** were *strongly agree / strongly disagree* or some close variant. The graphic version of the scales and how to lay them out in a questionnaire are not provided in the reviews here because they are rarely provided in the source material. Concerned readers are urged to consult books that deal with survey development or the various types of measurement scales.

Where an item is followed by an (r) it means that the numerical response should be reverse-coded when calculating scale scores. Errors involving notation of reverse-coding can occur at various **stages of an article's composition, review, editing, and publication**. Users of scales are urged to examine items closely to determine which ones should be reverse-coded before using scores in analyses.

Finally, the instructions that were given to participants when they responded to scales, are rarely provided in the reviews here because authors of the source articles very rarely provide them. Despite that, some suggestions have been provided in many cases, especially when the scales do not make sense without directions or scale stems of some sort. Potential users of a measure should feel free to contact the creators and/or other users who have been cited in the review and ask them about the instructions along with any other questions related to the measure.

Scale Reviews

ATTITUDE TOWARD THE FOOD PRODUCT (NUTRITIOUSNESS)

The degree to which a person believes a particular food is wholesome and healthy is measured with three questions, each with its own semantic differential and a 101-point sliding response scale.

Origin:

Hagen, Krishna, and McFerran (2017) used the scale in Study 3 with 16_ _ _ _ _ _ in the U.S. **recruited from Amazon's MTurk.** The source of the scale was not stated _ _ _ _ ke _ _ds in the items (healthy, nutritious, and wholesome) are common to several mea _ _ _ _ _ _ struct that have been used in other consumer studies, e.g., Olson et al. (20_6); Whit_ _ _ _ _ _6).

Reliability:

The alpha for the scale was .95 (Hagen, Krishna, a_ _ _ _ _ _ _ 201_).

Validity:

The scale's validity was not discussed by Hagen, _ _ _ _ _ _ McFerran (2017).

References:

Hagen, Linda, Aradhna Krish_ _ _ _ _ _t M_ _ _ _ _ _017), _ _jecting Responsibility: Low Physical Involvement in Obtaining F_ _ _ _ _ _ _ _ _hea_ _ _ _ _g," *Journal of Marketing Research*, 54 (4), 589-604.

Olson, Jenny G., Brent McF_ _ _ _ _dre_ _ _ _les, _ _ Darren W. Dahl (2016), "Wealth and Welfare: Divergent Moral Re_ _ _ _ _ Eth_ _ _ _ _sumer Choices," *Journal of Consumer Research*, 42 (6), 879-896.

White, Kathe_ _ _ _ _ _ _ _arren _ _ _ _ _ _ _obin J. B. Ritchie (2016), "When Do Consumers Avoid Imper_ _ _ _ _ _ial Pac_ _ _ _ _ _ mage as a Contamination Cue," *Journal of Marketing Research*, 5_ _ _ _ _10_ _ _ _ _.

S_ _ _ _ Item_

1. _ _ _ _ healthy is _ _ _ _?
   _ _ _ _ / heal_ _ _ _

2. H_ _ _ _ _ _ _is this food?
   not at a_ _ _ous / very nutritious

3. How w_ _ _ _ e is this food?
   not at a_ _ _olesome / completely wholesome

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1. The response format used by Hagen, Krishna, and McFerran (2017, web appendix pp. 2, 3) with these items was a sliding scale ranging from 0 to 100.

COMMITMENT TO THE COMPANY (GENERAL)

Four, five-point Likert-type items mea**sure a customer's degree of commitment and loyalty. The** scale is general in the sense that it can be easily adapted for use with a variety of business entities such as a company, brand, store, or website.

Origin:

Wilson, Giebelhausen, and Brady (2017) referred to the measure as *sel_____ con_____on* and used it in two studies. Data for one of the two studies came from data o_____ 2013 J.D. Power North American Hotel Guest Satisfaction study. The data___t create_____ Giebelhausen, and Brady (2017) had responses from 6,577 pe_____. The sec_____ _____ full responses from people recruited from Amazon Mechanica_____ at study_____ examine some psychometric aspects of their measures. As for_____al of the_____ was composed of items taken from the J.D. Power study. _____d that_____ f the key words and phrases in the scale are commonly found in measur_____ and_____ e.g., Garbarino and Johnson (1999); Price and Arnould (1999).

Reliability:

The scale was found to have high inte_____ sistenc_____ cally, an alpha of .94 was reported for the scale using data from the J._____ _____. A C_____ was found for the scale in the psychometric study.

Validity:

As noted above, a separate_____ as u_____ by_____ on, Giebelhausen, and Brady (2017) to determine if the scales they_____ _____ u_____ dies 1 and 2 were equivalent to scales created from items in the_____ ower s_____ CF_____ ed evidence that the scales were **"substitutable**_____ The AV_____ omm_____ ment scale was .682.

Referen_____

Ga_____o, El_____ S._____ (1999), **"The Different Roles of Satisfaction, Trust, and** C_____ent in_____Rela_____hips,"** *Journal of Marketing*, 63 (April), 70-87.
P_____da L. and_____nould (1999), **"Commercial Friendships: Service Provider**-Client R_____in Cont_____*rnal of Marketing*, 63 (October), 38-56.
Wi_____ Micha_____D. Giebelhausen, and Michael K. Brady (2017), "Negative Word of Mouth_____sitive for Consumers Connected to the Brand," *Journal of the Academy of Marketing S_____45 (4), 534–547.

Scale I te_____

1. I feel loyal to _____.
2. If I were unable to be a customer of _____ I would be disappointed.
3. I am committed to _____.

KNOWLEDGE OF THE PRODUCT CLASS (EXPERT)

The scale uses three statements to measure a consumer's belief that he/she has expert level knowledge with respect to a specific product category and is an excellent source of information for friends buying such a product.

Origin:

Alavi, Wieseke, and Guba (2016) used the scale in a field study where data were collected from 537 salesperson–customer interactions in a car retailing setting. This involved 28 dealership chains that were located in 11 different cities and offered new and used cars of different brands. The scale itself is a slight adaptation of a measure developed and used in a business-to-business context by Wagner, Klein, and Keith (2001).

Reliability:

The scale's alpha was .89 (Alavi, Wieseke, and Guba 2016).

Validity:

Although the details were limited, Alavi, Wieseke, and Guba (2016) stated that their scales showed evidence of discriminant validity. With regard to this product knowledge scale, the AVE was .72.

References:

Alavi, Sascha, Jan Wieseke, and Jan Guba (2016), "Saving Discounts through Accurate Sensing – Salespeople's Estimations of Customer Price Importance and Their Effects on Negotiation Success," *Journal of Retailing*, 92 (1), 4.

Wagner, Judy A., Noreen M. and Jane Z. (2001), "Selling Strategies: The Effects of Suggesting a Decision Making Practice and Buyers," *Journal of the Academy of Marketing Science*, 29, 289.

Scale Items [1]

1. I understand the features well enough to be considered an expert when evaluating different _____.
2. I know which product characteristics are needed when buying a _____.
3. If a friend were thinking of buying a _____, I would be an excellent source of information.

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1. The name of the focal product category should be placed in the blanks. The end points on the response scale used with these items were not stated by Alavi, Wieseke, and Guba (2016). The anchors could have been *not at all* (1) and *extremely* (7) because they were used for all of the other multi-item scales in the study.

PARENTAL MEDIA MEDIATION
(AUTONOMY-SUPPORTIVE RESTRICTIVE)

Four, five-point items are used in this scale to measure an **adolescent's belief about what his/her** parents would say if they did not want him/her to watch television, movies, or video games that **contained too much violence. Specifically, this belief is a characterized by the parents "restricting"** the time the child spends with the unacceptable media content and providing rationale in which the perspective of the adolescent is taken seriously.

Origin:

Vanwesenbeeck, Walrave, and Ponnet (2016) used the scale in a study of data collected from 780 young adolescents in the Dutch-speaking area of Belgium. The scale was developed by Valkenburg et al. (2013) as part of the multi-measure instrument they called the Perceived Parental Media Mediation Scale (PPMMS). With multiple studies the authors provided evidence of **their scales' reliabilities and validities.**

Reliability:

The construct reliability of the scale as used by Vanwesenbeeck, Walrave, and Ponnet (2016) was .82. Alpha was .81.

Validity:

The measurement model tested by Vanwesenbeeck, Walrave, and Ponnet (2016) provided a good fit to the data. Items for one of the scales, not the one reviewed here, were removed and the fit improved further. The AVE for the scale measuring Autonomy-Supportive Restrictive Mediation was .54 and a test provided evidence of the scale's discriminant **validity.**

Comments:

Items for each scale in the PPMMS were not laid out contiguously in the questionnaire but were in a rather unique questionnaire format. A question was asked and then answers were provided with items from different scales. Because of the integratedness of items from the different scales and the way they were combined in the questionnaire, it may be best to use the scales as described by Valkenburg et al. (2013, pp. 464-466).

References:

Vanwesenbeeck, Irina, Michel Walrave, and Koen Ponnet (2016), "Young Adolescents and Advertising on Social Network Games: A Structural Equation Model of Perceived Parental Media Mediation, Advertising Literacy, and Behavioral Intention," *Journal of Advertising*, 45 (2), 183–197.

Valkenburg, Patti M., Jessica Taylor Piotrowski, Jo Hermanns, and Rebecca Leeuw (2013), **"Developing and Validating the Perceived Parental Media Mediation Scale: A Self**-Determination **Perspective,"** *Human Communication Research*, 39 (4), 445–469.

WEBSITE DESIGN (PRODUCT SELECTION)

Three, five-point Likert-type items compose the scale and are used to measure the degree to which a person believes the assortment of products available at a particular website is adequate for what he/she is interested in buying.

Origin:

The scale was used by Blut (2016) in an impressive study of e-service q_____ Data __ the study were collected by a market research firm in the U.S. from 358 people. P_____ re screened to ensure they made at least one purchase from an online store within the ___ x m___s and that they were to respond to the survey with respect to that r___

The scale was created by Blut (2016) from several sources. One __ items (# __ s from the WebQual instrument by Loiacono, Watson, and G_____ (2002) ___ th__ item (#2 below) was borrowed from the eTailQ instrument by Wolfi_____ Gilly (___ __urce of the third item is less clear though it is very similar to ___ __esh e____ __ in a scale.

Reliability:

The scale's alpha was .79 (Blut 2016

Validity:

Blut (2016, p. 509) provid_____ ___ __ in s_____ the scale's face validity. He also appeared to say that evide___ __his ____ ___crim___ validity was lacking with respect to some scales in his study using th__ ___ and ___ 198_ test but that the scale passed the more lenient test suggested by An____ __d G_____ 88). The AVE of the scale was .61.

Reference__

Anderson, J_____ and ____ Gerbi__g (1988), "Structural Equation Modeling in Practice: A Rev___y and ___ ___ted ___ **Approach,"** *Psychological Bulletin*, 1003 (3), 411−423.

B__ __kus (____ __vi___ ___ity: Development of a Hierarchical Model," *Journal of* ___ __ 92 (4), ___

F___ __es and D___ __rcker (1981), "Evaluating S**tructural Equation Models with U__ __riable__ __ Measurement Error,"** *Journal of Marketing Research*, 18 (1), 39−50.

Gane__ ___ __, Kristy E. Reynolds, Michael Luckett, and Nadia Pomirleanu (2010), "Online Shopper M_____s, and e-Store Attributes: An Examination of Online Patronage Behavior and Shopper Ty_____," *Journal of Retailing*, 86 (1), 106-115.

Loiacono, ___ __ T., Richard T. Watson, and Dale L. Goodhue (2002), "WebQual: A Measure of Website Qua____," *Marketing Theory and Applications*, 13 (3), 432−438.

Wolfinbarger, Mary and Mary C. Gilly (2003**), "**eTailQ: Dimensionalizing, Measuring and Predicting eTail Quality**,"** *Journal of Retailing*, 79 (3), 183-198.

Subject Index[1]

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1. The keyword "attitude" is not in this index because many if not most of the scales in the book are measures of attitudes. Other words such as "customer" and "marketing" are not in the list for a similar reason.
2. Corporate Social Responsibility
3. Word-of-Mouth

About the Author

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Dr. Gordon C. Bruner II (Professor Emeritus, Southern Illinois University) received a B.B.A. and a M.S. in marketing from Texas A&M University. His Ph.D. is from the University of North Texas, with a major in marketing and a minor in music. It was during his doctoral work that he learned about scales, worked with them as he assisted his professors in their research, and eventually created scales of his own that were critical to his dissertation.

After several years of developing scales as part of his empirical research activities as a professor, Dr. Bruner realized the difficulty marketing researchers had in finding scales that had already been used in scholarly studies. The development of the first *Marketing Scales Handbook* began at Southern Illinois University in the late 1980s with a colleague (Dr. Paul Hensel). When that volume was published in 1992, it was the first book of its kind in the field of marketing. Eventually, Dr. Bruner was left as the sole author and the work continued in a more focused format. The handbooks are now used by thousands of professors, students, and practitioners around the world. Although the earliest volumes in the series are no longer available in print, the reviews of scales they contained having to do with consumer research can be found in revised form in the repository at *MarketingScales.com*. Indeed, the database is the largest collection of psychometrics that have been used in published marketing research, well over 4,100 scales at this time.

During his years in academia, Dr. Bruner's primary empirical research streams were consumer problem recognition and technology acceptance. His research has been published in the *Journal of Marketing*, the *Journal of the Academy of Marketing Science*, the *Journal of Advertising Research*, the *Journal of Advertising,* the *Journal of Retailing*, *Psychology & Marketing*, the *Journal of Business Research*, as well as many other journals. Throughout his teaching career, his specialties were strategic promotion and consumer behavior.

Dr. Bruner has retired from his long academic career but remains active in reviewing scales. Along with his role as author, he is also a devoted husband, father, and grandfather. Additionally, he is an amateur musician, loving to write and record his own songs. Last but definitely not least, he is a devout Christian, an adherent of the faith though not the religion.