MARKETING SCALES HANDBOOK

Multi-Item Measures for Consumer Insight Research

VOLUME 11

SAMPLE

GORDON C. BRUNER II

TABLE OF CONTENTS

Acknowledgements

. . . .

Introduction

. . . .

Volumes 1 to 10 of this series contained multi-item scales that had been included in articles published in six of the top marketing journals between 1980 and 2017. (See the table below for the six journals.) This eleventh volume of the series covers the scales that were reported in articles published in 2018 and 2019. 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 a measure of something and are not finding it in this book, they should check out the full database at *MarketingScales.com* where several thousand scales are available.

Similar to Volumes 4 to 10, 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, there were measures reported in the domain of articles examined that 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 the online reviews as "see also."

Another criterion used to help 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 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 of the options and choose the one 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 the articles published in six top marketing journals during 2018 and 2019. (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 194 articles from the marketing literature that received the greatest attention and provided the 400 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 common name is used by 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 its length?

As for finding scales of interest, the Table of Contents is a useful place to start. Also, a Subject Index is provided at the back of the book. As helpful 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., Financial Stress, Homophily, Softness of the Object.

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 or adapted it from another source. 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 validity that the work is merely summarized. Interested 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 the scale could be usable in other contexts with a bit modification.

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 over half did not respond. If they did respond and provide useful information, they are cited.

Scale Items:

The statements, adjectives, or questions composing a scale are listed in this area of a review and are generally referred to as the *scale items*. Also, an indication of the response format is provided in this section unless it 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 versions of the scales and how authors displayed them 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 the cited authors or books that specifically deal with questionnaire development.

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. Because of that, users of scales are urged to examine items closely to confirm which ones should be reverse-coded when determining scale scores.

Finally, the instructions that were given to participants when they responded to scales, are rarely provided in the descriptions provided here because they are rarely provided in the source articles. Despite that, some suggestions have been provided in many cases, especially when the scales do not make sense without directions or scale stems. Potential users of a measure should feel free to contact those researches cited in a review and ask them about the instructions as well as any other issues that are unclear about the measure.

Scale Reviews

BRAND AUTHENTICITY

The extent to which a brand is viewed as authentic and credible is measured with three, nine-point uni-polar items.

Origin:

Luffarelli, Mukesh, and Mahmood (2019) used the scale in Studies 1 to 5. It was also us[ed in] replication Studies 1 and 2 provided in the appendix. The authors indicated that their scale [was] adapted from work by Morhart et al. (2015) as well as Napoli et al. (2014). (See Comments below.)

Reliability:

In the many studies in which the scale was used by by Luffar[elli, Mukesh,] and [Mahmood (201]9), the alphas ranged from .81 to .90.

Validity:

The scale's validity was not discussed by Luffar[el]i, Mukes[h, and Mah]mood (2019).

Comments:

Morhart et al. (2015) as well as Na[p]oli et al. (2[014) v]iewed bra[nd] authenticity as multi-dimensional. However, their wor[k] and s[c]apo[...] [sca]ls with very different dimensions. As noted above, Luffarelli, Mukesh[, and ... (201]9) [...] their work but created a scale that is not consistent with either co[...]. G[...] the validity of this scale depends upon the way the construct is viewed.

References:

Luffarelli, Jonathan, M[...], and Amma[r] Mahmood (2019), "Let the Logo Do the Talking: The Influence of Logo [Des]ign [...] Bran[d] Equity," *Journal of Marketing Research*, 56 (5), 862–878.

Morha[rt, Fr]itas, Lucia [M]alär, [...] [D]evremont, Florent Girardin, and Bianca Grohmann (20[15), "Bra]nd Authentici[t]y: An Inte[gra]tive Framework and Measurement Scale," *Journal of C[on]sumer Psychology*, 25 ([2), 200–218.

[Napo]li, Juli[a, ...] Dickins[on, M]ichael B. Beverland, and Francis Farrelly (2014), "Measuring C[...] [...] Auth[enti]city," *Journal of Business Research*, 67 (6), 1090–1098.

Scal[e Ite]ms:[1]

_____ is:

1. authentic

DONATION EFFORT

The extent to which an individual or company has put a lot of thought, work, and sacrifice into a particular donation is measured with five items.

Origin:

Except for a little bit of phrasing from two items in a measure of effort by Bechwati and Xia, the rest of the scale seems to have been created by Gershon and Cryder (2018). They refer to the measure as *effort/sacrifice* because they originally expected the items to measure separate constructs, but based on the results of factor analyses conducted in at least six studies, they decided to combine them into one scale.

Reliability:

Across the several studies in which it was used by Gershon and Cryder (2018), the alphas ranged from .85 to .92.

Validity:

Although Gershon and Cryder (2018) did not assess the scale's validity *per se*, they did mention that the items were factor analyzed in several studies along with items expected to measure other constructs. The five donation effort items as well as used by them. Those results provide evidence of the scale's unidimensionality and its convergent and discriminant validities.

Comments:

In most of the studies by Gershon and Cryder (2018), the scale was used with respect to a company, but the donation effort of a particular individual was measured in one of the studies (3A). It appears the scale could also be used with other entities but, of course, pretesting should be conducted to confirm the psychometric quality of such applications.

References:

Bechwati, Nada N. and Lan Xia (2003), "Do Computers Sweat? The Impact of Perceived Effort of Online Decision Aids on Consumer's Satisfaction with the Decision Process," *Journal of Consumer Psychology*, 13 (1), 139–14

Gershon, Rachel and Cynthia Cryder (2018), "Goods Donations Increase Charitable Credit for Low-Warmth Donors," *Journal of Consumer Research*, 45 (2), 451–469.

Scale Items:[1]

1. _____ put a lot of effort into this donation.
2. _____ worked hard on this donation.
3. _____ put thought into this donation.
4. How big was _____ 's sacrifice when making this donation?

MACHINIZATION

This scale measures how much a person considers an object to be a machine rather than a h...
and can be easily replaced because of that. Ten, seven-point Likert-type items compose th... scale.

Origin:

Mende et al. (2019, web appendix, p. 4) used the scale in the Study 4 pretest with data...
from 100 participants via Amazon MTurk. The scale was apparently created by the authors...
on the work by Stenzel et al. (2012) as well as Waytz and Epley (2012).

Reliability:

The alpha for the scale was .87 (Mende et al. 2019, web appendix, p. 4).

Validity:

The validity of the scale was not addressed by Mend... ...19). ...ever, since t... scale was
used as a manipulation check and the manipulation wa... ...l, it...rovides some preliminary
support for a claim of the scale's predictive vali...ty.

References:

Mende, Martin, Maura L. Scott, Jen... van Doo... ...ewal, and ...na Shanks (2019), "Service
Robots Rising: How Humanoid Ro... ...en... S... ...riences and Elicit Compensatory
Consumer Responses," *Journal... ...earc... ...5–556.

Stenzel, Anna, Eris Chinellato, Maria... ...Áng... ...n Pobil, Markus Lappe, and Roman
Liepelt (2012), "When Humanoid Robots ... ...uman-... e Interaction Partners: Co-
representation of Robotic Actions," *Jour...l of ... ...ental Psychology: Human Perception and
Performance*, 38 (5)... ...1077.

Waytz, Adam and ... ... (2012), "So...l Connection Enables Dehumanization," *Journal of
Experimental Social ... ...(1), 70-76...

Scale Items:[1]

This _____ . ...[2]

...i...
2...
3.
4. ...ol.
5. is lifeless.
6. is diff...ent than a person.
7. has a m...s/her/its own. (r)
8. It is not i...ortant how I treat the _____ because this _____ is just a machine.
9. This _____ is easily replaced because he/she/it is just a machine.

288

SERVICE QUALITY (EMPLOYEE'S EMPATHY)

The scale uses three, seven-point Likert-type items to measure how strongly a person believes that an employee has engaged in behaviors to politely and attentively address a customer's concerns (unspecified).

Origin:

Marinova, Singh, and Singh (2018) used the scale in Study 2. Data were gathered from participants in an online panel who had flown in the previous two years. As for the scale's origin, the authors cited Mattila and Enz (2002) and may have received some inspiration from it but none of the items came from that source. Curiously, the items are more similar to the items in a scale by Andaleeb and Basu (1994). Ultimately, it appears that Marinova, Singh, and Singh (2018) created the scale by drawing ideas from multiple sources.

Reliability:

The composite reliability reported for the scale was .89 when used with respect to a missed flight and .88 with respect to lost luggage (Marinova, Singh, and Singh 2018, p. 18 of web appendix).

Validity:

All of the multi-item scales used in the study were examined by Marinova, Singh, and Singh (2018, p. 188) with two CFAs: one for the missing flight scenario and one for lost luggage. Reasonable fits were found in both cases. AVEs were .72 and .72 for the missing flight and lost luggage scenarios, respectively (web appendix). Support was also found for the scale's discriminant validity. Finally, the scale was part of the manipulation check and, since the manipulation was successful, it provided some evidence of the scale's predictive validity.

References:

Andaleeb, Syed Saad, and Amiya K. Basu (1994), "Technical Complexity and Consumer Knowledge as Moderators of Service Quality Evaluation in the Automobile Service Industry," *Journal of Retailing*, 70 (4),

Marinova, Detelina, Sunil Singh, and Jagdip Singh (2018), "Frontline Problem-Solving Effectiveness: A Dynamic Analysis of Verbal and Nonverbal Cues," *Journal of Marketing Research*, 55 (2), 178-192.

Mattila, Anna S., and Cathy A. Enz (2002), "The Role of Emotions in Service Encounters," *Journal of Service Research*, (4), 268–277.

Items:[1]

The extent to which the _____ agent in the interaction . . .[2]

1. spoke politely.
2. listened carefully to the customer's situation.

WEBSITE USAGE INTENSITY

This scale uses six items to measure how involved a person is with a website such that connects one to a community and is part of daily life. The scale appears to be most relevant for use with social media websites.

Origin:

Kitirattarkarn, Araujo, and Neijens (2019) used the scale with data collected from Facebook users living in the U.S., South Korea, the Netherlands, and Thailand. The samples were described as being comparable across the four counties in terms of several basic demographic characteristics. Although the authors did not identify the source of the measure, the items are from an earlier form scale created by Ellison, Steinfield, and Lampe (2007) and is sometimes referred to as the Facebook Intensity Scale (FBI).

Reliability:

As used by Kitirattarkarn, Araujo, and Neijens (2019, p. 203), the scale's alphas were .93, .88, .88, and .93 for the U.S., the Netherlands, South Korea, Thailand, respectively.

Validity:

The validity of the scale was not discussed by Kitirattarkarn, Araujo, and Neijens (2019). While they mentioned that they had conducted factor analyses of their many scales, specific results were not provided.

Comments:

The scale items were phrased in the native language of participants in the four samples using the translation/back-translation method. The specific phrasings were not provided in the article apart from the English version. Interested users should contact the authors for the translations.

References:

Ellison, Nicole B., Charles Steinfield, and Cliff Lampe (2007), "The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites," *Journal of Computer-Mediated Communication*, 12 (4), 1143-1168.

Kitirattarkarn, Gauze P., Theo Araujo, and Peter Neijens (2019), "Challenging Traditional Culture? How Personal and National Collectivism-Individualism Moderates the Effects of Content Characteristics and Social Relationships on Consumer Engagement with Brand-Related User-Generated Content," *Journal of Advertising*, 48 (2), 197-214.

Scale Items:[1]

1. _____ is a part of my everyday activity.
2. I am proud to tell people I'm on _____.

Subject Index[1]

. . . .

. . . . .

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

. . . .

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 only 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 of 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 at *MarketingScales.com*. Indeed, the database is the largest collection of psychometrics that have been used in published marketing research, well over 4,500 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 promotion management 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.