Journal of Multidisciplinary Research
ISSN 1947-2900 (print) • ISSN 1947-2919 (online)

Editor-in-Chief
Professor Hagai Gringarten, Ph.D.

Managing Editor
The Reverend Professor Raúl Fernández-Calienes, Ph.D.

Associate Editors
Professor Gershon Tenenbaum, Ph.D., Florida State University
Professor Lisa J. Knowles, Ph.D.
Professor Nicole Grandmont-Gariboldi, D.B.A.

Book Reviews Editor
Tina Marie Trunzo, J.D., LL.M.

Copy Editors
Gricel Domínguez, M.A., M.L.I.S.
Larry Treadwell, IV, M.A.

Senior Research Assistant
Sandra Castillo

Research Assistants
Laura Rodríguez, Maximiliano García

Contact Information
Professor Hagai Gringarten, Ph.D., Editor-in-Chief, Journal of Multidisciplinary Research
c/o O’Mailia Hall, 16401 N.W. 37th Avenue, Miami Gardens, Florida 33054
Telephone +1 (305) 628-6635 E-mail: hgringarten@stu.edu

Journal Web Address
http://www.jmrpublication.org

Journal Indexing & Listing
Indexed in ProQuest (www.proquest.com), EBSCO (www.ebscohost.com),
Gale/Cengage (www.gale.com), Ulrich’s (https://ulrichsweb.serialssolutions.com/),
de Gruyter (Germany) (www.degruyter.com), and EZB (Germany) (ezb.uni-regensburg.de).

Listed in Directory of Open Access Journals (http://www.doaj.org),
AcademicKeys (www.academickes.com), JournalSeek (http://journalseek.net), MediaFinder
(www.medaifinder.com), NewJour (http://old.library.georgetown.edu/newjour/toc.html),
CUFTS Journal Database (Canada) (http://lib-code.lib.sfu.ca/projects/CUFTS/wiki/), and the
Open University of Hong Kong Electronic Library (Hong Kong) (http://www.lib.ouhk.edu.hk).

Accessible via the NIST Research Library (National Institute of Standards and Technology, part

Mission Statement
The mission of the Journal of Multidisciplinary Research is to promote excellence in leadership practice by providing a venue for academics, students, and practitioners to publish current and significant empirical and conceptual research in the arts; humanities; applied, natural, and social sciences; and other areas that tests, extends, or builds leadership theory.

Compilation Copyright©2009-2013 by St. Thomas University. All rights reserved.
Journal of Multidisciplinary Research

Vol. 5, No. 2  Summer 2013

Contents

Editorial Details...inside front cover
Mission Statement...inside front cover
Editorial Review Board...inside back cover

Editorial
By Hagai Gringarten...3

Articles

The Effect of Olfactory Ovulation Cues on Males’ Attention Allocation and Perception of Exertion
By Itay Basevitch, Selen Razon, Edson Filho, Nataniel Boiingin, Oscar Gutierrez, Robyn Braun, Guler Arsal, and Gershon Tenenbaum...5

Some Statistical Illusions and the Debate on Discrimination
By Helgi Tomasson...23

The Attractive Nuisance: A Model to Prevent Workplace Distractions
By Jeffery W. Dance and Robert W. Service...35

Group Emotion in Spectator Sport: An Interdisciplinary Approach to Affective Qualia
By Hyun-Woo Lee, Young Do Kim, Joshua I. Newman, and Yukyoum Kim...53

The Multiple Roles of the Organization Development Practitioner
By Lawrence D. Hubbell...71
Life Forward

Ellen Jacoby, Ellen Jacoby Casting International
By Joelle Gringarten...83

Student Corner

Effect of Public Relation on Customer Loyalty with Special Reference to E-Commerce Portals
By Susan James and Lavanya Rajendran...87

Reviews

By Anne-Marie Mitchell...103

Review of 50 ways to protect your identity in a digital age: New financial threats you need to know and how to avoid them, by S. Weisman.
By Larry Treadwell...105

By Hagai Gringarten...107

Editors’ Choice

Recent Books of Interest – Summer 2013...111

Instructions to Authors...115
A warm welcome to the summer edition of the *Journal of Multidisciplinary Research* (JMR). Winston Churchill once said, “to improve is to change; to be perfect is to change often.” The same goes for us here at the journal. As we continue to innovate and evolve as a research journal, I am happy to announce the JMR now is accessible via the NIST Research Library at the National Institute of Standards and Technology, which is part of the U.S. Department of Commerce.

In our continuous effort to deliver interesting research from around the world, our current edition features thought-provoking articles from the University of Iceland, Florida State University, Ball State University, Samford University, the University of Wyoming, Anna University in India, and the University of Chieti-Pescara in Italy. This issue of the *Journal of Multidisciplinary Research* (Volume 5, Number 2) features a student article in the “Student Corner,” and three book reviews: a memoir by former United States Supreme Court Justice Sandra Day O’Connor, a book about identity theft in the digital age, and an interesting book written by Jonah Berger, a Marketing Professor at the Wharton School, about what make things popular and why some products go viral while many others fail. The “Life Forward” section features an interesting interview with Ellen Jacoby, a legendary casting director. In this issue, we also are featuring “spotlight artist” with paintings by Pedro A. Figueredo.

As summer comes to a close, and as we strive to publish substantive and highest quality multidisciplinary research from around the world, we start the new academic year with much vigor while continuing to create a truly global journal.

Onward,

Hagai Gringarten, Ph.D.

*Editor-in-Chief*
This painting commemorates the 100th anniversary of Igor Stravinsky’s “The Rite of Spring” (Le Sacre du printemps). On May 29, 1913, this musical composition premiered in Paris to near riot reactions in the audience. With vibrant and explosives passages, first-time listeners were not prepared to experience the jarring, dissonant, and polyrhythmic sounds expressing the creative power of spring. The composer once described his work as evocative of “the violent Russian spring that seemed to begin in an hour and was like the whole earth cracking.” This piece consists of complex and revolutionary instrumentation sometimes bordering on musical chaos. In this painting, I have tried to visually capture the essence of this avant-garde musical composition.
The Effect of Olfactory Ovulation Cues on Males’ Attention Allocation and Perception of Exertion

Itay Basevitch  
*Florida State University*

Selen Razon  
*Ball State University*

Edson Filho  
*University of Chieti-Pescara, Italy*

Nataniel Boiangin  
*Florida State University*

Oscar Gutierrez  
*Florida State University*

Robyn Braun  
*Florida State University*

Guler Arsal  
*Florida State University*

Gershon Tenenbaum  
*Florida State University*
Abstract

The purpose of the present study was to examine the effect of olfactory ovulation cues (i.e., female body odors) on a range of psychological, physiological, and behavioral indices in males during an exertive motor task. Eighty-eight male participants performed a handgrip squeezing task at 20% of maximum squeezing capacity to volitional fatigue. There were three conditions to the study: control, placebo, and ovulation. Researchers recorded participants’ rate of perceived exertion (RPE), attention allocation, heart rate (HR), and skin conductance response (SCR). Multivariate analysis did not reveal significant differences among the groups. However, as task duration increased, small to large effect sizes (Cohen’s $d$; $d = .13 - .60$) emerged between the ovulation and both the control and placebo groups for HR, SCR, and attention allocation. Effect size magnitude suggests female ovulation cues may have a delayed effect on males' attention and RPE during an exertive task. Future research should focus on alternative methods of collection and distribution of olfactory ovulation cues. To increase ecological validity, research also needs to test these effects by means of diverse tasks and settings (aerobic tasks, team tasks).

Keywords: exercise, body odor, attention, perceived exertion

Introduction

The use of two broad attentional strategies, association and dissociation, helps coping with exertive stimuli (Tenenbaum, 2001). Associative strategies entail directing attentional focus to internal and bodily cues, whereas dissociative strategies entail directing attentional focus outward and away from bodily cues (Tenenbaum, 2001; 2005). Empirical evidence suggests that during performance on physical tasks, individuals alternate between associative and dissociative strategies (Lind, Welch, & Ekkekakis, 2009). The latter is effortless at low-moderate workload intensities; nonetheless, associative strategies tend to prevail above sub-maximal intensities (Lind et al., 2009; Tenenbaum, 2001). This phenomenon, i.e., the attention shift, accounts for the tendency to shift attention from dissociative (e.g., non-task related stimuli) to associative (e.g., task related stimuli) focus as a function of the physical workload (Tenenbaum, 2001).

In an effort to increase exercise adherence, recent studies have examined the relationship between environmental stimuli and task performance (Connolly & Tenenbaum, 2010; Hutchinson & Tenenbaum, 2007; Razon, Basevitch, Land, Thompson, & Tenenbaum, 2009; Tenenbaum, 2005). Findings from these revealed that presentation of external stimuli (e.g., visual and auditory cues) mediates attention shift, perceived exertion, and consequently, influences task enjoyment (e.g., perceived hedonic and functionality tones) and task adherence.

However, scant research within the exercise psychology domain has addressed the relationship between olfactory stimuli, attention allocation, and performance on physical tasks. Among these, Raudenbush, Corley, and Eppich (2001) investigated the effect of olfactory stimuli (i.e., peppermint) on a range of physical tasks (e.g., handgrip, push-ups, and running) to determine whether task performance improves under olfactory conditions. Similarly, Basevitch et al. (2011) concluded that peppermint and lavender cues may affect attention diversion and mediate performance in physical tasks (Basevitch et al., 2011). Noteworthy, although these tested the impact of synthetic olfactory stimuli (e.g., peppermint, lavender) on select behavioral outcomes, no research has examined the impact of natural olfactory stimuli during physical tasks.
This study is an initial attempt to investigate the impact of females’ ovulation cues on a set of performance variables in males during a physical task. This initiative is congruent with previous research suggesting that women’s natural scents affect endocrinological responses in men (Miller & Maner, 2011) most probably because body odors activate the amygdala region, which, in turn, excites dopaminergic arcuate neurons involved in the regulation of sexual behavior (Dulac & Kimchi, 2007).

As per the specific effects of olfactory cues on performance, evidence from evolutionary biology further suggests that body odors may alter physical performance (see Gage, 2003). Of particular interest, female ovulation cues promote cognitive and behavioral changes in males (Haselton & Gangestad, 2006). To that end, body odors affect social and sexual behavior, mediate social interactions, influence mood, increase skin conduction, change pain perception, increase testosterone levels, and direct attention to emotions (Gangestad, Thornhill, & Garver-Apgar, 2005). Precisely, evidence suggests that following exposure to female ovulation scents males are more likely to change their behaviors, take higher risks, and attempt to seduce the ovulating female (Haselton & Gildersleeve, 2011). Furthermore, post exposure to the scent of an ovulating woman, men display increased levels of testosterone and sympathetic activity (Miller & Maner, 2010) as well as greater heart rate and skin conductance responses (see Adolph, Schlosser, Hawighorst, & Pause, 2010).

Nonetheless, most scientific efforts addressing the effect of body odors on behavior are within the comparative biology realm. While abundant evidence on the olfactory capacity is available within the animal population (Dulac & Kimchi, 2007), research findings are equivocal as per the relationship between body odors and simultaneous behavioral responses in humans (Doty, 2010). Consequently, there is a need for investigating the dynamics between women’s ovulation scents and male biopsychosocial behavior (see Miller & Maner, 2011; Singh & Bronstad, 2001). The purpose of this study was to examine the effect of olfactory ovulation cues (i.e., female body odors) on a set of psychophysiological indices in males performing a strength-endurance task. Specifically, we examined the effect of body odors on the psychological (i.e., attention allocation, perceived exertion), behavioral (i.e., task adherence and attrition rate), and physiological (i.e., heart rate and skin conductance response) responses of male participants during a handgrip squeezing task. We hypothesized that exposure to female ovulation cues would (a) extend task adherence, (b) delay the dissociative-associative attention shift, (c) divert attention from the exertive task, and (d) affect both heart rate and skin conductance responses in males during effort expenditure.

**Method**

**Participants**

Eighty-eight male college students (n = 88) from a university located in the southeastern United States participated in the study for course credit. No data collection occurred prior to the approval of the Institutional Review Board. Due to the physical nature of the task, only healthy individuals participated in the study. To check for health status, potential participants answered General Health and Lifestyle Questionnaire (GHLQ) and a set of additional items gauging medical history on pre-existing olfactory concerns (e.g., chronic sinusitis, septal deviation, hyposmia). Due to the motivational requirement of the task, participants also answered
motivational and commitment checks. Data analysis did not include those (i.e., the data) of participants ($n = 8$) scoring low in task motivation and task commitment (i.e., scores of 5 or lower on the Task-Specific Self-Efficacy and Commitment Check questionnaires). The final data included 80 male participants. Participants’ age ranged 18-38 years ($M_{age} = 21.78, SD = 3.70$).

**Apparatus and Handgrip Task**

A calibrated Lafayette TM handgrip dynamometer Model 78010 (Lafayette instrument company, Lafayette, Indiana) helped measure handgrip capacity. The dynamometer included an adjustable hand bar connected to a steel spring that when the participant squeezed the dynamometer, moved a pointer and displayed applied force in kilograms on the face of the device. The testing anchors for the dynamometer ranged between 0 and 100kg. Previous studies have confirmed the validity of the handgrip squeezing task in regard to measuring perceived effort (Basevitch et al., 2011; Razon et al., 2011).

**Task Conditions**

This study followed a random assignment protocol, and there were three conditions to the study: (1) ovulation ($n = 26, M_{age} = 21.77, SD = 4.50$) (i.e., exposure to a T-shirt worn previously by an ovulating female), (2) placebo ($n = 26, M_{age} = 21.69, SD = 3.79$) (i.e., exposure to a new unused T-shirt washed with unscented detergent, and, therefore, without an ovulation scent), and (3) control ($n = 28, M_{age} = 21.86, SD = 2.84$) (i.e., no exposure to a T-shirt at all). Prior to task performance, participants in the ovulation and placebo conditions smelled a T-shirt with and without the female ovulation cues, respectively. Participants in the control condition did not smell a T-shirt.

**Odor Collection Method**

Two female researchers helped collect the ovulation cues for this study. Consistent with the previously validated body odor collection paradigms (see Miller & Maner, 2011; Singh & Bronstad, 2001), the ovulation cues consisted of the females' T-shirt worn during ovulation phases. In compliance with the validated protocols, the two females were not on hormonal contraceptives and had regular menstrual cycles of approximately 26-34 days in length. Considering the onset of menstrual blood flow as Day 0, the women wore the T-shirt during the nights of Days 13, 14, and 15 (i.e., late follicular phase, near ovulation). When the women did not wear the T-shirts (i.e., during day time) they kept them in a sealed hermetic freezer bag. Also, to avoid superfluous odors, during Days 13, 14, and 15, the women bathed using fragrance-free soap and shampoo, and refrained from (a) using perfumes, deodorants, and antiperspirants on both themselves and their bed linens; (b) eating odor-producing food (e.g., chili, garlic, pepper, vinegar, asparagus); (c) smoking cigarettes, drinking alcohol, and using drugs; and (d) engaging in sexual activity and sleeping in the same bed with someone else. At the completion of each three-day session, the women returned the T-shirts to the researcher. To best ensure appropriate implementation of the protocol, the women also returned an odor collection log they filled each day of the three-day session. Congruent with the body odor collection paradigms, participants smelled the T-shirts within three days of women wearing them.
Instrumentation

The General Health and Life Type Questionnaire (GHLQ; British Columbia Department of Health, 1975). A part of the Physical Activity Readiness Questionnaire (PAR-Q), GHLQ included eight items answered in a dichotomous (YES-NO) format. The original GHLQ consisted of items with specific relevance to coronary and cardiovascular health. For the purposes of this study, the scale did not include some of the cardiovascular items. Additional items to the scale included items related to olfactory precondition and allergies.

Demographic information. The form helped collect demographic information including name, age, gender, and frequency of physical activity participation. For the purposes of the current study, additional but optional items included those related to relationship status and sexual preference.

Ratings of Perceived Exertion (RPE; Borg, 1982). The 10-point category-ratio scale with anchors ranging from 0 (i.e., nothing) to 10 (i.e., extremely strong) helped measure perceived exertion. RPE is a reliable measure of physical discomfort and possesses high intra-test \((r = .93)\) and test re-test \((r = .83 - .94)\) reliabilities. RPE also correlates with a number of physiological and chemical markers of exertion including Lactic Acid (LA), Heart Rate (HR), Maximal Oxygen Consumption (VO\(_2\)), and Ventilation (VE) (Borg, 1982).

Attention (Tammen, 1996). A 10-point scale with anchors ranging from 0 (i.e., attention away from task and body) to 10 (i.e., attention on task and body) helped measure attention allocation throughout the task performance. Attention scale is a valid tool for measuring attention strategies during effort expenditure (Tammen, 1996).

Task-Specific Self-Efficacy (TSSE; Bandura, 1997). The TSSE helped measure participants’ beliefs in their physical ability to tolerate the physical exertion and discomfort associated with the task. A sample item of TSSE included “How confident are you that you will perform adequately on this task?” Participants rated each item on Likert-type scale ranging from 0 (i.e., not at all) to 10 (i.e., very much).

Commitment and smell check. The scale helped gauge participants’ task commitment. A sample item included “How committed were you to the task while performing?” Participants rated each item on a Likert-type scale ranging from 0 (i.e., none, not at all) to 10 (i.e., very much, very well). For the purposes of this study, three additional items measured the perceived pleasantness and intensity of the ovulation cues for the experimental and placebo conditions. A sample additional item included “To what degree was the smell pleasant or unpleasant?” Participants rated each item on a Likert-type scale ranging from 0 (i.e., no odor, extremely unpleasant, not at all) to 10 (i.e., extremely strong odor, extremely pleasant, very much).

Skin Conductance Response (SCR - ProComp Module; Thought Technology Ltd., 1975). Thought Technology’s physiological biofeedback system helped measure SCR via sensors placed on participants’ index and middle fingers. Skin conductance response is a measure of cognitive attention and arousal regulation (Adolph et al., 2010; Albrecht et al., 2011).
Heart Rate measure (HR - Polar T31; Polar Electro Inc., 1977). Polar’s T31 HR monitor system helped measure participants’ HR via a wrist worn HR receiver unit and a chest worn sensor strap.

Task duration and attrition rate. A standard stopwatch helped measure the amount of time each participant endured on the handgrip task to the nearest second. These data served to determine the attrition rate.

Procedure

Participation in the study included one session of approximately 45 minutes. In an attempt to control for procedural bias, the primary researcher was blind to all conditions, with the exception of the control condition. Specifically, a double-blind trial design, within experimental conditions, entailed one researcher administering the surveys and assigning participants to either the ovulation or placebo groups. A second researcher who ran the experiment was blind to the participant’s condition – i.e., did not have knowledge whether the T-shirt was of ovulation or unused. Prior to task-performance, participants read and signed the informed consent form. Subsequently, the researcher instructed participants to squeeze the dynamometer at maximal strength in one explosive effort. Congruent with previously validated protocols (Basevitch et al., 2011; Cline, Doscher, & Hoff, 2004), participants squeezed the dynamometer during three consecutive attempts, and the highest of these corresponded to the participant’s maximum volume contraction (MVC). Next, the researcher computed 20% of the participant’s MVC. Twenty percent MVC is appropriate (i.e., not too extraneous) with moderately active populations, and similar studies of effort perception have used the same protocol (Hutchinson, Sherman, Martinovic, & Tenenbaum, 2008; Razon et al., 2009).

Subsequently, participants received a detailed explanation of the handgrip squeezing protocol and answered the TSSE scale. Following, participants wore the HR monitor and the researcher connected participants’ non-dominant hand to the biofeedback system. At this point, the researcher recorded HR and SCR during a three-minute baseline session. During pre-testing and testing participants did not view or receive feedback of their physiological data. To avoid distraction, the researcher placed the biofeedback display screen in only his view. Upon completion of the baseline session, participants in the ovulation and placebo groups took three nasal inhalations from a bag that the researcher held up in front of them at nose level. To prevent visual bias, participants were blindfolded at the time of the nasal inhalations.

Next, using their non-dominant hand, participants squeezed and held the dynamometer at 20% of their MVC for as long as they could. Congruent with previous research using similar paradigms (Basevitch et al., 2011; Razon et al., 2011), participants verbally reported RPE and attention throughout the task performance at every 30s (using scales placed in front of them, at eye level). Upon task completion, participants responded to a commitment check, and the researcher debriefed participants on any questions related to the experiment.

Participants in the placebo condition underwent an identical protocol. Participants in the control condition did not smell any T-shirt, and squeezed the handgrip dynamometer at 20% of MVC for as long as they could.
Results

Manipulation Checks

Self-efficacy check. Results from a Multivariate Analysis of Variance (MANOVA) revealed no significant self-efficacy differences among three groups (ovulation, placebo, control) on the self-efficacy items of the TSSE scale, Wilk’s $\lambda = .88$, $F(8, 146) = 1.16$, $p = .32$, $\eta^2_p = .06$. On average, participants were highly self-efficacious about their ability to perform well on the handgrip squeezing task ($M = 8.41$, $SD = 1.35$).

Commitment check. Results from a MANOVA revealed no significant differences among three groups on the commitment items of the task commitment scale, Wilk’s $\lambda = .89$, $F(6, 150) = 1.46$, $p = .20$, $\eta^2_p = .06$. In general, participants reported high commitment levels to the handgrip squeezing task ($M = 8.70$, $SD = 1.23$).

Smell check. Results from a MANOVA of the three smell check dimensions (e.g., pleasantness, relaxing or arousing quality, attention), for the two task conditions (e.g., placebo and ovulation) revealed significant differences, Wilk’s $\lambda = .83$, $F(3, 47) = 3.15$, $p = .03$, $\eta^2_p = .70$. Univariate $F$ tests also revealed significant differences in attention diversion, $F(1, 50) = 4.43$, $p = .04$. The ovulation ($M = 1.73$, $SD = 1.66$) group reported less attention diversion than the placebo group ($M = 3.00$, $SD = 2.57$, $d = .60$).

Task Analyses

Total time duration and attrition rate. Results from a one-way Analysis of Variance (ANOVA) revealed the groups did not differ on total task duration, $F(2, 79) = .56$, $p = .57$. The mean time duration on the task was approximately 300s ($M = 305.74$, $SD = 109.90$), i.e., 10 time intervals of 30s. At the 8th-time interval (i.e., 240 s), 25% of the participants dropped out (see Figure 1). As a result, the main analyses of the data had 8th time interval frame as the reference point.
Ratings of Perceived Exertion (RPE). Results from a mixed model Repeated Measure (RM) ANOVA with time interval as a within subject factor (i.e., eight time intervals) and task condition (i.e., control, placebo, ovulation) as a between subject factor revealed a significant main effect for time, $\eta_{p}^{2} = .80$. RPE increased linearly with time, regardless of task condition. Analysis revealed no significant main effects for task condition, $F (2, 57) = .13, p = .88, \eta_{p}^{2} < .01$. Additionally, the time by condition interaction effect was non-significant, $F (4.51, 128.43) = .30, p = .90, \eta_{p}^{2} = .01$.

Attention. Results from eight (time intervals) by three (task conditions) mixed model Repeated Measure Analysis of Variance (RM ANOVA) on attention allocation revealed a main effect for time interval, $\eta_{p}^{2} = .40$. There were no significant effects for task condition, $F (2, 56) = .25, p = .78, \eta_{p}^{2} < .01$, and time by task condition interaction, $F (3.66, 102.33) = 8.63, p = .30, \eta_{p}^{2} = .04$.

RPE by attention. Results from a graph depicting the relationship between RPE and Attention and the effect sizes at each time interval (see Figure 2 and Table 1) revealed that at lower RPE levels the ovulation group diverted attention at greater levels than placebo and control, but these differences somewhat declined as the RPEs increased.
Figure 2. Means RPE by Attention for each task condition.

Table 1

Effect Size (Cohen’s d) for RPE and Attention between ovulation and placebo and ovulation and control conditions at each time interval

<table>
<thead>
<tr>
<th>Time Intervals (30s)</th>
<th>Ovulation-Control</th>
<th>Ovulation-Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RPE</td>
<td>Attention</td>
</tr>
<tr>
<td>1</td>
<td>0.12</td>
<td>0.32</td>
</tr>
<tr>
<td>2</td>
<td>-0.12</td>
<td>0.07</td>
</tr>
<tr>
<td>3</td>
<td>-0.09</td>
<td>0.21</td>
</tr>
<tr>
<td>4</td>
<td>-0.03</td>
<td>-0.04</td>
</tr>
<tr>
<td>5</td>
<td>-0.01</td>
<td>-0.08</td>
</tr>
<tr>
<td>6</td>
<td>0.00</td>
<td>-0.09</td>
</tr>
<tr>
<td>7</td>
<td>0.12</td>
<td>-0.34</td>
</tr>
<tr>
<td>8</td>
<td>0.13</td>
<td>-0.28</td>
</tr>
</tbody>
</table>

Heart Rate measure (HR). Results from eight (time intervals) by three (task conditions) RM ANOVA revealed a significant main effect for time interval, $\eta_p^2 = .09$, $F(3.83, 214.21) = 4.93$, $p < .001$. There was no significant main effect for task condition. Although analysis revealed a non-significant interaction effect, the HR by task condition interaction, $\eta_p^2 = .06$, revealed that HR increased at a greater pace in the ovulation condition in course of the effort expenditure (see Figure 3 and effect sizes in Table 2).
Figure 3. Mean HR through eight time intervals by task condition

Table 2

Effect Size (Cohen’s d) for HR and SCR between ovulation and placebo and ovulation and control conditions at each time interval.

<table>
<thead>
<tr>
<th>Time Intervals (30s)</th>
<th>Ovulation-Control</th>
<th>Ovulation-Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HR</td>
<td>SCR</td>
</tr>
<tr>
<td>1</td>
<td>-0.12</td>
<td>-0.04</td>
</tr>
<tr>
<td>2</td>
<td>-0.09</td>
<td>-0.07</td>
</tr>
<tr>
<td>3</td>
<td>-0.22</td>
<td>0.06</td>
</tr>
<tr>
<td>4</td>
<td>-0.05</td>
<td>0.09</td>
</tr>
<tr>
<td>5</td>
<td>-0.15</td>
<td>0.08</td>
</tr>
<tr>
<td>6</td>
<td>-0.46</td>
<td>0.02</td>
</tr>
<tr>
<td>7</td>
<td>-0.31</td>
<td>0.13</td>
</tr>
<tr>
<td>8</td>
<td>-0.28</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Skin Conductance Response (SCR). Results from a RM ANOVA revealed a significant main effect for time interval, $\eta_p^2 = .37$, indicating SCR increased linearly with time. There were no significant effects for task condition, $F (2, 51) = 1.14, p = .33, \eta_p^2 = .04$, and time by task condition interaction, $\eta_p^2 = .04$ (see Figure 4 and effect sizes in Table 2).
The purpose of this study was to examine the effect of female olfactory ovulation cues on a set of psychophysiological indices in males performing a strength-endurance task. Next, a multi-dimensional analysis (i.e., psychological, behavioral and physiological) offers a broad perspective on the relevant findings.

**Behavioral Level**

Task duration and attrition rates did not differ among groups, suggesting that female ovulation cues did not seem to affect performance. Previous findings from research examining the effects of olfactory cues on similar task performance also were equivocal (Simpson, Coady, Osowski, & Bode, 2001). This may be due to the relatively weak dosage of the olfactory stimuli in comparison to the strong demands inherent in the physical task (Raudenbush, Meyer, & Eppich, 2002). Olfactory stimuli could exert some effects on tasks, which are less physically demanding; however, as the physicality (i.e., workload) of the task increases, the effects of the olfactory stimuli may decrease and become extinct (see Basaevitch et al., 2011).

**Psychological Level**

The three groups did not differ on the RPEs. All participants increased RPE ratings linearly as time progressed. Additionally, as the task became increasingly difficult, participants diverted their attention from the stimulus and focused on exertive sensations. Previous studies also have indicated a linear relationship between the duration of the exertive task and RPE (Hutchinson & Tenenbaum, 2007). Similarly, groups did not differ on the attention focus. However, at lower RPEs, attention of the ovulation group was dissociative, relative to the control and placebo groups; this difference, however, decreased as the RPEs increased. Previous research

**Figure 4.** Mean SCR through eight time intervals by task condition
has indicated that attention is exclusively associative at higher levels of RPE (Tenenbaum, 2001). Therefore, the increased levels of RPE in this study may have probed associative strategies, which, in turn, are less susceptible to olfactory stimulation.

Although research has shown increased hormonal response in males following exposure to female ovulation cues (Miller & Maner, 2010), most of the extant literature has used different paradigms and investigated variables related to sexual behaviors (Gangestad, Thornhill, & Garver-Apgar, 2005). The current study was the first to investigate the effects of female ovulation cues during a physical task. It, therefore, may be plausible that female ovulation cues have only a minimal effect on task performance when task are not from the sexual realm. Other plausible explanations for the findings may pertain to methodological shortcomings (e.g., dosage of the ovulation cues, administration methods) and accuracy of measurement tools.

Physiological Level

Previous research has indicated that chemosensory cues may increase HR and SCRs (see Adolph, Schlosser, Hawighorst, & Pause, 2010; Albrecht et al., 2011). However, in the current study, HR did not differ among the groups. There was a main effect of time for all conditions indicating that as time on task increased, HR increased accordingly and linearly. Furthermore, although the interaction failed to reach significance, as time on task increased, HR increased at a faster pace in the ovulation group relative to participants in the control and placebo groups. The apparent differences in effect sizes in HR among the ovulation and the placebo and control groups as a function of time further confirmed this observation. Arguably, exposure to ovulation cues could have a delayed effect on physiological variables. Thus, initially, ovulation cues may not have had an effect on HR. However, with greater time on task, physiological differences may have gained further prominence. Previous research on the effects of body odors on sexual behaviors has suggested a delayed effect (i.e., that peaks more than an hour after exposure to stimulus) for some variables (e.g., genital arousal, sexual lust) (see Tuiten, Van Honk, Koppeschaar, Bernaards, Thijssen, & Verbaten, 2000).

Finally, as per the SCR, there was a significant time effect indicating that as time on task increased, SCR also increased. Nevertheless, condition and condition by time interaction were not significant. Effect sizes for the experimental group, however, remained large relative to the placebo group, which may suggest a similarly delayed effect of the ovulation cues on SCR.

Conclusion, Limitations and Future Research

Findings from previous research examining the effect of body odors on human behavior and physical performance are equivocal at best. The current study aimed to delineate the effects of female ovulation cues on behavioral, psychological, and physiological variables in males during a strength-endurance task. Although no significant differences emerged among the groups (i.e., ovulation, placebo and control), effect sizes of the psychological and physiological variables suggest that time on task may mediate some of the effects. From a methodological standpoint, one may argue the between-subject design inherent in this study may have led to increased nuisance within the measurement of highly subjective physiological data. While the individual variability presents concerns in any between-subject protocol, to control for variability, participants in this study answered to two manipulation checks (i.e., TSSE and commitment
check) and did not differ on either. More importantly, due to fatigue and practice effects that may be inherent in a handgrip squeezing task, the present protocol did not use alternative designs including within-subject protocols.

Yet another factor that may have added to the noise with regard to the physiological data in the present study may be the small number of donors. Previous studies have used similar amounts of donors (see Miller & Maner, 2010). However, recent studies have used a greater number (see Saul & Miller, 2011) of donors thus future research could benefit from additional donors during the odor sampling procedure. It is also important to note the use of a non-ovulation condition could have enhanced the design of the present study. The introduction of a second experimental condition entailing to smelling a T-shirt worn by women far from ovulation (see Miller & Maner, 2010) could further contrast the results, and provide more adequate comparisons, thus offering additional insights into the effects of olfactory ovulation cues on select indices within physical effort settings.

Consequently, beyond using different tasks and designs, future research also may target the extent to which women’s bodily cues may affect the secretion of select chemicals (e.g., testosterone). To that end, identifying the effects of natural body scents within diverse performance settings such as aerobic activity (e.g., cycling and running) and team sports (e.g., soccer and basketball) may increase the ecological validity of the findings, and prove important for the advancement of knowledge in the field.

References


About the Authors

Itay Basevitch, Ph.D. ([ib05@fsu.edu](mailto:ib05@fsu.edu)), has just completed his doctoral studies in sport and exercise psychology at Florida State University. Itay received his bachelor’s degree in psychology and sociology from Tel-Aviv University, Israel, and his master’s degree in sport and exercise psychology from Florida State University. Itay’s research interests revolve around perceptual-cognitive skills (e.g., anticipation and decision-making), perception of attention and exertion, and the link between psychological and physiological variables in sport and exercise settings. Currently, Itay serves as sport psychologist to select college football teams in the U.S.

Selen Razon, Ph.D. ([srazon@bsu.edu](mailto:srazon@bsu.edu)), is an assistant professor of sport and exercise psychology at Ball State University. Dr. Razon’s research interests revolve around the effects of multimodal sensory stimuli on perception of effort and attention focus, and the use of interdisciplinary strategies with a special emphasis for promoting physical activity in healthy and chronically ill populations. Dr. Razon received a doctoral degree in sport and exercise psychology from Florida State University, and a master’s degree in counseling psychology from the University of Miami. Dr. Razon is a member of several organizations including the American Psychological
Association (APA), the American College of Sport Medicine (ACSM), and the Association for Applied Sport Psychology (AASP).

Edson Filho, Ph.D. (soares_medeiros@yahoo.com.br), received a doctoral degree in sport and exercise psychology from Florida State University. A Fulbright Scholar recipient, Dr. Filho’s research efforts revolve around human and team excellence, with an emphasis on expert performance, interactive brains and shared mental models, and bio-neurofeedback applications. Currently, Dr. Filho is a post-doctoral fellow in neuroscience and psychophysiology at the Behavioral Imaging and Neural Dynamics Center at the University of Chieti-Pescara, Italy, where he studies optimal performance experiences among elite athletes (professional drivers, cyclists, and rifle-shooters) using brain imaging technology.

Nataniel Boiangin (nmb10g@my.fsu.edu) is a graduate student in sport and exercise psychology at Florida State University. He received his B.S. in psychology from Florida State University. Nataniel’s research interests revolve around decision-making, visual perception training, attention allocation, and exercise adherence. Nataniel is the Head Coach for the Florida State University Ice Hockey Team and a member of several organizations including the Association for Applied Sport Psychology (AASP), the International Society of Sport Psychology (ISSP), and the North American Society for the Psychology of Sport and Physical Activity (NASPSPA).

Oscar Gutierrez (oag09@fsu.edu) is a doctoral student in sport and exercise psychology at Florida State University. He received his master’s degree in counseling psychology from Florida State University. Oscar’s research interests revolve around the perception of effort and exertion in response to select sensory stimuli, and psychophysiological effects of exercise participation in humans.

Robyn Braun (rab09g@fsu.edu) is a doctoral student in sport and exercise psychology at Florida State University. Robyn’s research interests revolve around the perception of effort and exertion in children as well as the use of sensory modalities in promoting exercise adoption and maintenance in the general population.

Guler Arsal, Ph.D. (gulerarsal@gmail.com), received a doctoral degree in sport and exercise psychology from Florida State University, and a master’s degree in physical education and sports from Middle East Technical University, Turkey. Dr. Arsal’s research interests revolve around expert performance, choking under pressure, and the use of psychological skills in elite sport performance with a special emphasis in protocol analysis method.

Gershon Tenenbaum, Ph.D. (gtenenbaum@admin.fsu.edu), is Benjamin S. Bloom Professor of Educational Psychology at Florida State University. Dr. Tenenbaum is a graduate of Tel-Aviv University and the University of Chicago. He is a former director of the Ribstein Center for Research and Sport Medicine at the Wingate Institute in Israel, and coordinator of the Graduate Program in sport psychology at the University of Southern Queensland in Australia. From 1997 to 2001, he was the president of the International Society of Sport Psychology, and from 1996 to 2008 the Editor of the International Journal of Sport and Exercise Psychology. Dr.
Tenenbaum has published extensively in expertise and decision-making, psychometrics, and coping with physical effort experiences within sport and exercise settings. He is the recipient of several distinguished awards for his academic and scientific achievements, and is a member and fellow of numerous scientific and professional organizations.

Discussion Questions

1. As per the focus of the present study, define Heart Rate (HR) and Skin Conductance Response (SCR). How are they measured in the present protocol?

2. List two strengths and weaknesses associated with this study. What would you do differently if you were to design a study looking into the effects of olfaction in human behavior?

3. Drawing upon the present research focus, discuss alternative and potential ways in which the olfactory modality could affect human behavior in a variety of domains (e.g., eating behaviors, buying behaviors, overall decision-making process, etc.).

To Cite this Article

Some Statistical Illusions and the Debate on Discrimination

Helgi Tomasson
University of Iceland

Abstract

Discrimination is a charged issue in many parts of the world. Frequently scientists assess the extent and nature of discrimination by means of data analysis. All data analysis rests on a bridge between a scientific model and a statistical model. In this article, the author reviews some simple issues that can give misleading results. The methodological literature on statistics explains the nature of these issues, but they might slip past the attention of scientists and policy makers with less formal training in statistics. In this article, the author illustrates this by means of some simple examples.

Keywords: statistical model, omitted variable bias, Simpson paradox, discrimination, affirmative action

Introduction

Discrimination is a highly debated issue in Western countries. Legislators and other authorities have been keen on passing laws and regulations on quotas and other types of affirmative action. The underlying motive is that some forces in society treat some groups unfairly. The underlying forces and reasons causing this unfairness are not always clear. There simply is a statement of unfairness, and that some action is necessary. A group of multidisciplinary specialists, lawyers, economists, sociologists, and others in administration and politics work together in forming this policy. The policy stands on data of uneven quality, and statistical modeling of the underlying process is prone to be fuzzy. Due to the heterogeneity of the group of policy makers, it is inevitable that the greatest common denominator for statistical expertise is likely to be low. Reporting of common statistical measures can easily generate some misconception as I show by illustrating some simple statistical facts. Although an experiment on possible gender discrimination in wages is the main line of reasoning behind this article, in
principle, the examples apply to all applied statistical work. For readers with formal training in econometrics and statistics, the examples are trivial, but hopefully, eye opening for some.

In recent years, the fact that women as a group receive lower pay than men in most industrial countries has caused a debate concerning whether this is somehow unjust – that is, whether the labor market systematically discriminates against women. Many supporters of this statement base their views on quantitative data, surveys, tax-data, official statistics, etc. When making statements on the association of, say, gender and wages, one is doing statistical inference in a statistical model. An important property of the statistical model is that it should have some potential in replicating the observed data. In this article, I illustrate some plausible errors in inference by means of a few examples.

The first example illustrates that inference based on 2x2 tables that might arise in surveys of official statistics (e.g., U.S. Census Bureau) can be misleading. The point of the example is that it is necessary to take into account all-important variables simultaneously. Textbooks on econometrics and statistics state this clearly and unambiguously. The second example illustrates the importance of homogeneity of a group in statistical analysis. That is, that aggregation of heterogeneous groups can give misleading results. The third example shows the impact of measurement error in covariates, i.e., the presence of a measurement error usually results in biased estimates of the importance of the covariates. Finally, I mention the economic motivation for discrimination.

It is now more than 50 years since the publication of How to Lie with Statistics (Huff, 1954). This is a classic reference, and one issue of the 2005 volume of the journal Statistical Science discussed various types of statistical traps to celebrate its 50th anniversary (Best, 2005). The view that the difference in average wages between men and women confirms discrimination is perhaps one of the most widespread statistical illusions in modern times.

Some Statistical Issues

Two by Two Tables are Misleading

This author created the artificial data in Table A (in the Appendix) for the purpose of illustrating statistical issues that arise in the analysis of wage data. Here, the understanding is that gender=1 is male and gender=0 is female. There are two age groups: young (age=0) and old (age=1), two types of occupations (0/1), and two steps of seniority (not senior=0, senior=1). If one presents the average wages in a sequence of all possible two by two tables, one gets tables 1, 2, and 3. In all three tables, the males have higher wages in all groups, both occupation groups, both age groups, and both levels of seniority. For many people, it is tempting to infer that the labor market discriminates against women. This, however, is not necessarily the case.
Table 1  
**Average Wages by Gender and Occupation**

<table>
<thead>
<tr>
<th></th>
<th>Occupation=0</th>
<th>Occupation=1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>77.000</td>
<td>122.142</td>
</tr>
<tr>
<td>Females</td>
<td>63.333</td>
<td>103.333</td>
</tr>
</tbody>
</table>

Table 2  
**Average Wages by Gender and Age**

<table>
<thead>
<tr>
<th></th>
<th>Age=0</th>
<th>Age=1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>72.500</td>
<td>118.750</td>
</tr>
<tr>
<td>Females</td>
<td>61.250</td>
<td>97.500</td>
</tr>
</tbody>
</table>

Table 3  
**Average Wages by Gender and Seniority**

<table>
<thead>
<tr>
<th></th>
<th>Seniority=0</th>
<th>Seniority=1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>78.750</td>
<td>152.500</td>
</tr>
<tr>
<td>Females</td>
<td>69.090</td>
<td>120.000</td>
</tr>
</tbody>
</table>

It is Necessary to take Account of all Important Covariates Simultaneously

The tables above are textbook material for illustration of statistical fallacies. All statistical analysis stands on some kind of statistical modeling. A statistical model is a simplified model of some reality, and the scientist uses data to infer about that reality. Statistical research consists of analyzing the properties of statistical methods, i.e., a pseudo real-world. The reference is the true statistical model, and the features of statistical methods stand on their properties for that model. If a method gives a biased or somehow distorted view of the true model, it shows a characteristic of the method. Some people who work with data do not realize this and claim they are not working with a model; they are just listening to data and letting data speak for themselves. A statistician does not accept this type of argument and claims they are working with some kind of model; they just do not know it. Someone who wishes to make a strong inference based on Table 1 is essentially basing this inference on a model in which the only covariates of interest for explaining average wages are gender and occupation. In this kind of model, one ignores other variables that might affect the wage formation. If occupation is important for average wages then it is necessary to include the occupation variable in all models concerning wages.

A fundamental tool in statistical analysis is the linear regression analysis. A simple version, with dummy (0/1) covariates, is of the form:

\[ y_i = \beta_0 + \beta_1 x_{i1} + \cdots + \beta_k x_{ik} + \varepsilon_i. \]

Here \( y_i \) can, for example, represent wages of individual \( i \) in a given period of time, \( x_{i1} \) represent the gender of individual \( i \), \( x_{2i} \) represent the occupation type of the individual, and \( \varepsilon_i \)
represent the individual deviation from the expected wages of individual \( i \). If this is the true model, one can try to guess the importance of the covariates by estimating the \( \beta_i \)'s based on data. If, say, \( x_{i1} \) is the gender of an individual then one might interpret the coefficient \( \beta_1 \) as the impact of gender on wages, corrected for the factors \( x_{i2}, \ldots, x_{ik} \). In the current example, one can do this. If \( x_{i2} \) is the occupation of an individual and \( x_{i3} \) is the seniority of an individual then one obtains the following:

\[
\text{average wages} = 64.520 + 10.340x_1 + 16.270x_2 + 56.930x_3.
\]

The interpretation is, that in the given period of time, a senior individual earns on average $56.930 more than a non-senior, occupation 1 earns $16.270 more than occupation 0, and males $10.340 more than females. Is it then correct to state that, when corrected for important covariates, the gender-pay difference is $10.340? No! There are more important covariates that affect wages, and it is necessary to include them in the model. If the age variable, \( x_4 \), is added to the model, one obtains the following:

\[
\text{average wages} = 48.130 - 5.810x_1 + 24.640x_2 + 51.300x_3 + 44.330x_4.
\]

This reversed the sign of the coefficient of the gender variable, so in this model, the females seem to earn more than males. Actually, this example is a textbook case for illustrating the impact of omitting important variables. The following formula generated the true data:

\[
wages = 50.000 - 5.000x_1 + 20.000x_2 + 50.000x_3 + 40.000x_4 + 10.000x_3x_4,
\]

In reality, females earned more than males, due to the realistic feature that the aging-effect is not constant over occupation groups (an occupation-age interaction term).

This example is, of course, a simplification of reality. The covariates take only two values (0/1). But, as a textbook example, it makes a point. It is a laboratory model with artificially generated data, in which favors females over males. A superficial statistical data analysis based on 2x2 tables or simple regression models easily can yield misleading results. The model builder always has to be concerned whether she has included all-important variables, and specified them correctly in the model. It is easy to construct examples in which all 2x2 tables will give misleading results.

Oaxaca (1973) describes a regression model for labor market data. His data set consisted of thousands of records. At that time (1973), working with so much data was a big achievement. The amount of data might lead some people to believe the results must be correct just because of the huge amount of data. A statistically-minded individual knows that perhaps some variables were missing from their model, and, therefore, the inference on male-female differentials might be biased. Even if there are many observations, measurements on important variables may be lacking. Indeed, some of the missing variables may be latent and impossible to measure directly. Therefore, methods for dealing with unobserved and unobservable variables are sometimes necessary. An important model design is the panel-data, or repeated measures design. Panel-data methods consist of statistical methods for models in which there are many observations of the same individual. Hausman and Taylor (1981) derive an improved methodology for panel-data
analysis. They apply their method for filtering out unmeasured individual variables to a data set
on men’s wages from PSID (Panel-Study-of-Income-Dynamics). Greene (2003) shows their
method and part of their numerical results in a textbook on econometrics. In Table 13.3 on page 306 in Greene’s (2003) text, one can read the ordinary-least-squares method of estimating the model suggests the racial wage-gap is around 8.5%. The table also shows output of their new method, which suggests the racial wage-gap is around 1.8%. The message of this is that much of the reported wage discrimination might be a result of an improper statistical method.

Becker (1993) reacts to a report from the Boston Federal Reserve concerning the HMDA (Home Mortgage Disclosure Act) for monitoring minority access to the mortgage market. The authors of that report later published it in the American Economic Review (Munnell, Tootell, Browne, & McEneaney, 1996). The report suggests that, even after controlling for various external variables, results suggest discrimination against minorities. Becker’s answer is to turn the problem around: If the banks discriminate against minorities then the banks should profit more from lending to minorities, which does not seem to be the case. The economic motive seems to be missing.

Another Nobel Prize winner analyzes the concept of discrimination. In his article, Detecting Discrimination, Heckman (1998) gives statements like the following.

[C]areful reading of the entire body of available evidence confirms that most of the disparity in earnings between [B]lacks and [W]hites in the labor market of the 1990s is due to the differences in the skill they bring to the market, and not to discrimination in the market, and (p. 101)...the evidence from the current U.S. labor market is that discrimination by employers alone does not generate large economic disparities… (p. 112)

In the years before 1970, there was a certain tendency in econometrics to search for a large global model that explained everything. One of the skeptics of this approach was C. W. J. Granger, the Nobel Prize winner in economics for 2003. In the early 1970s, he lectured on the concept of spurious regression (Granger & Newbold, 1974). This article was basically a reinvention and improvement on the argument made by Yule (1926). The general idea is that unrealistic assumptions in the statistical model reduce the validity of the outcome. In the time-series models Granger discussed, the assumptions concerned issues like stationarity. Textbooks of econometrics and statistics, e.g., (Greene, 2003), typically assume a correctly specified model, homogenous underlying groups and covariates without measurement error. It took the economic profession a long time (10 to 20 years) to appreciate Granger’s skeptical thoughts. Even now, people in economics, and perhaps in other disciplines, are practicing spurious-regression—regressing time-series data without specifying a particular time-series model, obtaining high $R^2$, and wrongly interpreting this as a highly significant (and important) result.

**Aggregation of Heterogeneous Groups can Give Misleading Results**

It is easy to construct an example in which all firms discriminate against men, but the aggregate seems to discriminate against women. The following example (with these numbers) occurs in many textbooks (Poirier, 1995; Lancaster, 2004), although the accompanying stories are different. Tables 4 and 5 show that the A- and B-type firms discriminate against men. However, when aggregated, the A+B-firm discriminates against women.
A teacher in biostatistics reviewed this example in her lecture. The story was that in a certain population the carriers of a certain gene were more likely to acquire a disease. However, the population was heterogeneous and consisted partly of Native Americans (Indians), and partly of Americans of European origin. Among the Native Americans, the gene carrier was not more likely to acquire the disease. Likewise, among European Americans, the gene carrier was not more likely to acquire the disease. It just so happened that both the gene and the disease were more common in the European American population. It would have been a wrong policy to use the aggregated data to take some action based on whether an individual carried that gene or not.

Table 4
Wages in Firm A. 70% of the Females have High Wages, 60% of the Males have High Wages

<table>
<thead>
<tr>
<th></th>
<th>High wages</th>
<th>Low wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Females</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 5
Wages in Firm B. 30% of the Females have High Wages, 20% of Males have High Wages

<table>
<thead>
<tr>
<th></th>
<th>High wages</th>
<th>Low wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Females</td>
<td>9</td>
<td>21</td>
</tr>
</tbody>
</table>

Table 6
Wages in Firm A+B. 40% of Females have High Wages, 50% of Males have High Wages

<table>
<thead>
<tr>
<th></th>
<th>High wages</th>
<th>Low wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Females</td>
<td>16</td>
<td>24</td>
</tr>
</tbody>
</table>

The Impact of Measurement Error

It is wrong to ignore the presence of measurement error just because every individual is equally likely to be subject to it. Many textbooks in econometrics (e.g., Greene, 2003) show that a measurement error in a covariate will lead to biased and inconsistent estimates, i.e., the bias will not disappear by increasing sample size. A measurement error in one covariate will in general affect the estimates of the impact of all other covariates in a regression model.

If we assume 30% of males have a senior job, and 5% of females have a senior job, and further assume the probability of a wrong classification of a senior worker is 30% and the probability of a wrong classification of a non-senior worker is 5%. Further, assume that Table 7 shows the true wage distribution. Then one can use Bayes rule to derive the observed distribution in Table 8. Here, the truth for both males and females is that the senior worker earns twice as much as a non-senior worker. The truth is gender neutral. The measurement-error (classification error) is completely gender neutral, yet the observed values are likely to report a difference in
gender among both seniors and non-seniors. Someone might conclude the reward for seniority is much smaller for females than for males.

This type of statistical calculation is well known in the medical literature. The medical literature uses the terms “sensitivity,” the proportion of positives the test correctly classifies, and “specificity,” the proportion of negatives the test correctly classifies. The properties of the predictive value of the test, i.e., the probability of having a disease, when the test is positive, is something completely different (Altman, 1991).

Measurement errors are a natural phenomenon in all practical data observations. For example, in the 1960 U.S. Census, there are 62 women age 15-19 who have more than 12 children, and widows below the age of 14 are common (De Veaux & Hand, 2005). Textbooks in econometrics and statistics suggest various solutions (e.g., the instrumental technique, such as Greene, 2003). The treatment of measurement error in general is a complicated issue and requires sophistication on behalf of the scientists. A text on measurement error models is Fuller (1987).

Table 7
True Wage Relations between Senior and Non-Senior Workers

<table>
<thead>
<tr>
<th></th>
<th>Seniors</th>
<th>Non-seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Females</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 8
The Relations between Senior and Non-Senior Workers of Table 7 Observed with Measurement Error

<table>
<thead>
<tr>
<th></th>
<th>Seniors</th>
<th>Non-seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>1.86</td>
<td>1.12</td>
</tr>
<tr>
<td>Females</td>
<td>1.42</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Conclusion

When debating discrimination, one needs a clear definition. The economic intuition of, say, Becker (1971) tells us that, even if the intention to discriminate is there, the discrimination cannot be very widespread. The scope for employers to practice discrimination is particularly limited. In a free market with easy access to information, employers maximizing their profit will try to minimize labor cost; therefore, the demand for workers who are willing to work for low pay will rise. These workers, in turn, will be able to raise their wages. Marriage is an important institution. Partners will decide how to allocate their participation in the labor market. Historically, the nature of this allocation has been such that the male partner has much higher income. Some authors have sought explanations for this (e.g., Korenman & Neumark, 1991). O’Neill and O’Neill (2005) state the following.

There is no gender gap in wages among women and men with similar family roles. Comparing the wage gap between men and women age 25-43 who have never married
and never had a child, we find a small observed gap in favor of women, which becomes insignificant after accounting for differences in skills and job and workplace characteristics. (p. 34)

The marriage is important. Farrell (2005) cites facts from the U.S. Census Bureau in the 1950s to show there was very little difference in the earnings of unmarried women and unmarried men between 45 and 54 (p. xxi). This period took place well before the introduction of affirmative action and the Equal Pay Act of 1963. Farrell (2005) gives a follow-up of these results in modern times, and the pattern seems to be the same. Of course, one might claim that unmarried women are somehow different from unmarried men, i.e., that one needs to model the marriage selection process. This kind of modeling is likely to be a complicated statistical exercise and beyond the scope of this article. The professional literature on econometrics and statistics is typically of a high mathematical level. The research in that field is highly focused on mathematically proving asymptotic properties of estimators. This makes the field inaccessible to many professionals educated in the social sciences; perhaps, therefore, policy makers with varying educational backgrounds might fall victim to simple statistical traps. At least, it seems to be a reasonable doubt about the benefit of affirmative action policy. Becker (1971) also suggests that it is of dubious social value to reward or punish employers for discrimination (beyond other criminal conduct). Discrimination is not in their economic control. The lawyer, Farrell (2005), asks the compelling question whether the main impact of the Equal Pay Act of 1963 was to earn a living for a group of lawyers (he claims to be one of them). Still legislators carry on, and O'Neill (2010) bursts out: “Washington’s Equal Pay Obsession. There’s no epidemic of gender discrimination. So why is Congress proposing another law?” (http://online.wsj.com/article/SB100001424052748703326204575616450950657916.html). A probable cure for the debate might be more cooperation across academic disciplines. Professionals in econometrics and statistics have to give more respect and reward to ordinary statistical work, and other groups have to be more open to accepting statistical advice.

References


Appendix

Table A1
Data for Illustrative Examples

<table>
<thead>
<tr>
<th>Gender</th>
<th>Occupation</th>
<th>Age</th>
<th>Seniority</th>
<th>Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>165</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>165</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>165</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>115</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>85</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>85</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>85</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>115</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>65</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>65</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>85</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>90</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>90</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>90</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>120</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>120</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>70</td>
</tr>
</tbody>
</table>

About the Author

Helgi Tómasson (helgito@hi.is) has a B.S. degree in applied mathematics from the University of Iceland and a Fil.Dr. (Ph.D.) in statistics from the University of Gothenburg, Sweden. He has been a fellow at the department of Biostatistics at the International Agency for Research on Cancer in Lyon, France. He has been a director of an institute of labor market research in Reykjavik and now holds a tenured position as a professor of econometrics and statistics at the Faculty of Economics at the University of Iceland, Reykjavik, Iceland. He has been a visiting scholar in Denmark, England, Sweden, and the USA. He has authored articles in scientific journals. He is interested in statistical computing, and is the author and maintainer of the statistical package ctarma=continuous-time-auto-regressive-moving-average.
Discussion Questions

1. It should be clear that affirmative action is not free. Is it possible to do a cost-benefit analysis of affirmative action?

2. How widespread are the statistical fallacies described in the text in scientific work?

3. The equal-pay equal-rights industry employs how many?

4. Do politicians use statistical illusions to buy votes?

To Cite this Article

The Attractive Nuisance: A Model to Prevent Workplace Distractions

Jeffery W. Dance
Samford University

Robert W. Service
Samford University

Abstract

In today’s technological world, there are many tools that can be of use to managers and leaders, but inappropriate use of those same tools can distract one from doing the most important work. Technological tools are neither good nor bad. Their application determines whether they are useful or are distractions. At this point, the judgment piece of leadership and management necessitates humans and their selective intellect as a vital addition to technology. As anyone who has attended a meeting or taught a class recently can attest, we have a problem! The “tools” have evolved beyond our ability to use them in the most effective and efficient manner. Indeed, no one can “effectively” multi-task, for multi-tasking significantly reduces efficiency, quality, or effectiveness. This is a fact few seem to realize, let alone manage. Summer 2012 reports on CBS’s and NBC’s U.S. newscasts, and articles in many major U.S. newspapers report on the rise in walking-while-distracted accidents, and the addition of fines for violators in some cities.

This article focuses on the manager’s duty to facilitate personal and organizational success by identifying, removing, and protecting against seemingly helpful “endeavors,” technological or otherwise, which in reality are obstacles and distractions to core competencies. Using the tort doctrine of the Attractive Nuisance as a pattern, this article will assist managers in identifying core competency and efficiency distractions as well as in protecting against their dangers. Solutions include the connectivity of intellectual ambulatory management, establishing sound job scope and depth, developing cultures of cooperation with clear lines of the business case for new projects and ideas, and creating self-policing monitors to maintain focus on core objectives.
Keywords: execution, time management, efficiency, distraction, planning

Introduction

In the time it takes to read this article, you will probably receive several distracting urgent seeming e-mails, texts, or phone calls, or possibly someone stopping in your office for what they see as an important interaction with you but in the end could have waited for another time. Does this mean you consider a “closed door” policy and become an office recluse? No, quite the opposite is true. In fact, disciplined managers know how and when to interrupt or allow others to do so. Interruptions are distractions and can lead to billions of dollars in lost time, waste, and lost competitive advantage.

The Knowledge Quotient, a leader’s ability to pay attention to workplace technologies and continually learn about and from them, is a prerequisite in today’s fast paced hyper-connected world (Service & Arnott, 2006). This quest for knowledge, although admirable, can be a distraction to core missions when it simply follows its normal course. With the Internet and its wide and deep access to information, diversions, even for good purposes, can be deterrents to efficient and effective production. Cohen and Graham (2001) noted that in project management the folly of multitasking is a sure fire way to increase cycle times and decrease project quality. Humans cannot multi-task effectively. “A person who is interrupted while performing a task takes 50 percent more time to complete it and makes 50 percent more errors” (Brooks, 2011, 92). In today’s connected world, many distractions are self-inflicted. Instantly viewing, answering, or listening to phones and computers can cause the unimportant to appear as urgent events. When in actuality the message ends up being a meaningless inquiry or even less useful comment, joke, or picture. Every working manager can agree that not all distractions are inherently bad; they are, however, factors of knowledge production that require a manager’s focus.

“A failure to prepare on your part does not constitute an emergency on my part.” This slogan appears as a familiar warning on many workers’ desks. It is a poignant reminder to procrastinators to plan ahead. But, what about those disciples of the five functions of management who live and breathe Planning, Organizing, Leading, Controlling, and Staffing? Should there be a warning to them that not every idea is a good idea requiring further project development? In terms of project management, prioritization, and execution, many project ideas are dangerous resource drains on the organization. Just because a particular manager thinks the company’s Key Performance Indicators (KPI) dashboard should have one more metric does not mean the development team should chase the data, burn development time, and consume other resources in order to create it. Too many managers and leaders at all levels have a flavor-of-the-month solution, book, idea, or newly invented rabbit trail to distract themselves and their followers. Take care, and keep in the front of your mind that management and leadership rule one is first do no harm (McIntosh, 2011), and contrived nuisances, attractive or not, are all too often exponentially dangerous.

We often hear that time is our most valuable resource. However, we have found our attention is more valuable asset because it is our focused use of time. In today’s overly informed world, the attention of top people is the most valuable resource organizations have (Davenport & Beck, 2001). And, in today’s highly linked world, nothing takes away from our time and attention like jumping from one medium to another to see what that “ding” was about – text, e-mail, or some other stimuli. One thing is certain, humans cannot truly multitask without losing quality or
time. What we do is switch back and forth, and all studies show that when one “multitasks,” one is doing so at the expense of accuracy or speed (Gopnik, 2012; Hall, 2011; Pinker, 1996). The most effective people learn to focus their attention in more of an old fashion batch mode: assigning certain times each day to look at e-mails, review text messages, or check messages of all types. Bosses must stop demanding subordinates watch every waking hour for a question or message – for innovation and creativity are the only sustainable competitive advantages, and this takes some time away just to think. As we will discuss later in this article, we will see certain legal and wage-hour implications.

For those of us who have spent careers following successes and failures in organizations, it comes as no surprise that a high Intelligence Quotient (IQ) does not always correlate with success in many of life’s endeavors (Drucker, 2002). Yet, our measures for entry in many fields requiring advanced degrees basically are surrogates for the IQ test (Sternberg, 1996, 2003). It is time to change our thinking when training and developing the future managers and leaders of our organizations. The concern must center on successful intelligence rather than traditional IQ (Brooks, 2011; Hall, 2011; Sternberg, 2003). Selecting the important and avoiding the unimportant, and applying one’s attention appropriately underlie the intellect that leads to life’s successes: choices (Wooden & Jamison, 2007). “Managing-controlling” the focus of time and attention for self, subordinates, peers, and bosses is “the” crucial managerial and leadership wisdom requirement as we move into a globally hyper-competitive world (Service & Loudon, 2012). No one can do it all or even most of it! Moreover, researchers and practitioners now are saying “[t]he leader of tomorrow is someone who can jump across boundaries and disciplines and analyze cultural and global differences” (Shinn, 2011, 37). This newly flattened world with exponentially increasing distractions requires managers and leaders to grow in abilities of selection and analytical focus (Friedman, 2005, 2008; Friedman & Mandelbaum, 2011).

Teaching and understanding the discipline of getting things done through others is a predominant theme in today’s management literature. Using the tort doctrine of the Attractive Nuisance as a pattern, this article will assist managers in identifying core competency and efficiency distractions as well as in protecting against their dangers. Solutions include management by walking around, establishing sound job scope and depth, developing a culture of cooperation with clear lines of the business case for new projects and ideas, and creating self-policing monitors to maintain focus on core objectives. Managers must practice TIPS. Always giving “Timely, Individualized Performance-specific Suggestions” using a “what, what, why” model – saying, “This is what you did, this is what you should have done, and this is why.”

In summary, Dennis Bakke, former Chief Executive Officer of the global power company AES, notes one of the most important functions for managers to remember is to “serve as chief guardians of the core principles of the organization” (Malone, 2004, 50). This article focuses on the manager’s duty to facilitate personal and organizational success by identifying, removing, and protecting against seemingly helpful processes that in reality are obstacles and distractions to core competencies. Nothing is as destructive as a manager who walks around and throws a monkey wrench into everyone’s work: “Where does this stand? Can you look at this?” and so on, can be good or bad. Watch your actions as a manager to leverage or de-leverage with your influence.
The Work Environment

Work is an ever-changing attitude. Ruiz-Quintanilla and England (1996) noted a negative shift in the U.S. worker’s perception of work as compared to other countries such as Germany and Japan. The U.S. worker viewed work in a utilitarian context with a more burdensome and constrained perspective (Mathis & Jackson, 2012; work life balance has become the desire for most workers today worldwide). A U.S. worker may have a lack of job depth perspective, whereas the Japanese worker sees work in a more positive light as exchanges and social contributions. U.S. workers reported working more hours a week in 2010 than in 1960; however, productivity evidence points to more wasted time (Murray, 2013). One can surmise that being connected 24X7 might be confused with working 24 X 7? This could be one of the many inconvenient truths that most lament. Closer examination indicates strongly that a great deal of the wasted time is due in part to the lack of focus and switching cost all too often revolving around the Attractive Nuisance. The fact that most U.S. workers evaluate their lives in a more retrospective view than some more forward-thinking cultures, supports these points further (Miller, 2005). Workers’ different views of work can bring different motivations as how to get work done and how to achieve work-life balance as a result of that work. Necessary distractions, breaks, and perceived entitlements can be a challenge to the manager.

Workplace change is a distraction that requires management to develop focus and attention to detail effectively. Often quoted, Theodore Levitt, the former editor of the *Harvard Business Review*, once said to sustain success, focus regularly on the right things, and make many small, uncelebrated little improvements each and every day. Change itself can propagate very personal and utilitarian behaviors. Managers who understand change behavior can succeed when addressing subordinates in order to get work done. Gilley and others showed a distinct correlation between workers’ perception of manager effectiveness and treatment of employee individualism. Gilley and others further described manager effectiveness in change management to be 24%, suggesting the firm to be at risk as a result of managers’ inability to relate to employees and effectively manage respective change (Gilley, Thompson-Heames, & Gilley, 2012, 76). Relational trust attitudes are critical in the workplace. When an employee knows a manager’s directive is not just another whim, but rather an integral task that requires immediate attention, the “change” in focused tasks for the day are accepted and accomplished more easily. This understanding is essential to proper time-management, scheduling, and project staging. The workplace is a breeding place of daily change – the good, the bad, and the categorically ugly.

Work and work environment continues to change as technology changes. Burdens and constraints typically occur with formal fixed locations and specific directions within management oversight (Ruiz-Quintanilla & England, 1996). Yet, these magnified burdens and constraints serve as the “Integration of technologies, industries, nations, cultures, relationships, and interests continue to characterize the twenty-first century workplace” (Potoker, 2011, xii). Therefore, exchange models and social benefits in the context of job depth or freedom are increasing with more knowledge workers. Drucker describes a knowledge work environment as “borderless” with “upward mobility.” An understanding that knowledge for a required task or skill is important, and there remains a risk of failure – “not everyone can win” (Drucker, 2008, 37). Lofquist and Dawis (1969) cite several psychological studies of workers that show work as a means to an end. This means versus performance and meaningfulness has expanded of late according to Mathis and Jackson (2012). However, these same studies (Lofquist & Dawis, 1969) as do more recent studies
(Neck & Manz, 2013, on self-leadership; Yukl, 2013, on leadership of others), showed the worker to have gained certain satisfaction through the work itself. Although not coined by Drucker, he continually focuses on the “Knowledge Worker” as an owner of the means of production. With this understanding of knowledge workers, time is a costly resource. The knowledge worker must wield time wisely in order to produce at a sustainable rate. The manager also must understand how to utilize effectively knowledge workers providing manageable freedom in project development, free time, creativity, and deadlines. In fact, on stressing the necessity of innovation (includes creativity), Drucker in his 1985 and 1998 classics said that “stop doing” lists are more critical than “to do” lists. As Friedman and Mandelbaum rightly proclaim, “Continuous innovation is not a luxury anymore—it is becoming a necessity. In the hyper-connected world, wherever can be done, will be done” (2011, 96). Use your focused attention toward innovative solutions versus stability and control: Computers can manage the stability and control.

Computing and work are now 24/7 endeavors. The availability of work (and many more distractions via the Internet linked with smart devices of all types) to the worker and vice versa are new challenges managers must face as they not only are accessible to their bosses at all times of day but also are their subordinates to them, and so on. The cycle may never end. This real-time and full-time accessibility can result in poor decision making on several different fronts (Davis, 2002). Excessive amounts of data can occupy precious time resources; overworked PowerPoint presentations, and the need to impress or fear of failure can require useless hours of rework. These are just some of the effects of having access to technology at all times. Data is not information, information is not communication, and knowing or even using is not always wisdom. Consider the following scenario as managers lose touch with what is important as they press subordinates for more data and more presentations that are exciting. A last minute change in a presentation, for the sake of change, may spruce up a graphic only because the access to change is there, but the change is cosmetic, rather than substantive. The worker must stop everything currently on task, review the request, make the change, and review the change. The manager’s myopic view of the worker’s schedule – “It’s just a quick change, and they don’t have anything else pressing” can be a typical manager’s thought. Is this the best way of using your human capital? The change may be attractive as it relates to making the presentation better, and the perceived ease of making the change seems immediately accessible, but it can result as a detriment to staff, morale, productivity, and effectiveness.

Marketers understand the importance of “stickiness” and customer loyalty. If a customer can stay online longer, the chance of buying is much greater to the point that a retailer’s Web manager must look for ways to “increase search duration” (Bhatnagar & Ghose, 2004, 328). In contrast, reasoning of just a few minutes to check a child’s soccer schedule or make an online purchase so as not to have to leave work early can be a loose form of “presenteeism.” Although originally coined as a response to employee health and “absenteeism,” presenteeism can take on forms of being at work physically but lacking any engagement. Many employees are present but remain distracted for many reasons. How one manages time in the knowledge workplace is becoming a point of discussion among many areas of management. The availability of computers and personal smart phones in the workplace present employees many chances for distraction. Cisco Systems reported on its Website that 63% of its clients’ employees transact personal business on companies’ computers at least one time per day. Even with corporate IT security policies in place, employees disregard and take advantage of the low barriers of access, thus the
access to the computer becomes a distraction and nuisance to productivity. Continually ask, “Am I really busy on the right things, or busy ruminating and avoiding key issues?”

Time and Execution

Franklin Covey’s 2010 Annual Report noted “execution” as its top “job-to-be-done content area.” In order to execute on the firm’s goals and objectives, execution, time management, and focus must be co-aligned. Franklin Covey reported this particular practice area to be $9 million in revenue, up 63% from the previous year. The focus on time management and execution adds value to any organization, but first managers must minimize obstacles that deter effective execution in terms of distraction. The legal doctrine of Attractive Nuisance is an appropriate model to prevent, protect, and remove distractions in the workplace in order to effect execution.

Time management is a misnomer for time is not changed or extended; it is simply a finite budget. After recording how we spend our time, we only can decide how to spend time. That is, what are you going to pay attention to and focus on? It simply cannot be everything. As we have alluded to above, management and leadership wisdom starts and ends with what you chose to pay your attention. You need focused blocks of time to improve your successful intelligence and to meet the necessity to become and remain innovative. Moreover, “When top executives compare their top priorities to their time use, “They are usually surprised about the mismatch” (quoting Harvard Management Professor R. S. Kaplan in Silverman, 2012, February, 14, B9).

As managers, we also must understand our employees have time budgets as well. How they spend their time, either at their direction, their superior, or someone else’s, is crucial and requires extensive management. Their distractions can come from many different sources, which can, and will, reduce productivity.

Pay attention to those attractive issues that will bog down the smartest of people. These time-wasters may come from the organization itself: clutter of overstaffing leading many in the organization to be the added baggage, or else to have too much time on their hands and wind up spending everyone else’s time; and finally, allow or even cause poorly executed meetings (Drucker, 2008). Manager-leader success will prevail through your ability to navigate through those attractions, which left alone are all too often your new distractive nuisances.

Attractive Nuisance

The Doctrine of Attractive Nuisance is a legal tort provision that often challenges landowner liability. Old trucks, swimming pools, wells, and other similar things, or “conditions” on one’s property, may seem rather inert at face value. Farms tend to have wood piles, dugout areas, barns, and the like; but, what happens when an inquisitive child find that wood pile enticing, falls, and subsequently is injured? The Doctrine of Attractive Nuisance determines whether the landowner did enough to protect against the hazard.
The Attractive Nuisance must meet five tests for liability (Winter, 2002).

“1. The location where the condition exists is a place the landowner knows children may frequent.
2. The condition is known to the landowner as possibly presenting certain risk of life or serious bodily harm.
3. Children may not realize the condition to be of such danger.
4. The expense to protect against such danger is minimal when compared to the children’s risk.
5. The landowner fails to remove the danger or provide adequate protection from the danger” (p. 705).

Warning signs around a property are not sufficient to protect against the Attractive Nuisance. As the five tests show, it takes a conscious effort on the landowner’s part to protect against injury. The same is true in business and management. The manager is analogous to the landowner in that he or she must not only post policies and procedures but also reinforce them through ongoing monitoring – not so much to be a heavy-handed stick, but rather a manager who has the employees’ best interests at hand, much more like a parent looking to prevent harm. Attractive Nuisance places duty on the landowner; however, a true manager sees this not only as his or her duty but also as a responsibility.

How does a manager prevent distractions (i.e., Attractive Nuisances) in the workplace? Our Attractive Nuisances in the workplace are those conditions, resources, situations, people, and assets that, on the surface, seem innocuous at best, but create an environment of non-productive time wasters. Just as the landowner, manager-leaders must develop skills and cautions in the following five areas.

1. Know the conditions that distract. Recognize and manage these to be successful for everyone included. This will require intentional and deliberate choices to change with changeless principles.
2. Know distractions impact success. Create ways for known distractions to be helpful. Act with purpose for positive results.
3. Employees may not see the distraction. Do not blame the employee when it was you who created the distraction in the first place.
4. Managers cannot afford not to prevent distractions. Understand time is money. Make your policies “time optimizers,” not “time suckers.”
5. Managers act decisively in the face of known distractions. Do not allow fluff. Set the example, and follow it.

Use these five areas as tests to facilitate the success of your employees while maintaining a positive attitude of work.

Know the Conditions that Distract

In Jack, former General Electric (GE) Chief Executive Officer Jack Welch describes his number one or number two ‘Fix, Sell, or Close’ idea consisting of three concentric circles to
illustrate the core businesses and products his company had to focus on to become successful in 1984. Anything outside these circles were also outside the company's vision. After executing this plan, Welch said GE was able to free itself of almost 200 burdensome businesses and product lines valued at $1 billion. This also included "operations that were the heart of the old GE, including...housewares, television manufacturing" (Welch, 2001, 110-111). This illustration required Welch and his associates to make hard decisions at the expense of tradition and comfort. They could not get to that point without first making an intentional and deliberate survey of their existing portfolio. As manager-leaders, we also must pay attention to the distractions: outliers that waste time cause us to lose focus and cause the same for our employees, even if these are a seemingly natural part of the business day.

The impressions we make are deliberate as we change to adapt to the situations and environments where we exist. We make up our minds about another person in five seconds, which is the same time it takes to check a text on our smart phone (National Highway Transportation Safety Administration, 2011). We know the dangers of texting and driving, but does this mean we should never take our eyes off the road? Just as a driver must focus constantly while changing focal points to check side-view and rear-view mirrors, and among other cues, the manager-leader must choose constantly to change his or her focus without compromising principles. Otherwise, driver-hypnosis sets in, and accidents are bound to happen. We call these deliberate and intentional acts "The 3 C's to Control Distractions." As with Welch, we believe these three interrelated core values provide the qualities manager-leaders require to maintain focus, but not die the slow death of tunnel vision. Manager-leaders Choose to Change within Changeless Principles. Anything outside this is pure distraction. Find and use the sweet spot of Choice (Choose), Change, and Changeless principles.

Choose. Choice is deliberate and is a healthy distraction. Managers and leaders must choose to see their roles as deliberate and intentional. In order to maintain effectiveness as a manager-leader, you must continually be on guard and know the conditions that breed unproductive distractive behavior in your workforce. This quality is continual scanning to know the conditions that may be ripe for negative distraction. Helping your staff avoid distractions, even when such conditions exist, is the mark of a manager-leader who strives to facilitate success within his or her team.

Change. Learn from the bosses you have had who made unreasonable last minute demands on your time. Understand that your staff and other departments have lives outside of work. There are always unforeseen circumstances that require emergency measures. The manager's job is to know where distractions may occur and protect against them.

Organizational structure can be a significant actor in distractive environments. For example, matrix organizations tend to be very creative and nimble; however, they also are perfect environments for distractions. If the workgroup does not have clear objectives and specific time frames, many members are utilized for other reasons under the guise of the project team. Scope-creep, dry rot, and other similar lost-focus results will occur. Managers only need to remind themselves of Janis' "Groupthink" warnings to remain fresh and on point.

Sy and D'Annunzio (2005) described many challenges and struggles in matrix organizations, whereas distractions come in the form of status, power, misaligned goals, unclear roles, and silos. Furthermore, turf-struggles become another issue that distracts in what can be a
very effective organizational structure. Managers and senior executives skilled in matrix administration can not only prevent distractions but also restore the value and mission of the matrix organization.

**Changeless principles.** Technology, although a must for business success, can produce some of the most difficult challenges for manager-leaders. Mastrangelo et al. (2006) noted a particular pattern among workers who use business computers for personal purposes. The top offenders tend to have had Internet accessibility at work longer than their peers, the employee’s home Internet speed is not as fast as that work (the idea “I’ll wait until I get to work”), and employees work more than one job. The company technology asset is a tool provided to and for the employee to get work done. Unfortunately, it always may pose an attraction to an employee who becomes too comfortable with the speed, availability, and quality of the equipment. This is not to assume all misusers of company computers are engaged in some online vice or other malfeasance. It does provide an opportunity to reinforce the changeless principle that we will “saunter” when given the opportunity. Manager-leaders must make intentional efforts not to catch employees, but to leverage this distraction to a positive.

*Management by Walking Around* is simply the best deterrent. Educators face technology distractions with each class period. Students are so dependent on smart phone devices and social media that interrupt many class periods due to egregious use of these devices. The authors know firsthand the effect in the classroom; moreover, this innocent attraction could lead to nonproductive time at work and possibly destructive behavior. You might recall that in the abstract, we called management by walking around the *connectivity of intellectual ambulatory management!* Think about this more sophisticated terminology, and practice the intellectual part of connecting as you move *purposefully managing* through your organization.

In all executive education events we have held of late (a relatively large number), we have run into the problems of distractions due to phones in which participants seemingly cannot help but look at messages and e-mails. The higher the managerial-leadership level of the individuals, the worse the problem. In fact, we have started requiring (where we have that power) that participants put their cell phone and other connective devices, including PCs, in a box to be collected after the session: ridiculous but all too necessary.

Choosing to deliberately and intentionally change, seek understanding, and develop the ability to recognize quickly then act on the distracting conditions that exist in an organization will separate the exceptional manager from the average manager.

**Know that Distractions Impact Success**

Managers act with purpose to provide leadership. Leadership is immediate and forward-looking, but not arbitrary. Famous American General Robert E. Lee reminds us “If you go on ciphering, we are whipped beforehand” (Crocker, 2000, 69). Planning, organizing, leading, controlling, and staffing are intentional functions within a manager’s toolbox. In order to prevent distractions that do not facilitate firm and employee success, the manager must be intentional and recognize the fact that distractions, no matter how innocent, could escalate to unproductive work.

Performance suffers with interruptions; recent literature identifies the growing problem of multitasking as a result of attempting primary tasks interrupted by texts, e-mails, Facebook®,
Twitter®, and the like. The studies in this literature showed overall poor grade point average (GPA) performance in students who use social media. These students study 30% less than non-users and have 20% lower grades. Last, one important insight coming from this line of research was the study participants involved in multitasking actually perceived their performance to be satisfactory, when in reality the results were lacking (Kirshner & Karpinski, 2010).

Is distraction always bad? Some studies do indicate “taking a break to clear one’s head” before making complex decisions actually may be productive (McMahon et al., 2011, 738). Students argue that music, IPods, television, Twitter®, and social media help them study, and they have to have it switched on to be productive. Employees want radios at their desks. Sports events seasons such as the NCAA’s (National Collegian Athletic Association, the U.S. college sports association) Final Four® can be fun and offer lighthearted breaks from work. These are exceptional distractions that can add value to work-life balance and productivity. The day-to-day distractions of “reply all” on e-mails, overbearing managers, and creative but useless projects are the nuisances that may seem necessary but in actuality act as barriers to goal achievement. Managers are leaders who are bound to know the impact of their actions and the requirements placed on subordinates.

As managers, we learn from those in our care. So too as teachers, we learn from our students. One of the first things we generally ask a class is to tell us one of the dumbest things they ever have done, followed by one of the wisest things they ever have done. This, of course, breaks the ice, but more importantly, requires them to think about what made the difference in the two. In most cases, it was simply maturity and stopping to think or possibly seeking advice. Our point becomes the following: This is how we gain wisdom, reflecting on our mistakes and triumphs and not treating those two imposters just the same. With these thoughts in mind, we begin to differentiate wisdom from actions and move into the topic of leadership to the point of distraction-management.

We start by defining leadership as management done well. If you intend to be a good manager, you will need to understand what it takes to be a good leader. Organizations may obtain efficiency through non-leadership programmable roadmaps. Many academicians say management is doing things right, and leadership is doing the right things; or, management is keeping people in the known, and leadership is moving people into the unknown. Those definitions, though correct and our own, are nonetheless dichotomous (Service & White, 2012). Requirements revolve around developing leaders capable of exhibiting leadership as human influence through management, selection, relationships, and creditability. It then becomes paramount to define leadership further. In that attempt, listed below are tenets of effective leadership as we prevent success-depleting distractions:

1. Wanting and desire, focused work: visioning and envisioning.
2. Understanding organizations (purposes-products), cultures, self, others, and situations.
4. Communicating – defining and sharing missions, visions, and values.
5. Challenging – self and others to move to ever higher levels.
6. Inspiring – first through actions then with words and platitudes.
7. Enabling – empower others in order to leverage their assets.
8. Persuading – motivating self and others through communications, actions, rewards, and penalties.


10. Applying – leveraging, building, developing, and arranging but always improving effectiveness.

Employees May Not See the Distraction

Employees show up for work every day to do their job and go home. As the economy tightens, so too does one’s attention to pleasing the boss. Personality traits can lead to certain attractive distractions. These traits can be a breeding ground for positive and negative workplace behavior. Even the egotist misunderstood as self-centered when he or she simply has a higher sense of self-efficacy (O’Neill & Hastings, 2011). The workplace microcosm includes many personalities, naiveté, discretions, and attitudes that present opportunities for employees to get involved.

Companies with significant philanthropic emphases may endanger an employee’s tenure. Wherein enthusiastic employees participate, even chair various committees that actually endanger the employee-participants. One organization of which the authors have knowledge actually developed a track record of laying-off each year’s fund raising chairperson. This came even though the employee volunteered to chair the committee. When senior management realized the employee had enough time to do such a good job on the campaign, they instinctively believed the employee did not have enough to do in their regular job. The result? One less full-time employee.

The manager must train and educate employees constantly on efficient focused work. It is incumbent on the manager to protect employees from the attractive nuisance in the work place.

Managers Cannot Afford Not to Prevent Distractions

Recent wage and hour decisions related to overtime pay for checking e-mail after normal working hours leaves managers concerned about how workers spend their days. Brazil’s labor courts have sided with workers to potentially award millions of dollars in overtime pay to workers who are required to check and respond to e-mail after hours. U.S. employers must consider this possibility when requiring employees remain connected 24 hours a day seven days a week (Associated Press, 2012).

Surveillance cameras, time-keeping card swipe machines, and other theft detection devices are essential in wage control and loss prevention. Statistics from the Association of Certified Fraud Examiners show companies are experiencing a 27% increase in employee theft. Seven percent of revenues are lost to fraud. Three percent of retail workers experience arrest for workplace theft. We know below-standard pay rates can lead to higher employee theft rates (Campbell, 1997), but what about the theft of time? Most employees do not come to work with the “intention of stealing time”; however, it happens and unproductive on the job time costs employers billions of dollars each year (Montoya, 2010, 90-91).

Trained managers learn early on about the classic concepts of “sauntering” and “soldering” from Adam Smith and Frederick Taylor, respectively. Time between operating room
turnovers, production line refits, and meeting punctuality can mean dollars to the bottom line. We all know time is money. Managers must prevent distractions on all fronts as the associated time and materials. The economics of water cooler talk and workplace social interaction is not the focus here. What is important is the ability and “desire of workers” to put in a full day’s work while quickly adapting to change (McKenzie, 2004, 17).

Managers do not have to drive workers as in previous history. Nor does one have to condone a total hands-off approach. A sustainable return on investment elicits a culture of mutual respect wherein the worker appreciates the manager as he or she operates in a management-by-walking-around (MBWA) environment.

As we have discussed, leadership, wisdom, and discernment (collectively ‘leadership-wisdom’) are circular and require disciplined repetition, until one desires to stop being an effective leader. We see effective leadership as the understanding of equifinality and multiplicity. Equifinality is a principle observed in open systems, and of course, effective leadership is nothing if it is not an open system. Equifinality simply means there exist many potential means to desired ends (Von Bertalanffy, 1968). It implies that individuals and organizations can obtain advantages and success in substantially different ways and that what worked or works for one may or may not work or apply for another at the same or another time (Mendenhall et al., 2008; best global leadership research review). Multiplicity implies every “thing” (all of which humans work with and for) becomes increasingly more complex, ambiguous, and uncertain in depth and breadth, and there become more “things” over time. Finally, we see leadership-wisdom often is useless if one selects the wrong issues to address. For indeed, an individual’s most valuable asset is not his or her time, but what he or she pays attention to and focuses on. Time alone goes on, and it is of little value if attention and focus are on the wrong topics. Managers, at any level, cannot afford not to prevent distractions. Extending that thought, Steve Jobs said, “People think focus means saying yes to the thing you’ve got to focus on. But, that’s not what it means at all. It means saying not to the hundred other good ideas that there are” (Rumsfeld, 2013, 305).

The Wall Street Journal (2012) recently reported on timesaving, focus-driven, meeting techniques at Atomic Object. The software company knows the value of time, and how meetings can distract and dilute time value, but it knows meetings are vital for communicating vision, colleague interaction, and the like. It uses stand-up meetings to capitalize on and counteract the human physical need to sit. With the posterior out of the equation, the meeting can commence in an orderly, focused, and efficient manner (Silverman, 2012, February 12). Therefore, let us discuss the worst things individuals acting as leaders and managers normally do. These “worst” leadership or management failing time-wasters normally center on effort or ethics; instead, they are (1) failing to act – no decision, or (2) selecting the wrong issues to address.

1. No answer is an answer on the side of inaction; and, only when you act will you know what to change: Be a doer, and do not stay wrong or comfortable long.
2. One side of any issue also has its reverse side; there are at least two views of the same thing, and most things are good at one time and bad at another. Remember Covey’s fifth habit: “Seek first to understand then to be understood” (Covey, 1989, 235).
3. In education, business, life, and happiness, the main causes of failure are inaction and staleness: Be proactively innovative, and take safe risks.
4. Education starts by admitting ignorance for we are all ignorant but on different subjects in different ways: Intend to understand, before being understood.
5. Learning makes for a full life in that it ensures a person at least can be fit company for him- or herself: Become a lifelong learner.

6. Everyone is entitled to his or her opinions, but not to his or her own facts, and we can never be quite sure what the facts are: Be open to the fact that you might be right or wrong and that the source of useful facts may be uncomfortable to you.

7. For every complex problem, we find simple easy explanations or solutions that are wrong: Curiously appreciate equifinality and multiplicity.

8. Grow and remain above board (legal, ethical, fair, above the fray) in all actions, and help others grow professionally, relationally, educationally, intellectually, physically, spiritually, and, simply as a human: Be the example as a life-long student, and teacher-mentor and mentee.

9. Make everything as simple as possible, never simpler: Know what is important and what is urgent, and don't confuse the two.

10. If you don’t know, you will not grow: Mind your own gaps first – stay informed enacting your own future.

Managers Must Act Decisively in the Face of Known Distractions

As a bookend of sorts to the first test, the last is very similar. If we only see what we want to see, we will never act intentionally and deliberately for ways to change and improve. Manager and leaders must act decisively to prevent or remove known distractions. Recognizing the conditions for distractions is the first step, but doing something about it is the execution we managers value. We recommend the following for addressing three prominent distractions we see in many firms. Use these as a starting point to remove and correct the distractions that exist.

First, work within your company’s Information Technology policy to allow employees some Internet access. Work to achieve group norms at a level of trust such that employees police themselves and each other. Make the Internet a positive distraction.

Second, require a written agenda for all meetings, and stick to it – even the finish time. Do not allow smart phones or e-mail during the meeting. You are the leader; your employees are depending on you to make the most of their time. Remember, a formal performance appraisal is one of the most important meetings managers have: Do these only when you are willing to turn off all—and we mean all—electronic devices and concentrate on the task at hand. Yes, we are saying you need to have and follow an agenda when you are doing a performance appraisal. Provide slack time to get to points the person needs or wants to discuss, but schedule that time.

Third, set presentation standards early, and stick to them. Employees should know that aside from proper spelling and grammar, full color and opulently bound presentations are not necessary for internal use. You want your employees spending their time on content, not developing the next great background and clip art. If one’s company has developed a standard PowerPoint presentation format then use it. Moreover, insist on punctuality at all meetings as a must.

Conclusion

This article does not intend to cover all types of workplace distractions. Instead, it uses an accepted legal doctrine as a metaphorical approach to management. The authors encourage
management to look for rubrics, models, and tools to execute management responsibilities effectively. The Attractive Nuisance is simply a way to explain workplace distractions. The ability to use discipline in everyday management life protects against distractions. E-mail, the Internet, and texting are social norms with great efficient value. PowerPoint, data mining, and immediate information access produces a quest for perfection. Unfortunately, organizations can allow these to become an “attractive nuisance.”

Use the tools in this article to evaluate yourself. Identify known and unknown distractions. Bring awareness to these among your staff. Make empowerment agents to manage distractions on one’s behalf. Knowledge workers appreciate technology; the manager-leader’s job is to help them channel that appreciation and facilitate their success (Angus, 2006).

Everything eventually has its tipping point (Gladwell, 2002), and in today’s hyperlinked, over-informed and under-considered world, we are fast approaching that point with the number and complexity of our “Attractive Nuisances.” Always analyze your reasons for failure, and you often will see it is because of not attending to the right things at the right time (Dorner, 1996; a must read on the logic of failure). “The 3 Cs to Control Distractions.” Manager-leaders Choose to Change within Changeless Principles. Anything outside this is pure distraction. Make your “3 Cs” focused attentively on intentionally and deliberately recognizing attractive nuisances, and you will jump-start your success.

References


Associated Press. (2012). Brazil: Checking e-mail after hours? It’s overtime, January 12.


About the Authors

Jeffrey W. Dance, M.B.A. (jwdance@samford.edu) is Management Instructor at Samford University, in Birmingham, Alabama. Dance had extensive and varied experience in many managerial assignments in the corporate arena before starting his own consulting business. He has adapted quickly to academic work, publishing several articles in his first year.

Robert W. Service, Ph.D. (rwservic@samford.edu), is a professor of leadership at Samford University in Birmingham, Alabama. He received his Ph.D. in 1993 after a success career in executive management. As a professor, he has won the University-wide teaching excellence award and publishes extensively in areas of management, leadership, crossing cultures, information systems, and others. His work has taken him to Croatia, Ukraine, England, Germany, and Kenya among other locations.
Discussion Questions

1. Many sports use terms from other sports to describe scores, plays, etc. (a baseball shut out with the winning team scoring three runs may use the tennis term of “3-Love” to describe the score). How might business use other disciplines’ models to articulate business concepts – as in the Attractive Nuisance?

2. The article stresses management by walking around (MBWA) as a tactic to prevent workplace distractions and wasted time. How might a manager-leader execute MBWA tactics without losing employee trust, engagement, and morale?

3. What does this article imply about the manager-leader’s intentional responsibility to prevent and remove activities that are value detractors in the place of value generators?

4. Research indicates that no-one can multi-task without losing quality or taking more time. How can we use this article to get people to utilize their time better by structuring it and avoiding the many attractive nuisances that pull managers and workers alike in all directions?

To Cite this Article

“Flight of the Firebird” (2013)
Acrylic on canvas (18 × 24 in.)
Painting by Pedro A. Figueredo

Image Copyright © by Pedro A. Figueredo
All rights reserved. Used with permission.

This painting is inspired by the music for the ballet ‘The Firebird’ by Igor Stravinsky.
Group Emotion in Spectator Sport: An Interdisciplinary Approach to Affective Qualia

Hyun-Woo Lee
Young Do Kim
Joshua I. Newman
Yukyoum Kim
The Florida State University

Abstract

Spectator sport entails unique individual and collective cultural practices, often bound to the production and negotiation of emotion. For instance, the neurophysiological mechanism of mirror neurons—activated in imitation and empathy—evidences the social functionality of collective emotions. Accordingly, in congruence with the token identity theory, we shed light on the group emotion theory by reinforcing and clarifying the psychological and sociological aspects of group emotion. We discuss the ways in which emotion is manifest—as a neurophysiological state. Next, we describe the social significance of group emotion with regard to embracing cognitive-affective system and sociability function. We then discuss the relationship between bodies, sport spaces, and the production of spectator sport-specific group emotion along the five elements influential to group emotion: (1) identicalness of the stimulus object, (2) uniformity of the functional organization of the neurophysiological state, (3) readiness of emotion in the cognitive-affective system, (4) physical and psychological connection, and (5) structural and cultural contexts. We conclude by identifying phenomenological properties of group emotion and provide a discussion describing implications based on the findings of qualitative inquiry and empirical assessments.

Keywords: spectator sport, group emotion, affect, qualia, psychology, sociology
Introduction

Group emotion is a construct in which two or more people experience a collective and shared emotion. The construct of group emotion inherently embraces the mental state, bodily reaction, and phenomenological interplay of affective response(s). As such, we argue and explicate the epistemology and ontology of the mental states, physical states, and sociological phenomenon of group emotion to expand the discussion and implications of the concept. In this article, we integrate identity theory of mind and body, as a philosophical premise, with contemporary theories of emotion in psychology and sociology. In this, we identify the gaps in the existing literature for the study of group emotion. Taking this approach can reconcile the contradiction of some paradigms and disciplines while clarifying the boundaries and elements of group emotion. Further, it establishes the foundational basis for the speculation of group emotion.

Group emotions have a unique function of being collective (Niedenthal & Brauer, 2012), and exemplification of this phenomenon is prominent in spectator sports. Unified emotional outbursts by spectators at sporting events are a common, if not expected, phenomena. Indeed, part of the allure of sport is the unknown outcome, which means a clutch play or a last minute upset is likely to arouse powerful emotional responses from sport spectators. Expressions such as wild cheering for a spectacular performance, booing a bad play, and ritual body movements such as the “wave” are all representative of outbursts by spectators that people can witness frequently at the group level. Therefore, in light of the pervasiveness of emotional convergence among sport spectators, it is surprising that cognitive-affective personality systems (i.e., human information processing system reflecting individual differences in responses to social and emotional stimuli; Mischel & Shoda, 1995), with particular reference to the phenomena of group emotions in this context, have received insufficient scholarly attention. Emotional expressions and experiences, whether they take place inside or outside a sport organization, are usually the result of social interactions, and have been an area of interest among scholars across disciplines for decades (e.g., Grandey, 2000; Gross, 1998; Hochschild, 1983). The majority of sport-centered research in this area (e.g., Crisp, Heuston, Farr, & Turner, 2007; Funk & James, 2001; Trail & James, 2001; Wann, 2006; Wann & McGeorge, 1994) focused on sport consumers’ individual emotions, a concept similar to, but still distinct from, the concept of group emotion.

Psychologists understand emotion as a synchronization of various components (i.e., operation of appraisal, action readiness, and control precedence on feelings, behaviors, and bodily reactions) that flexibly influence each other (Frijda, 2008; Scherer, 2000). The focus of this article is the emotion existing at a group-level in spectator sports. The concept of group emotion holds particular relevance to sport marketing research and practice because it is the distinguished, first-hand experience of sport by spectators that can serve as a catalyst to psychological and social sport outcomes (e.g., identity, involvement, satisfaction, attitudes, behavioral intentions, consumption). Therefore, the purpose of this article is to examine the role of group emotion in a spectator sport context by integrating phenomenological properties such as psychological, neurological, and sociological aspects (e.g., performance, space) into a unified framework.

To that end, we first outline the philosophical premise of our approach and the foundations of emotion. Next, we reconsider the group emotion phenomenon through an interdisciplinary approach. Then, we further discuss interrelationships among bodies, sport
spaces, and the production of group. Finally, we discuss the findings of this article, implications, and suggestions for future research.

Identity Theory of Mind and Body

The identity theory of mind and body is a philosophy of mind asserting the articulation of each mental state to a physical state. Early theorizations asserted identity theory mainly in accordance to Occam’s razor (a rule of parsimony suggesting scientists should select the hypothesis with the simplest explanation and fewest assumptions), i.e., by its virtue in simplicity and explanatory utility compare to mere correlation or dualism (Place, 1956); or considering the correlations between phenomenal experience and neurophysiological process as contingent identity (Feigl, 1958, 1967). In this, philosophers considered the ontology of qualia, the subjectively remaining instances of individual experience or unexplainable nomological danglers that are disparate with experienced qualities themselves, as a phenomenological fallacy and representation of different conceptual systems (see Kripke, 1980; Smart, 1959; Solomon, 1976).

A more liberal identity theory of mind and body identifies each mental state with a physical state by its causal role. Lewis (1966) argued that “[T]he definitive characteristic of any (sort of) experience as such is its causal role, its syndrome of most typical cause and effects”; this type of mental state as such is tied with a physical state; and thus physical states are identical to the experience. In this argument, Lewis went beyond the need of parsimony to accept identity theory by identifying a physical cause and effect to a psychological predicate.

Enc (1983) further defended identity theory from both functionalism and behaviorism by identifying the functional organism of correlations between psychological predicates with neurophysiological states, even when the behaviors may not by identical (i.e., token identity theory). That is, we can logically reduce a psychological predicate to neurophysiological states consisting of each functional organization. Taking this assertion fully supports the ontology of the physical (neurophysiological) states in such identity between the mind and body. For instance, recent evidence from neurology indicated the function of small regulatory RNAs on neuronal identities (Li & Jin, 2010); and the role of jumping genes in forming different functional organizations in neurons among identical DNAs (Gage & Muotri, 2012).

As entailed by type identity, a token identity also asserts the identification of a kind of mental state with some neurophysiological function. Although it is a weaker assumption than the type identity theory, the token identity theory can embrace the external causes and effects to the mental state. That is, while holding the identities with some physical state, the token identity theory can overcome the limitations of type-type identification: Logical properties of (e.g., Kripke, 1980; Solomon, 1976) and nomological danglers (Smart, 1959) consisting of disparate states of identities and multiple realizations all can be fully consistent with the theory. We take along this approach as a means to elaborate how emotion comes to life through communal spectating, and how we might study it more holistically—in the context of group emotion. In the following section, we address the developments of contemporary theories of emotion and its consistency with identity theory.
Emotion

More than a hundred years ago, James (1884) postulated that “the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur is the emotion” (pp. 189-190). That is, the mind's perception of a physiological state coming from a stimulus is the emotion. Cannon (1927) criticized James’s theory by reporting that the viscera do not always cause an emotion. That is, emotional expression results from functions of hypothalamic structures, and simulations of dorsal thalamus causes emotional feelings. Since then, researchers continuously explored each part of the brain and its functional organization as such related to emotion (e.g., the limbic system; MacLean, 1949; Papez, 1937). Consistent with this line of development of theory, recent examinations from the neuroscience field are continuously providing rich and rigor evidences of associations of emotion and neurophysiology (see Dalgleish, Dunn, & Mobbs, 2009). Reiterating, the bodily responses as emotions consist of a neurophysiological state, which is consistent with identity theory.

Solomon (2008) agreed with this line of theory and traced the nature of emotional feelings to quite particular and verifiable bodily responses. Further, Solomon argued that researchers should not narrow the phenomenology of emotional feelings only to this point of view of associating bodily responses to mental states. In this, he argued that researchers should consider the qualia in the experience of having an emotion and the intentionality (i.e., aboutness; engagement with the world) of it. He suggested that emotion is always about something (an object), albeit it may be unconscious; and further explicated that social situations along with a person’s belief and attitudes influence the readiness to feel the emotion, the appraisal of it, and relative cognition. Similarly, Baumeister, Vohs, DeWall, and Zhang (2007) proposed a feedback theory of emotion that suggested automatic affective responses (unconscious) and conscious emotions, whereby feedback process of social cognition involves in similar responses to stimuli, influence behaviors. By incorporating human interactions and social organizations, furthermore, it is necessary to extend the theoretical boundary emotion to the field of sociology.

From a sociologist’s view, emotion is a relatively new topic, as early sociologists (e.g., Durkheim, 2001) did not detail their analyses for foundational statements with regard to emotion (Stets & Turner, 2008; Turner, 1999). Compared to its longtime popularity in psychology, it has been only recent that sociological theories of emotion have emerged (e.g., Heise, 1979; Hochschild, 1979). Accordingly, Thoits (1989) asserted there are two approaches in the sociology of emotion (i.e., social psychological ‘micro-level’ approach; structural-cultural ‘macro-level’ approach) that address the social situation, historical, and cross-cultural influences; and since the field is newly emerging (Jasper, 2011; Stets, 2005; Turner & Stets, 2006), he suggested researchers should continue to develop empirical analysis and theoretical development, along with rigorous measurements and methods. Turner (1999) identified the demographical, structural, cultural, and transactional forces as expectations of emotional experience and postulated the various relationships with the experience of emotion.

Stets and Turner (2008) proposed an integrative analysis of sociology of emotion by speculating the relationships among dramaturgic approaches emphasizing culture; structural approaches in both micro and macro levels; symbolic interactionist approaches emphasizing cognitive appraisals of self and identities; ritual approaches; and exchange approaches elucidating the interactions in emotional experiences. As a universal concept existing in human activity
(however minimal it may be), it is apparent emotion is connected with most sociological approaches. However, researchers in sociology have neglected to develop systematic method or a holistic approach to clarify the theory of emotion (e.g., in account to Occam’s razor). Specifically, they have—in our view—failed to sufficiently systemize a way of thinking to initiate the study of group emotion in sociology.

Whereas researchers have studied extensively the function of emotion between individuals, on the whole, the field lacks a perspective to study it on a group level (Niedenthal & Brauer, 2012). For instance, research in psychology mostly explores emotions in relationship to cognition and attempted to reveal the mechanisms in the affective system (Cacioppo & Gardner, 1999). It has been only recent that sociologists considered emotion by its ubiquitous relevancies with various theories (Turner & Stets, 2006). However, when considering the cognitive-affective system (Mischel & Shoda, 1995) with the phenomenological properties in a group emotion experience, we need to integrate both the individual state (i.e., psychological state; bodily reactions) and situational qualia (i.e., developmental influences; concurrent social interactions) to understand better the group emotion.

Consequently, focus on emotion is relatively new and research on emotion has limitations in its scope and refinement. Moreover, there has been a general lack of concern for integrating the external societal aspects with the internal cognitive-affective system. Accordingly, we argue the token identity approach can clarify the theory of group emotion by its simplicity and explanatory function in embracing the mind and body with the qualia. In the following sections, we further elaborate on group emotion in congruence with the token identity theory.

Speculation of Group Emotions

Significance of Group Emotion in Basis of Token Identity Theory

In line with the token identity theory, we define group emotion as an emotional state that two or more people share collectively. In the functional organization of group emotions, we identified three objectives interrelated with causes and effects among each other: the emotional stimulus object, the individual, and the others. In this, each person present at an event can each be an emotional stimulant to others when a group of spectators is simultaneously responding to an intentional object. Furthermore, the magnitude of group emotion is dependent on several elements operating in the phenomenon.

In this current article, we introduce the five elements influencing the degree of collectivity: (1) the identicalness of the stimulus object, (2) the uniformity of the functional organization of the neurophysiological state, (3) readiness (awareness) of emotion in the cognitive-affective system, (4) physical and psychological connection, and (5) structural and cultural contexts. Consistent with the token identity approach, the first element is a necessary condition, while the second and third elements relate with the identity of mental and physical states; and the fourth and fifth more closely deal with the aspect of qualia of the experience. With regard to the sociology of emotion, the phenomenology of such emotional experience embraces perceptions of the self and identity, and space and time.

The five elements are all-important factors of a collective group emotion, and can intensify such group emotion when those are focalized. For example, a buzzer beater of a champion match amplifies emotional arousal of an individual amid a crowd of spectators because
most crowds focus together on the (success or fail of the) final shot and that the fans’ neurological reward (e.g., dopamine mechanism) to such victory are very similar. Moreover, when this is the case, the fellow fans surrounding each other are likely to experience the embodiment of such emotional sport consumption. In that moment when consumption, emotion, and performance of fan identity coalesce, the individual can socially learn the importance of the event and the consumption culture of it through observation and mimicry (Hatfield, Cacioppo, & Rapson, 1994). That is, the five elements closely relate to the emergence and intensity of collective group emotion. By integrating the aspects from individual level to dyad and social levels, taking the approach of considering the five elements can improve the holistic understanding of the phenomena of group emotions.

Taking this approach has many benefits, compared to the various forms of scattered research in each field. Foremost, the umbrella of token identity theory provides a consistent way of thinking with regard to the epistemology and ontology of emotional experience. Specifically, the identity between the emotional state and neurophysiological state can benefit the study of individual-psychological ‘micro-level,’ and taking account of the qualia aspect can benefit the cultural-sociological ‘macro-level’ of the analysis. For instance, researchers can investigate the function of mirror neurons at a micro-level, and investigate human interactions and those contexts at a macro-level. Thus, as an interdisciplinary topic, speculation of group emotion based on token identity theory provides a basis to clarify the issues and conflicts inherent in various approaches.

The concept of group emotion expands the theory of emotion to a collective level involving societal influences. Moreover, the token identity approach can be most heuristically rich for its analysis by providing a unified framework of to the holistic view of the phenomenon. Many differences exist in this conceptualization. First, this approach suggests a designation of collective group emotion involved with the stimulus object, the individual, and the others. Second, it provides means to research the characteristics of a certain group emotion and its functional organizations. Third, it provides ways to compromise the qualia in to the formation, state, and group behaviors. That is, the current integrated approach can achieve a holistic analysis of a necessity and reality of a group emotion phenomenon in context to its situated danglers. For instance, along with scientific evidences such as neurophysiologic responses in a realistic group spectatorship, researchers can further consider social and cultural conditions in the study of group emotion, particularly by synthesizing phenomenological perspectives.

We further elaborate the phenomenology of group emotions in a spectator sport context. Sport is a unique site or context of consumer culture where people present their outbursts of emotion in a large scale, which can provide insights to building theoretical frameworks in its applied science field (Lanzetta & Englis, 1989; Niedenthal & Brauer, 2012; Rimé, 2007; Underwood, Bond, & Baer, 2001; Zillmann, Bryant, & Sapolsky, 1989). Speculation of emotions through the phenomena of sport, and vice versa, should enhance the understanding of the group emotion phenomena. For instance, a spectacular play or a win in a big game (e.g., North Carolina’s men basketball team being upset by Duke on its home court) is likely to create emotional outbursts from spectators who may identify with other spectator’s emotions and take on unified emotional displays. Furthermore, claiming the group emotion does not mean it is separate from individuals’ emotions. Rather, as aforementioned, the strength of this approach is in providing means to further elaborate a collectively shared emotion in units of groups or
imaginative communities; constituting a dialect of emotional performance. Hence, we explicate the internal process of group emotions and its function of sociability in the following sections.

**Internal Process of Group Emotion**

Direct spectatorship is not the only way to consume a sporting event, but conceptualizing such process of sport consumption, via a hypothetical scenario (i.e., actually attending a sporting event), can offer a certain heuristic rendering of the internal process of group emotion. First, buying a ticket or entering the place where the game is happening (e.g., stadium) stimulates an individual’s readiness of emotion in the cognitive-affective system (Mischel & Shoda, 1995; Uhrich & Benkenstein, 2010). Second, watching the players stimulates a person’s emotion in the cognitive-affective system. Third, people around the individual stimulate a person’s emotion in the cognitive-affective system. The approach of token identity further exemplifies the internal process of group emotion in the spectator sport context by taking account the influences of cognitive-affective system and qualia into account.

Identity (social role) is a widely recognized construct to influence cognitively an emotional experience (Smith & Mackie, 2008; Stryker, 2004). When people share and unify their identity, it is more likely individual emotional experiences and a group emotion will be more intensive. The mechanism in the affective system involving group emotion is the mirror neurons. Mirror neurons can reproduce perceived emotional states and responses in a biologically similar fashion (Di Pellegrino, Fadiga, Fogassi, Gallese, & Rizzolatti, 1992; Iacoboni, 2009; Niedenthal & Brauer, 2012; Rizzolatti & Craighero, 2004). As the neurophysiological state by functional organizations, this mechanism connects into further theorization of the psychological predicate—group emotion.

Recent scientific evidence considers mirror neurons as the mechanism of imitation and empathy—sharing emotions (Iacoboni, 2009; Rizzolatti & Craighero, 2004). Empirical evidence of this neurophysiological mechanism provide exploratory power to the theories of psychology (e.g., cognitive learning; empathy) and sociology (e.g., mimicry; social actions). For instance, neuroscience experiments using functional magnetic resonance imaging (fMRI) have shown activation of human inferior frontal cortex and superior parietal lobe when the person performs or sees another individual performing an action (see Iacoboni, 2009). Furthermore, integrating this mechanism into the social sharing chain of emotion experience such as experiencing a sporting event can elucidate the functions of individual and collective processes in the construction of emotional climates (Rimé, 2007).

In psychology, sport spectatorship may pertain to the activation of mirror neurons in that people (1) imitate others’ behaviors (e.g., chants; uniformed bodily performances); (2) make association of identity in their perception and action (e.g., cheering the home team or the away team); and (3) implement empathy among players and other spectators at the place. Moreover, as a large-scale network for empathy composed by the mirror neuron system, the insula and the limbic system (Iacoboni, 2009) performs in intensive emotional outbursts in a stadium. That is, athletes and spectators show imitation and empathy by means of interactions with psychological situations and phenomenological qualia. Among the extensive social aspects to this phenomenon, we narrow the scope of discussion to ‘sociability’ in the following sections.
Sociability of Group Emotion

From the early stage of its study, scholars of sport recognized the sociability function of spectatorship. In the post-industry society, Anderson and Stone (1981) emphasized the role of secondary relationship in sport spectatorship as a replacement of primary relation of work as a central life interest. Melnick (1993) promoted the possibility of sociability and its spontaneous conditions of sport by identifying casual sociability as a coping mechanism of urban dwellers facing loneliness in the individualized city. Perceiving spectating sport as an alternative to Tonnies’ notion of *gemeinschaft*, Ingham and McDonald (2003) postulated functions of spectatorship to serve momentarily in the generation of spontaneous *communitas*—a ritual process uniting people (see Turner, 1969). In this line of theorization of relationships between representational sport and communities, scholars have been able to consider spatial and temporal aspects (whether proximal or distant) along with the individual’s involvement. That is, this line of research illuminated the political economy of communal bonding through sport.

Group emotions can provide theoretical progress to the mechanisms of rituals. For instance, rapid interrelations of embodiment of emotions and mimicry of bodily responses can explain the social functionality of human emotion (see Niedenthal & Brauer, 2012). Moreover, as rituals can promote the imagination of community, group emotions in a sporting event can foster the alternative *gemeinschaft* as representations collectives (Durkheim, [1912]2001; Ingham & McDonald, 2003). Further, Durkheim identified that the co-presence of individuals and rituals directed at totems can create positive emotions. Through the aforementioned large-scale network for empathy (involving mirror neurons), we assert the utilization of group emotion, especially, in a sporting event amplifies sociability. Furthermore, we assert that this function of group emotion is the essential of positive effects of in sport consumption (e.g., psychological well-being; Wann, 2006).

Bodies, Sport Spaces, and the Production of Sport-Specific Group Emotion

In this final section, we discuss the interrelationships among bodies, sport spaces, and the production of group emotions along with the aforementioned five elements influential to group emotions: (1) the identicalness of the stimulus object, (2) the uniformity of the functional organization of the neurophysiological state, (3) readiness (awareness) of emotion in the cognitive-affective system, (4) physical and psychological connection, and (5) structural and cultural contexts. Figure 2 represents these elements that intensify the production of group emotion in spectator sports. Mainly, we utilized the approach of symbolic interactionism (Mead, 1934) for this investigation.
Figure 1. Influential elements of group emotions.

In a sporting event, the main emotional stimulus object is the athletes while the surrounding environment still can mediate an emotional experience. Also, others at the place can influence the group emotion. In terms of bodies, athletes and others at the place involves with a person's group emotion. In this, the space and environment provides meaning to the bodily performance. To explicate the group emotion at a sporting scene, we adopt van Ingen’s (2003) approach to space in relations to performing bodies.

Carrying on the theorization by Lefebvre (1991), van Ingen (2003) asserted the three moments in the production of space: spatial practice, representations of space, and spaces of representation. Spatial practice refers to the perceived space; the production and use of material or physical space where movement that takes place. Representations of space refer to the conceived space; the symbolically imagined and constructed through discourse of thoughts, ideas, plans, codes, and memories of it. Spaces of representation refer to the lived space that combines the real and imagined space.
In the case of sporting events, we assert the construction of group emotions in and through the use of a stadium because the perception of affective sense of pride and attachment to individuals’ hometown stadium surrounded by their community increases favorable attitudes toward “our territory” here versus “their territory” there. The concept of topophilia described by Tuan (1974) further solidifies this notion. The concept of ‘topophilia’ postulates the ontology of emotional states. This theory asserts that individuals instinctively show strong attachment to a certain place or setting in where they have learned across time from their multifarious social and personal experiences and have made emotionally positive memories. The concept of topophilia properly captures the sharing emotion that many sports fans have for their hometown stadium (Bale, 1996). Further, patterns in the placement (spatial arrangement) of bodies in a stadium can marginalize or incorporate the spectators. These assertions now lead to further theorization.

The spatial practice sets the readiness of emotion. The general and historical spatial form of a sport stadium is in a circular shape (e.g., Coliseum), where spectators can see the athletes and the other spectators near or across them. The significance of a stadium in contemporary societies is that it accommodates up to more than 100,000 people at the same time in a singular boundary of space (e.g., Michigan Stadium or the Talladega Motor Speedway). Moreover, in a stadium people share identities with a certain team or player, thus identicalness of the stimulus object is very likely. It is difficult in the contemporary fractionized and urbanized society to meet people sharing such identities in a compact formation. Therefore, the spatial place of massive sport consumption inherently implies social significance in contemporary society.

Developmental history of one’s cognitive-affective system influences the representation of space. In this, similarities in the functional organization and cognitive social learning history can lead to collective appraisal of the space. For example, people who grew up watching and following the Boston Red Sox might likely have similarities in their appraisal of the Fenway Park by sharing the identical historical moments. Thus, people can learn the uniformity in emotions in a group setting and reciprocally influence the readiness for future spectatorship. In addition, representations of space develop sport spectators’ collective appraisal regarding the appreciation of a sport team. According to Holt’s (1996) two-year observational case study of baseball spectators, a primary reason for many Chicago Cubs spectators to express their collective emotion at the live sporting event was the symbolic ambiance created at Wrigley Field. Holt conveys that spectators appreciate Wrigley Field as being one of the few remaining classic ballparks (1914-2013) that maintain a change of pace, discourse of history, image of design (a manual scoreboard), and idiosyncratic features (the old-time organ music, the vine wall).

Considering a stadium as a space of representation, we emphasize the role of the bodies to further discuss the lived group emotion. That is, activation of physical bodies in a stadium embodies collective emotions along with the associated *qualia* itself. In this space, most people have attended the event willingly, thus the readiness for group emotion is high. Accordingly, in contrast to marginalization, counter-marginalization can occur as people with lower involvement can mimic the intensive emotion as a result of emotional contagion (Hatfield et al., 1994). To reiterate, the readiness of emotion is likely to be salient by at least a minimal psychological connection with an (social or role) identity, thus emotional contagion as a mechanism can reduce the marginalization of the experience of the less involved spectators.

Physical connections, distance of bodies of group members, also influence the group emotion. In this, three factors can amplify the intensity of group emotions: the number of group members at the time and space, the closer the group members are together, and the closer the
highly involved people are together. If the group members, for example, of an away team are not close to each other but scattered all around in a stadium, the situational space becomes difficult for them to accumulate ritual behaviors of group emotion profiles as bodily interactions are disconnected. However, emotional contagion is more active and further amplifies uniformed bodily reactions when the physical bodies are close together. The more the physical bodies are salient, the more the emotions are collective: The magnitude of co-presence amplifies the ritual sensation. In total, along with the other elements of group emotion, closeness in physical connection with the group, and the involvement of its members are keys to the representations of the group emotion phenomenon at a space.

Discussion

Spectator sport entails unique individual and collective cultures that involve the construction and negotiation of emotional climates. Sport spectatorship, in particular, illustrating the social sharing chain of emotion experience tends to activate the mirror neurons, the mechanism of imitation and empathy. This neurophysiological mechanism connects into the further theorization of the psychological predicate–group emotion. In line with this perspective, the identity theory of mind and body elicited the philosophical premise of this study. This identity approach can reinforce and clarify the psychological and sociological aspects of the group emotion theory.

While difference in qualia exists in individuals’ emotional experience, taking the framework of token identity theory can analyze better the ontology of a space where it is happening and the functional organization of psychological predicate of group emotion (i.e., a holistic viewpoint to the phenomenon of group emotion). Reiterating, as a phenomenal property, effects of nomological danglers and qualia as such can influence the psychological predicate of group emotion. Compared to strict deterministic approaches, the token identity theory is a more liberal approach to a phenomenon: It is open to refinements for each claim. In accordance with our arguments throughout this article, the state of group emotion involves neurophysiological states with various functional organizations depending on qualia (e.g., social human interactions; Niedenthal & Brauer, 2012).

Carrying on the discussion, intentional objects trigger a person’s readiness of emotion in the cognitive-affective system. Within the phenomenon of sport, every person present at the sporting event can each be an emotional stimulus to each other when the intentionality of the arousal object is in function. In addition, the mirror neurons (i.e., mechanism of imitation and empathy) reinforce the phenomenological aspects of psychological mechanism of mind and body. That is, the spectators perform when they see another individual performing an action (e.g., hooliganism). With these lines of theory, we agree the nature of emotional feelings can articulate into quite particular and verifiable bodily responses (Solomon, 2008). In this sense, by adopting a holistic view of the phenomenon through token identity theory, scholars might be able to better integrate the reciprocal effects with societal influences in their theorizations of group emotions.

Implications

Considering that individual’s developmental history and concurrent aspects of qualia influence temporal states, which also leads to the future ongoing cognitive-affective system,
group emotion is both the expression and constitutor of collective embodiment. For example, bodily reactions to an emotional stimulus can express, grant, and reinforce collective identity and the according bodily performances (e.g., uniformed performance such as the tomahawk chop by Florida State University fans) can retrospectively reinforce the cognitive-affective system as the developmental history. Taking this viewpoint for a holistic understanding can be the most heuristically rich approach to embrace all aspects of group emotion.

In its simplicity and explanatory function to comprise every aspect (e.g., contexts such as space), the group emotion theory can (1) enrich the academic field toward better understanding of the concept; (2) promote the culture of sport by understanding the functional aspect of the phenomenon; (3) provide ways to sport managers for a systematic approach to apply the concept in management and market research; and, all in all, (4) work as a paradigm to embrace the concept for human benefits. For instance, scientists can utilize this framework in synthesizing the theoretical contributions from neurology, psychology, and sociology; identifying its function as alternative gemeinschaft in the rationalized society; embracing group emotion in managing environment of a stadium (e.g., color of the seats, sound effects during a game); elucidating the unexplained variations in marketing predictions (as studies based on functionalism elucidates a posteriori psychological constructs such as team identity as a manageable concept); and deepening the discourse of human being by the mechanisms and causes and effects. Future studies should contribute to the theory by elaborating this concept by the suggested ontology of its many aspects, and contribute to practice by realizing the theoretical establishments.

**Interdisciplinary Approach to Engaging Empirical Formations of Group Emotion**

Consistent with the token identity approach, we further suggest research methods to collect empirical evidence(s) of group emotion’s neurophysiological state, psychological state, functional organizations, and aspects of qualia. In this, we considered approaches to utilize the five senses (i.e., sight, sound, taste, touch, smell) as empirical evidence. In large, physiological, psychometric, and qualitative evidences are speculated.

Functional magnetic resonance imaging (fMRI) is the most recommended method to collect neurological evidence (see Phan, Wager, Taylor, & Liberzon, 2002). However, fMRI has limitations to the participant’s movement and is not practically available to the researchers in sport management. In comparison, psychologists frequently use Electroencephalogram (EEG) due to its flexibility on dealing with participant’s movement. Accordingly, EEG oscillations in the mu frequency (8–13 Hz) over sensorimotor cortex is an event-related potential reflection of mirror neurons (Oberman et al., 2005)—activity of sharing emotions. That is, correlation with the EEG measures can reflect the intensity of group emotion. Further, researchers can utilize this physiological measure as a criterion variable of psychometric measures.

Psychologists also frequently use psychometric measures to quantify group emotions based on identities (e.g., Barsade, 2002). Particularly, Smith, Seger, and Mackie’s (2007) multi-level analysis indicated that group-level emotions can exist distinctive with individual emotions, and are inherent in group members sharing a social identity. In addition, by a survival analysis, Verduyn, Van Mechelen, and Tuerlinckx (2011) provided evidence that our affective system prolongs the duration of emotions when valence in the following behaviors are matched, and socially shared. However, we note that these survey-based measures are a posteriori contingent data involving cognitive evaluations. Thus, researchers must be careful in applying psychometric
analysis to explain the psychological predicate of group emotions. To that effect, in practice, researchers must cautiously identify and monitor confound variables.

While researchers can utilize physiological and psychometric measures to detect the psychological predicate, other spontaneous variables also could reflect the intensity of group emotion. For example, researchers could match the flow of noise (dB) during a sporting event with play records in reflection of group emotion. Also, researchers could measure the change of temperature and movement during a game by infrared cameras. Whenever consistent with the conceptualization, there can be numerous ways to identify, observe, categorize, and measure group emotions. In addition, other widely used methods of psychophysiological evidence such as biofeedback and electromyography (EMG) need consideration. Last, we suggest a qualitative method to analyze group emotions in that such affective qualia in group emotions is difficult to quantify through existing psychometric methods.

Ethnography is, for instance, a popular method of qualitative inquiry. By utilizing the researcher as the tool for research, researchers can implement ethnography to study group emotions. The greatest advantage of this qualitative method is the researcher can capture the holistic phenomenon and, especially, the qualia of group emotion. For example, researchers can use every activation and environment that is observable, hearable, and even abstractly conceivable. Drawing upon idiographic rationalities (as opposed to reductionist, nomothetic approaches), the ethnographer might be able to more inductively and holistically capture the complex nature of affective performance of group emotion—exploring emotive relationships in open-ended and socially-constructed ways. By departing from rigorous (positivistic) scientific methods, qualitative inquiry can enhance the theory of group emotion, particularly when taking the token identity approach. It is the concentration of the token identity approach to group emotion that researchers should analyze all evidences of the holistic phenomenon in a harmonious manner.

Conclusion

In the current article, we explicated a holistic framework to the study of group emotion. This article limits its boundaries, however, to the conceptual explications of psychological, sociological, and phenomenological aspects. Thus, future research should work to integrate neurophysiological evidence and molecular mechanisms of group emotions. Also, empirical examinations and evidences should accumulate and refine the framework. This theorization of group emotion sheds light on its functional roles in congruence with the token identity theory. In addition, we described the social significance of group emotion with regard to the cognitive-affective system and the sociability function. Next, we speculated the relationships among bodies, sport spaces, and the production of spectator sport-specific group emotion into the five elements influential to group emotion, namely (1) the identicalness of the stimulus object, (2) the uniformity of the functional organization of the neurophysiological state, (3) readiness (awareness) of emotion in the cognitive-affective system, (4) physical and psychological connection, and (5) structural and cultural contexts. All in all, the advantages of a holistic approach to group emotions and its implications at both micro and macro levels warrant future interdisciplinary studies.
References


James, W. (1884). What is an emotion? *Mind, 9*(34), 188-205.


**About the Authors**

Hyun-Woo Lee (h110d@my.fsu.edu) is a Ph.D. candidate in the Sport Management program at Florida State University. From 2002 to 2007, Hyun-Woo was a race car driver and marketing manager of the Synchro-G Racing Team (www.synchrog.com). As a racer, he made multiple appearances on the podium, including championships, in national races; as a manager, Hyun-Woo attracted sponsors and established the integrated marketing communication solution for the team. Carrying on his interest in sport marketing, Hyun-Woo now endeavors to research the phenomenon of sport. Hyun-Woo is certified in Measurement and Statistics by the College of Education and presented in multiple academic conferences around the globe (Korea, US, China, Australia). His research interests deals with interdisciplinary studies of human psychology, including the functional organizations of physiological and mental states of psychological predicates. Carrying on his passion to the study of positive psychology, Hyun-Woo loves to play sport and, in his spare time, devotes all his effort to his family; very happily.

Young Do Kim (yk09@my.fsu.edu) is a Doctoral Candidate in the Department of Sport Management at The Florida State University. His primary research area lies in the field of sport marketing. More broadly, he is interested in the realm of sport consumer behavior. From the consumer behavior viewpoint in particular, he currently focuses more on the study of sport fan equity.

Joshua I. Newman (jinewman@fsu.edu) is the Director of the Center for Physical Cultural Studies and Associate Professor of media, politics, and cultural studies in the Department of Sport Management at Florida State University. Dr. Newman’s research and teaching draw upon critical theory and cultural studies to interrogate the corporeal and political economies of sport and the active body. In addition to having published over 40 journal articles and book chapters on issues pertaining to sport, physical activity, and body culture, Dr. Newman is the author of two books: *Embodying Dixie: Studies in the Body Pedagogics of Southern Whiteness* (Common Ground, 2010) and *Sport, Spectacle, and NASCAR Nation: Consumption and the Cultural Politics of Neoliberalism* (with Michael D. Giardina, Palgrave, 2011). *Sport, Spectacle, and NASCAR Nation* was awarded the 2012 North American Society for the Sociology of Sport “Book of the Year” and in 2013 was selected as a Choice “Outstanding Academic Title.”
Yukyoum Kim (ykim6@fsu.edu) is an Associate Professor for the Department of Sport Management at The Florida State University. He received his Ph.D. from University of Florida. Most of his research lies in the field of marketing and sponsorship applied to the field of sport. Additionally, Dr. Kim has been involved in several research projects that focused on social media, cause-related marketing, fan identification, sport consumption motivation and constraints, service quality, sport product image, and curiosity. His accomplishments in the research areas above include 40 peer-reviewed articles in top sport- and business-related journals including the Journal of Sport Management, Journal of Business & Industrial Marketing, Journal of Management and Organization, International Journal of Sport Communication, European Sport Management Quarterly, International Journal of Sports Marketing and Sponsorship, and Sport Marketing Quarterly, and 58 research presentations.

Discussion Questions

1. What are the molecular mechanisms that amplify the intensity of group emotion?

2. Why do sociologists privilege performance and dramaturgy and psychologists privilege neurological processes?

3. How are we to explore further the unknown interactions between emotions and social contexts?

To Cite this Article

The Multiple Roles of the Organization Development Practitioner

Lawrence D. Hubbell
University of Wyoming

Abstract

The purpose of this article is to explore and analyze the multiple and sometimes contradictory roles assumed by the organization development (OD) practitioner. In this article, the author delves into the literature on the subject of OD practitioner roles as well as explaining the roles the author adopted in a particular OD intervention. In the author’s view, OD practitioners must maintain a high degree of flexibility during the course of an OD intervention, so as best to meet the needs of their clients. Depending upon the situation and the culture of an organization, the OD practitioner may assume different roles than those assumed by this author.

Keywords: organization development, role conflict, OD practitioner, OD intervention, facilitation

Introduction

Several years ago, a person who supervised the management of an organization—which for the purposes of confidentiality we will call Big River Accounting (Big River)—hired the author to resolve a serious dispute between that organization’s director and its associate director. (This author has changed the names of the organizational members and the nature of the organization.) The people who hired him did not want to choose between either the director or the associate director, but instead, they hoped the author could resolve their dispute. However, above all else, they wanted the dispute resolved because it was having a negative effect on staff morale and on the operation of the organization.

As a means of trying to discover the root of the conflict, the author interviewed not only the two primary disputants but also a majority of this organization’s employees. His interviews with staff were open-ended and began with roughly the following statement:
My name is Larry Hubbell. I teach public administration and specifically teach and practice organization development – the settling of conflicts between people in organizations. I am here to find out more about your organization so I can address some of the conflicts affecting your organization.

Any information you share with me will be confidential. I am not like a management consultant, who in some cases might make recommendations to management regarding what personnel actions should be taken. I am here solely to resolve disputes between some of the organization’s members.

In response, the author usually heard a long litany of this organization’s problems, and those problems usually revolved around either the director or the deputy director. Big River Accounting was an organization deeply divided by a conflict in which very few employees maintained their neutrality. Indeed, it was apparent the two principals in the conflict, especially the deputy director, openly sought out allies.

However, in retrospect, what made this organization interesting was not the intensity of the conflict, but rather the number of roles the author assumed as the organization development (OD) practitioner. The author, in advance of the intervention, did not plan to assume these varying roles, but rather assumed them because of the needs of the organizational members and his desire to resolve the conflict. This article presents a case study focusing on the multiplicity of roles this author adopted.

The author started his assignment as an anthropologist trying to discern the culture of this organization and understand the perceptions of its members. Although he never really stopped being an anthropologist, he next assumed the role of counselor, trying his best to provide his interviewees with unconditional positive regard. After gaining an understanding of the organization members’ perceptions, he then tried to serve as a mediator. When his efforts at mediation failed and one of the sides became particularly intransigent, he pushed himself into the role of judge. Finally, with some reluctance, he assumed the role of political player and provided one of the participants with the opportunity to “shoot himself in the foot.” This intervention, in short, was an ethical minefield, one in which the author assumed different and somewhat contradictory roles during the course of the intervention. In this article, the author describes what occurred in this instance to explore the contradictory roles the OD practitioner must adopt to ensure at least a semi-successful intervention.

**A Review of the Literature on the Characteristics of the OD Practitioner**

There is a limited body of literature in organization development literature on the role(s) OD practitioners assume, even though there is a considerable amount of literature on OD practitioners. Instead, writers on OD are more likely to focus on other issues related to OD practitioners. For example, a common subject is what skills and competencies OD practitioners should maintain. Schwarz (2006) notes OD facilitators should be substantively neutral, a third party, and a process expert. Carey and Varney (1983) note OD practitioners should possess the following skills: self-awareness skills, analytical-conceptual skills, and change influence skills. Eubanks, Marshall, and O’Driscoll (1990), in a similar vein, believe OD practitioners should have people, data, and delivery skills. Eisen (2010) likens the OD practitioner to an artist. Warrick and Donovan (1979) indicate they should have consulting, knowledge, conceptual, and
human skills. Not dissimilarly, Neilsen (1984) writes OD change agents should have conceptual, interpersonal, technical, and integrative skills.

Other writers have focused on what values motivate OD practitioners. For example, Van Eynde, Church, Hurley, and Burke (1992) note “Traditionally, OD values have fallen into two categories – humanistic and organizational effectiveness” (p. 41). Piotrowski and Vodanovich (2001) write that OD practitioners “have embraced a host of ‘theories’ which provide a knowledge base for the field” (p. 307). Furthermore, they note “OD practitioners apply a mixture of concepts, theoretical frameworks and ad hoc versions of organizational processes” (p. 308). Neumann, Miller, and Holti (1999) urge OD practitioners to expand themselves by developing “a broader and deeper theoretical and practical base than many currently possess” (p. 216).

With regard to the roles adopted by OD practitioners, Browne and Cotton (1975) write OD practitioners assume a role of marginality when they practice their craft in organizations. Speaking of consultants generally, Block (1981) notes they can assume an expert, pair-of-hands, or collaborative roles, or both. Mather (1973) believes OD practitioners play the role of broker between employees and managers. For Chandler (2001), the OD practitioner is both a facilitator and a leader. Neilsen (1984) discusses the adoption of roles by the OD practitioner as a process; for him that process includes role envisioning, role interaction, and role reaction. However, this author is not aware of any published work that discusses in any depth the multiplicity of roles an OD practitioner sometimes assumes within the context of an OD intervention.

The Principal Actors

- Jack Fielding: the Director of the Big River Accounting
- Steve Short: the Associate Director of the Big River Accounting
- Cynthia Morse: Jack Fielding’s supervisor and the person who hired the author
- Frank O’Reilly: Cynthia’s supervisor
- Dennis McLaughlin: the Administrative Officer
- Mimi Youngblood: Executive Assistant to Jack Fielding
- Theresa Stefano: Budget Manager

The OD Practitioner as Anthropologist

During the first stage of the intervention, the author was serving as anthropologist – trying to understand the values of the organization. The author finds it rather peculiar that there is very little overlap between the fields of anthropology and organization development, although the concept of organizational culture is a central concept in both fields. In conducting a search of the word “ethnography,” a common methodology used by anthropologists, the author found no articles in OD Practitioner pertaining to this topic and only one article in Leadership and Organizational Change that purported to be an ethnography (Cheng, 1998). Nevertheless, in the field of anthropology, workplace ethnographies starting in the 1970s have become increasingly common. Indeed, Hodson (2004) counts 149 examples of them, in his meta-analysis of workplace ethnographies (p. 13). Similarly, a review the author conducted of the Journal of Contemporary Ethnography found no examples of organization development interventions.
The author began his search to understand this organization’s culture by interviewing staff at Big River Accounting by receiving a thorough briefing from Cynthia Morse. Morse, among her many duties, oversaw the organization from a site roughly 50 miles away. Cynthia clearly was frustrated. She had made various attempts at trying to resolve the conflict between Jack Fielding, the director, and Steve Short, the associate director, but had been unsuccessful. Unfortunately, at this point, Jack and Steve were barely speaking to each other. Indeed, during the entire intervention, the author never met with both of them together. Cynthia also was somewhat pressured by her supervisor, Frank O’Reilly, to retain both Jack and Steve and, at the same time, resolve their conflict. Although on paper Frank was the supervisor of the larger organization, in fact, he relied upon Cynthia to oversee Big River.

When the author arrived at Big River ready for his scheduled interviews, he was somewhat surprised his interviewee Dennis McLaughlin, the Administrative Officer, was accompanied by Steve Short, who then took the opportunity to complain about the Director, Jack Fielding. To say the least, the author was put off by Steve’s aggressive manner and his intense lobbying. Nevertheless, he patiently listened to Steve’s long list of complaints during this interview and subsequent interviews, which were supplemented by more than 50 pages of e-mails, notes, and memoranda provided by Steve.

Steve’s complaints were as follows:

- Steve believed Jack had a pattern of making sexual harassing remarks to subordinate employees employed by the organization. However, no one in the past had ever filed a complaint against him. Recently, one employee, Theresa Stefano, at Steve’s urging, had come close to filing a complaint regarding a remark that Jack had made that she had thought was particularly egregious.
- Steve believed a recent organization plan had been handled poorly. For some time, there had been a plan to provide assistance to Mimi Youngblood regarding the budget and personnel functions. Big River had employed Mimi for 25 years, and Steve, Jack, and Dennis all had publicly stated she was overworked and needed some assistance, although in private, they conceded she was frequently a bottleneck and a source of difficulty. (It was the author’s assumption that no one wanted to cross Mimi because she not only had a powerful personality but also could serve as an ally.) All of them agreed Theresa Stefano would assume the new role of Budget Manager. Jack assigned Steve and Dennis to redo Mimi’s job description. Steve redid the job description and presented it to Jack, who apparently placed it on Mimi’s desk when she was on leave, apparently to avoid conflict with her in light of her diminished duties. When she returned from leave, Mimi was upset with the revised job description, feeling it greatly diminished her role in the organization. At a subsequent staff meeting, Jack was critical of the revised job description, even though he had given his implicit support for it by passing it on to Mimi.
- Steve felt that Jack was too punitive with two staff who had been released and that he was unreasonably harsh with another current staff member.
- Steve claimed Jack, unlike Steve, put his own interest ahead of the organization. He claimed that Jack’s outside consulting probably exceeded the 20 percent time limit the organization allowed and that accordingly he spent too little time in the organization.
Steve claimed the organization was in danger of being shut down because it was in violation of numerous standards set by its accrediting agency.

Finally, Steve was critical of Jack’s public and private hurtful comments made about the staff.

During subsequent meetings, Jack Fielding acknowledged he made mistakes in managing the organization and conceded he had a poor working relationship with Steve Short. However, unlike Steve, he expressed a willingness to resolve their conflict. The author was not sure whether Jack’s willingness to arrive at an accommodation with Steve was a strategic move on his part, to appear as a reasonable counterweight to Steve, or rather a genuine attempt to restore civility and some sense of unity to the organization. No matter his motive, throughout the intervention, the author found Jack to be much easier to deal with than Steve. Jack appeared reasonable and, at least to the author, held his emotions in check. Steve put forward the opposite persona – very emotional and almost unrelenting in his criticism of Jack. Interviews with other staff members did not result in much new information, except they did reveal both Jack and particularly Steve had made a concerted effort to secure allies in the organization. So as not to inflame either party, at this point in the intervention, the author was careful not to indicate what was at stake – specifically that Jack and Steve’s supervisors were not willing to put up with this conflict indefinitely and that the failure to reach an agreement could result in the eventual termination of one of the parties.

The OD Practitioner as Counselor

During the next stage of the intervention, the author found himself serving as Steve’s de facto counselor. He served as a sounding board for Steve, while trying to urge him to reach some kind of accommodation with Jack. During this part of the intervention, Steve would call the author into his office frequently and would discuss his perspective of the problem. Occasionally, Dennis McLaughlin, Steve’s closest ally, also was present. Although Steve always insisted Jack was entirely responsible for their conflict, Steve always managed to keep the door somewhat open to an agreement. In retrospect, the author believes Steve may have done this so the author would continue to fulfill Steve’s seemingly insatiable need for a sounding board. In between these de facto counseling sessions with Steve, the author also maintained open lines of communication with Jack, so as not to alienate him.

Although the author at the beginning of the intervention did not expect to serve as a counselor, he found himself thrust into this role because of Steve’s obvious need to vent, which the author’s desire to establish rapport with Steve compounded. The author walked a fine line in these sessions. On the one hand, he provided Steve with unconditional positive regard as Carl Rogers (1961) advocated and practiced, but on the other hand, he did not want to compromise his role as a mediator. Why did Steve feel that an accommodation with Jack was highly unlikely? In describing Jack, Steve said the following:

- “I cannot trust the man.”
- “He is dishonest. He’s lied to me and others.”
- “How do I know he will keep the agreements he makes with me?”
“His character is flawed.”
“Jack has a history here.”
“This is not fixable.”
“I’m not sure he is capable of change.”
“He cannot be the program director. He is incapable of doing the job.”
“He’s vindictive.”

During these sessions, Steve also claimed that previously Frank O’Reilly had told him Steve was a co-director of the organization and that the fact his title was associate director was mainly a matter of convenience to satisfy their accrediting agency’s requirement each accounting organization have only one director. In a subsequent conversation with Frank O’Reilly, he denied he had told Steve this, but Frank did say that, at some time in the future, the directorship of the organization might rotate.

In addition, throughout Steve’s counseling sessions with the author, he insisted he should receive a substantial pay increase—a request that in the author’s view weakened his credibility by highlighting his avarice. Did Steve’s complaints revolve around the management of Big River Accounting, or was he primarily interested in ousting Jack, having himself installed as the Director, and increasing his salary?

The OD Practitioner as Mediator

After allowing Steve to air thoroughly his views of the conflict, the author tried to move the process forward by starting the mediation process. As a means of bringing Steve to the table, the author also assured the ever-reluctant Steve that the author’s involvement in the mediation would be ongoing, to lessen his fears that any agreement between the two of them would not receive monitoring. He indicated that, for several months, the author was willing to conduct weekly meetings with Jack and Steve to provide them a forum for discussing any agreements reached between them. After almost two weeks of many one-on-one conversations, it appeared as if Steve finally was willing to have the author facilitate a negotiation with Jack, albeit with Dennis present. The following day, Steve changed his mind and told the author he was not willing to negotiate with Jack. Disappointed by Steve’s change of mind, the author told Steve quite bluntly that it was unlikely Frank would fire Jack. Steve probably had two options: Either he could come to an agreement with Jack or he could resign. What the author left unsaid was that, given his intransigent position, Steve’s position in the firm was unlikely to be renewed when his contract expired the following year.

The author also asked Jack, Steve, and Dennis to write up a list of their wants. (The author included Dennis in this exercise, mostly as a concession to Steve, because Steve insisted Dennis be included in any negotiations with Jack. Why? Because Steve said he wanted a witness. From the author’s point of view, this demand was a non-starter because it would be a clear signal to Jack that Steve did not trust him.) The author felt that by asking each person to make a list of his wants, it could serve as an initial way to identify possible commonalities and could serve as the basis for a possible negotiation. By using this approach, the author was borrowing a page from the book Getting to Yes, in which the authors Fisher, Ury, and Patton (1991) encourage negotiators to focus on fundamental interests, rather than positions. Such an approach helps
build trust by affording the opportunity for both parties, if they are willing, to make known what they really want. However, the anger of both Steve and Dennis was so intense that many of their wants were inflammatory. The author could not use them as a basis for negotiation with Jack. As an example, Steve listed the following wants:

- An apology (by Jack) to me in front of the staff.
- If we are equal then our salaries also should be equal. I would recommend $165,000 per year. I believe this to be fair, and it splits the difference between our current salaries.
- No manipulation or “illusion of control” management method.

Dennis was even more provocative; he noted the following:

- Jack Fielding’s office should be located somewhere outside of Big River Accounting, and he should report directly to Frank O’Reilly. Jack Fielding should no longer have any say in the day-to-day operations of Big River Accounting.
- The duties and responsibilities currently assigned to Jack should be delegated to Steve Short as the newly appointed Interim Director.
- Steve Short should report directly to Frank O’Reilly.

Unfortunately, throughout the intervention, Steve’s position was immutable – Jack had to go and Steve was ready and willing to assume the position of director. On the other hand, Jack was more flexible and seemed amenable to a negotiated agreement in which the organization continued to employ both parties. His list of wants did not mention personalities, but instead focused on policy concerns.

The OD Practitioner as Judge

The author was particularly uncomfortable playing this role but felt himself somewhat forced into it, since Frank and Cynthia desperately wanted closure. As persons intimately familiar with the conflict, they asked the author for his analysis of the situation. Up to this point, the author had been in frequent contact with Cynthia and perhaps had conveyed to her what in retrospect was an overly optimistic appraisal regarding the chances for a settlement. That all changed when Steve made his final decision not to negotiate with Jack. What is a mediator to do when one party is willing to negotiate and the other party refuses?

In contrast, was Steve right? Had Jack’s indiscretions crossed the line? Was Steve’s intransigence justified? Was it possible Steve was filling the role of whistleblower, rather than the self-interested careerist? This is where the author’s interviews with so many of the organization’s members became useful. The author was able to view the organization not only through the eyes of Steve and Jack, the principal protagonists, but also through those of ten other organizational members. For example, how did the author interpret the alleged sexual harassment of Theresa by Jack, which according to both parties consisted of the exchange of jokes of a sexual nature? Apart from the appropriateness of exchanging sexual jokes in the workplace, the author asked himself if this behavior was consensual. Did Theresa feel compelled to engage in sexual banter
with Jack because she perceived such behavior to be a condition of her employment? Or was Steve prodding Theresa to file a sexual harassment complaint so he could strengthen his case of malfeasance against Jack?

To answer this question, the author recalled his interview with Theresa. Theresa was a young, attractive, and assertive woman. She was very aware of the conflict between Steve and Jack and in the author’s estimation did not want to get caught on the losing side. Her protestations about Jack’s alleged sexually harassing behavior were more measured than irate. During the interview, she presented herself with a childlike flirtatiousness. Indeed, at the latter stage of the intervention, she inexplicably gave the author a small stuffed animal. Based on that evidence and his conversations with others, the author decided Jack’s behavior had been more a case of bad judgment, rather than venality.

What of Steve’s other principal charge of mishandling of Mimi’s change of duties? The author relied upon his consulting experience for this one. Many times, he had witnessed managers avoid conflict, rather than confront it. If the firm dismissed managers on this basis, there would be a tremendous void in the upper ranks.

Thus, the author felt himself thrust into the role of judge for several reasons. First, Steve was unwilling to negotiate with Jack, which made the author’s role as a mediator moot. Second, Cynthia Morse and Frank O’Reilly wanted to resolve this situation quickly and undoubtedly would ask the author for his opinion about what they should do. The author weighed the evidence and relied upon his intuition. He felt Steve’s case against Jack to be lacking in substance and credibility. Since Steve was, in effect, forcing Cynthia and Frank to choose between Steve or Jack, he decided to expedite the process, which led to the next stage of the intervention.

The OD Practitioner as Political Player

Early on in the intervention, when the chances for a settlement between Jack and Steve seemed promising, the author had arranged, with the consent of Frank and Cynthia, to conduct a team building session for the senior staff of Big River Accounting. He also had arranged for Frank O’Reilly to be present. Since a team building session for the staff seemed inappropriate, given the ongoing conflict between Jack and Steve, he cancelled the team building session but continued to reserve Frank’s time. Instead of having Frank participate or witness the team building session, the author arranged for Frank to hear, in private, the cases of Steve and Jack. Although his actions appeared to be neutral, the author was confident that, given the opportunity, Jack would be cool, collected, and reasonable in front of his supervisor, and Steve, given his volatile nature, would “shoot himself in the foot.”

This was not the first time the author had acted politically during an OD intervention. In a previous article (Hubbell, 2004), the author revealed how he acted politically. Then, as now, he continues to feel ambivalent about taking this course, but believes, given the circumstances, that his actions were warranted. Nevertheless, in future OD interventions, he will continue to adopt, in the words of Clement (1992), “a politically moderate approach” (p. 9).

Frank and the author first met with Jack. In this meeting, they agreed this interpersonal dispute had to be resolved because the organization was suffering as a result of it. The author decided to limit the parameters of the negotiation. With Frank O’Reilly’s consent, the author laid
out the following conditions to both Jack and Steve, knowing in advance these conditions would be much more acceptable to Jack than Steve:

- There would be no apologies;
- there would be no discussions of pay increases;
- there would be no witnesses at meetings; and
- Dennis McLaughlin would not be included in negotiations between Jack and Steve.

The author also emphasized that a real agreement was needed, rather than a temporary truce. The agreement needed to bring about closure and not merely a tactical ceasefire. The author also restated Frank O’Reilly’s assertion that Jack and Steve were not co-directors – a central issue in the dispute.

After asserting these preconditions, the author asked Jack what he wanted from Steve. In summary, Jack told the author that he wanted Steve to provide him respect and acknowledge his position as director. In return, Jack stated he would treat Steve as his deputy, keep him informed of his activities, and not micromanage him. The author then asked Jack how he knew if any agreement with Steve was working. Jack said his best indicator would be the elimination of passive-aggressive behavior, specifically sulking on Steve and Dennis’s parts.

The author then asked the same question of Frank O’Reilly. He said there would be evidence the conflict had ended if the following events or behaviors, or both, occurred:

- Stronger quality of the staff;
- a good cohesive staff;
- reduced evidence of discord;
- comments from the staff that things are going well;
- positive feedback from external visitors; and
- no more end runs.

The author began his meeting with Steve by relaying the same ground rules. After stating those ground rules, Steve took an opportunity to take another jab at Jack. He asserted that Jack had just recently concluded a negotiation with another accounting organization without discussing it with him or any other members of the organization. This other accounting organization had announced recently it would be closing its doors effective immediately, and Jack had agreed to take its clients. Unbeknownst to Steve, Jack had discussed this issue with both Frank and Cynthia. Steve also told Frank that Jack’s wife was one of the organization’s partners. When the author asked him whether he believed this was an ethical violation and a poor management practice, he replied “Yes.” (In a subsequent conversation with the author, Frank said he believed Jack’s actions were ethical and actually would benefit Big River Accounting.) The author indicated to Steve that it was quite likely Jack had not discussed this matter with him because of their poor interpersonal relationship.

In the subsequent conversation, Steve repeated to Frank his problems with Jack. Steve also repeated the former assertion he made to the author, that he felt he was more capable of running the organization than was Jack. The author quizzed Steve on various matters so Frank could understand fully Steve’s position and the depth of his emotion. Frankly, the author used
this tactic primarily to illustrate what he believed to be Steve’s intransigence, naked self-interest, and unrestrained emotionality. At one point in the conversation, the author asked Steve the following question: “Steve, are you telling Frank that it’s either him or me?” Steve replied in the affirmative. The author expressed his frustration, saying he believed the organization could benefit from both Jack and Steve continuing to work together. Furthermore, Steve was putting Frank in a difficult position.

Frank stated his disappointment with Steve and noted that it appeared the parties were at an impasse. He expressed his growing anger with Steve—at his intransigence and his need to put his own interests ahead of the organization. The author gave Steve one last chance by saying that when Frank and the author walked out of the room, Frank, rather than Jack and Steve, would resolve this interpersonal dispute. Steve made no response. The negotiation was over.

Several months later, Steve resigned. He, undoubtedly, was correct. Dennis hung on another nine months and then also resigned.

Conclusion

Like most OD interventions in which the author participates, this intervention was a learning experience, albeit an uncomfortable one. He tried to balance the need for a resolution of this interpersonal conflict with the needs of the participants. He was not successful in doing so. As the intervention reached its final stages, the need for a resolution of the conflict took precedence over the needs of the participants.

In retrospect, would he have conducted the intervention differently? Probably not. The participants in this conflict, most especially Steve and Dennis, clearly wanted only one resolution to this conflict: Jack’s head. Barring that development, they seemed prepared to engage in a guerilla-like jihad that inevitably would damage Big River Accounting. Even though the author is confident this is what would have resulted from a non-resolution of this conflict, he remains conflicted by his actions. Thus, this article is both case study and therapy.

References


About the Author

Larry Hubbell (Hubbell@uwyo.edu) is a political science professor at the University of Wyoming where he specializes in public administration. He has served as an Organization Development consultant to more than 70 organizations.

Discussion Questions

1. After learning about the significant problems in this organization, should the author have chosen to end this (OD) intervention? If so, why? If not, why not?

2. The author became very enmeshed in the politics of this organization; should he have employed a different strategy so he would have been less involved politically? If so, why? If not, why not?

3. Are the roles the author assumed during this intervention ultimately contradictory, rather than complementary? If so, why? If not, why not?

To Cite this Article

Life Forward

Ellen Jacoby
Ellen Jacoby Casting International

There isn’t a movie-goer around the world whose image of South Beach bikini-clad women, roller skaters, and pretty people of The Birdcage, or the zaniness of Jim Carrey’s Ace Ventura as he makes his way around South Florida, or the unusual charisma of There’s Something About Mary as it became an instant cult “classic”...or the vision of a space shuttle launch in Contact at Cape Canaveral...or Harrier jets taking off from the seven-mile bridge in the Florida Keys in True Lies—and all of these were Ellen Jacoby-cast feature films.

Having worked with a who’s who of Hollywood directors, including Steven Soderbergh, Joel Schumacher, Sidney Pollack, The Farrelly Brothers, Bob Zemekis, Ron Howard, Mike Nicols, Michael Bay, Randa Haines, Tom Shadyac, Martin Scorsese, Tim Burton, Garry Marshall, John Landis, James Cameron, Joe Roth, Mira Nair, and Tony Scott, Ellen Jacoby is one name Hollywood keeps at the tip of its tongue and at the top of its address book.

Ellen Jacoby is a Miami native, having been raised in New Jersey and making her way full circle back to home base. A former professional singer and dancer, she traveled the world as an international backgammon champion, before returning to her beloved hometown, in the 1980s.
She was appointed to the First Film Advisory Board by Governor Jeb Bush, and named “Woman of the Millennium” by Miami Metro Magazine. A former Mayor of Miami Beach proclaimed October 23rd as “Ellen Jacoby Day.” With her committed 24/7 schedule, Ellen finds time to lecture; teach and coach acting courses; and devote her time to various local charities, including Cystic Fibrosis and the YWCA.

Most recently, on her company’s 25th anniversary, Ellen was presented with the Key to the City of Miami Beach. She also received a Lifetime Achievement Award from her alma mater Franklin College.

As founder and President of Ellen Jacoby Casting International, a casting office with separate film, television, commercial, and Hispanic divisions, Ellen has employed more than 250,000 actors, dancers, and performers through the years.

Interview by
Joelle Gringarten
University of Texas at Austin

Q. Life is about stories. What is a favorite story you use as an icebreaker?

I am not sure if I have just one. It would depend on the situation, and with whom I am meeting. I would try to think of a story that had some common ground. I am fortunate that I have many such stories.

Q. Based on your in-depth knowledge of the film industry, what would you say is the contributing factor to a movie’s success or failure?

There are many contributing factors. In no particular order – being well-known – this could be the subject matter, the title, the actors, and/or the director. For example, a very successful film will most certainly contribute to a successful sequel. Titles of famous books already have a market. Of course, certain stars are bankable, as is a famous director, and having a few stars in the same film, especially directed by an A-list director, usually makes for a good opening weekend. This is tied directly into the marketing-advertising of a film. The advertising and hype can be created long before the film opens. In order to sustain the film’s success, there needs to be good reviews in the press, and of course social media.

Q. How has the nature of the casting business changed since you started your business?

Hahaha, I feel like an old warhorse. When I first started casting, we used ¾-inch tapes and very large machines for the auditions. We would then have to make copies of the auditions to send out via Federal Express. That evolved into ½-inch tapes and smaller machines, which then evolved into DVDs, still using FedEx. Now, when we cast, we upload the casting to the Internet and send a link, and it can be viewed immediately anywhere in the world. Along with
that live audition, the headshot and resume also can be seen. We still need a studio and proper lighting, and actors still need to do what they do best.

Q. Why did this type of industry intrigue you, and how did you get started?

I really knew nothing about this industry, and there was no natural segue in my life to this industry. Just a little info though...I was a singer and dancer, fell off the stage, was paralyzed from the waist down, and eventually made a recovery. During the time of incapacity, I became a professional gambler and travelled around the world as a Backgammon champion. My parents kept asking me when I was going to get off this merry-go-round and get my feet on the ground with a “real” job. My venture into casting was per chance. I loved it and stayed with it. By the way, some of my icebreaker stories are from my gambling days. Not to date myself too badly, but my friends were Lucille Ball, Johnny Carson, Princess Grace, and Harry Winston to name a few – quite impressive for an impressionable 21-year-old girl.

Q. What is a typical day for you like?

There really is no typical day. Casting is comprised of many areas – reading scripts, doing character breakdowns, releasing the castings to the talent agents, reviewing submissions, auditioning talent, office chores, working on social media, going to the set, attending production meetings, etc. We usually are doing a combination of several of those on a daily basis.

Q. How would you describe the working atmosphere and the people with whom you work?

We try to keep it as relaxed as possible. Some talent agents need a little more briefing time than others; some talent need a little more auditioning time than others; some actors come unprepared; some actors arrive late; sometimes the Internet is down. With it all, we try to be friendly and keep everyone on an even keel and try to keep a constant flow. We strive for professionalism, both with the talent agent and the talent; that keeps the tension and stress away.

Q. How does your company differ from its competitors?

We are completely hands-on. I personally conduct the casting sessions. We speak to everyone. I like some of the advantages that technology has brought, but I can tell much more about a person when I actually speak and interact with him or her. I don’t assign it or shop it out. I get my high from reading a great actor.

Q. Can you suggest any particular skills or talents that are most essential to be effective in your job?

You must have good people skills. This is a “people” business, from the producer to the director to the talent agent to the actor. Great people skills – on the phone also.
Q. What work-related values are strongest in this type of work (e.g., security, high income, variety, independence)?

I am not sure if this type of work differs than others. You must be professional, honest, and prepared, and you must stay current. If I am going to meet with a director, I will find out everything I can about that director prior to my meeting. I will get there early, I will bring my updated resume, and I will dress appropriately. But, aren’t those values true of any type of work?

Q. What elevator speech would you give a person about success in life?

I can honestly say the best lessons I learned in life cost me dearly. Which brings to mind two quotes: The first is Khalil Gibran and not exact, but goes something like this: “You may not remember all of the people who made you laugh, but you will remember the ones who made you cry.”

The other is unknown: “There is no elevator to success. You have to take the stairs.”

To Cite this Interview

Student Corner

Effect of Public Relation on Customer Loyalty with Special Reference to E-Commerce Portals

Susan James
Anna University, Chennai, India

Lavanya Rajendran
Anna University, Chennai, India

Abstract

The business world is changing rapidly, seeing new trends of strategy implementation. Moreover, the Internet provides customers with ample information for whatever they require. This calls for more credibility and transparency from the organizations to attract new customers and maintain existing customer base. With customer acquisition being a costly affair, organizations look at leveraging customer loyalty. This study aims to examine the effect of public relation (PR) on customer loyalty for e-commerce portals. The researchers used questionnaires for data collection, which they distributed to 188 samples comprising of Flipkart, Jabong, and Ebay users – the top thee ecommerce portals in India based on Alexa rankings. Bi-variate correlations identify the relationship between public relation and customer loyalty. The findings indicate public relation has a positive influence on customer loyalty, provided the awareness, reach, and efficiency of the PR activities are high. Low awareness and low efficiency of the PR message do not foster loyalty of any kind. Public relation also has a higher significant relationship with customer loyalty when past good experience with the e-commerce portal acts as a moderating factor.

Keywords: public relation, customer loyalty, e-commerce, flipkart, jabong, ebay
Introduction

Customer purchases of various products are on the rise. Alongside, newer products also are entering the market, hoping to gain a good market share. Today, there is cutthroat competition in all markets, and the challenge lies heavily with businesses to create and maintain a cordial relationship with the customers in order to maintain and increase their market share. Public relations (PR) is one such tool to achieve this. The concept of public relations has been evolving over time. In 2011 and 2012, the Public Relations Society of America (PRSA) defined PR as “a strategic communication process that builds mutually beneficial relationships between organizations and their publics” (PRSA, 2012). It is essential for businesses to manage the communication flow effectively with the public to avoid perception gap between the organization and the public.

Customer acquisition is a costly affair. Firms spend more than five times as much to obtain a new customer than to retaining an existing one (Kotler & Keller, 2006). According to a study by the global business consulting firm Baines and Company, a 5% increase in customer retention can increase a company's profitability by 75% (1999). Customer loyalty enhances customer retention that results from effective PR services. Loyalty factors are an organization's most reliable success indicators (Zeithaml et al., 1996). Higher customer loyalty implies a higher market share and an ability to demand relatively higher prices, compared to those of competitors (Chaudhuri & Holbrook, 2001). Moreover, loyal customers foster positive word-of-mouth promotion and defy competitors’ strategies (Dick & Basu, 1994).

Also important is assessing the effectiveness of communication, failing which the effort of the business in executing a PR strategy will not see effective results. This, in turn, would affect the loyalty of the customer toward a product. Equivalent of advertising value has become obsolete in the West and soon will do so in other parts of the world. Reach is the key now. Without standardization, results remain fragmented, and organizations are unable to define return-on-investment. A recent report by the MSL group (MSL Group, 2013) on public relation in India and on 2013 outlook states that measuring the number of media mentions is meaningless. Media measurement should include quality of media coverage (tone, relevance, credibility). Buying behavior is changing rapidly as consumer perceives brands. Therefore, public relations has the ability to measure outcomes by gauging purchase behaviors and decisions, rather than measure outputs. Therefore, this study aims to investigate the effect of public relation on customer loyalty with special reference to e-commerce portals. Since online shopping is creating a wave in the industry, this study uses e-commerce portals to study the effect of PR on customer loyalty.

Literature Review

General

There has been a paradigm shift in the understanding of public relations. The discipline has shifted from a communication-centered approach to an organization-centered approach in explaining the model of public relations. Due to the dominance of the organization-centered perspective in public relations, strategic communication and its effect on public has very little emphasis on public (Botan & Soto, 1998). According to Karlberg (1996), research conducted on
this principle had conceptualized public relations as a commercial management function—a means of influencing consumer value and behavior, of cultivating markets, of corporate image control, and of issues management. The process of public relations is a dynamic process with interactions between three variables - source, message, and receiver. However, scholars had neglected the message variable in the public relations process. Hallahan (2000) stated the primary function of public relations should be to create effective messages to reach strategically important public. Later, Kelly (2005) constructed an understanding of the message and receiver variables, and to explore the relationship between the two. This study examines four PR strategies such as informative, persuasive, facilitative, and cooperative. The findings of the study suggested the attributes of publics such as involvement, goal compatibility, problem – recognition, information – seeking, and information processing behavior influence the use and effectiveness of public relations strategy in organizations. The public relations process had seen a shift from source-oriented perspective of measuring the number of messages placed in media to a consumer-oriented approach of measuring the impact of messages that are targeted to the public (Watson et al., 2005). This is a remarkable shift in the public relations industry.

The introduction of Web 2.0 has revolutionized the communication process. It provides great scope for efficient and fair communication with various people; especially for the public relations industry (Yang & Lim, 2009). Today, PR is less about channeling your message through the right media and more about making connections directly with your audience (Davis, 2012). Investigations had also revealed that the public trust consumer opinions on the internet rather than official communication from an organization about a product (Kucuk, 2008). Brian G. Smith (2010) conducted a study that explored social public relations through a qualitative analysis of user involvement on Twitter. Analysis of Twitter posts expanded understanding of interactivity online and demonstrates social media user fulfillment of public relations objectives. Social media renders huge success in the public relations practice, and capitalizing on this success, many companies followed the trend of creating visibility in the online space. For example, Facebook has more than 68 million active users, with an average of 250,000 everyday registrations by people. Particularly, when Facebook permitted companies to register, more than 4,000 companies joined within the first 10 days (Waters et al., 2009). This is a good relationship-building tool. However, the online transformation in the public relations arena has taken a new high in 2011. Associated with this digital transformation in the communication space, a key concern is customer relationship management in the public relations process (Starkey, 2010). Therefore, Web 2.0 is a natural environment for public relations, where new figures such as the community manager simply transfer the management of brand and company reputations to this new digital medium (Estanyol, 2012).

**Relationship Management in Public Relations**

One-way and two-way communication in the public relations process and the building of mutually beneficial relationships are two principal objectives of public relations (Cutlip et al., 2000). Similarly, Ledingham and Bruning (2000) stated the following: “To be effective and sustaining, relationships need to be seen as mutually beneficial, based on mutual interest between an organization and its significant publics,” and that “the key to managing successful relationships is to understand what must be done in order to initiate, develop and maintain that relationship.” As the focus shifted to relationship management in the public relations process,
Grunig (1993) stated the need for organizations to build substantive behavioral relationships with the publics. Bruning and Galloway (2003) conducted a study that suggested organizations build anthropomorphic relationships by engaging in behaviors that build trust, demonstrate openness about the organization and all the issues concerned, and be willing to invest time and effort into relationships with key public members. Exchange and reciprocity alone does not define organization–public relationships. It also depends on interdependence (Broom, Casey, et al., 2000). Interdependence is the success of an organization to sell its products to the public and simultaneously gain approval and support by the public for the organization's practices. The most common way public relations scholars analyze relationships is via perception between relational parties (Ledingham & Bruning, 2000; Ledingham, Bruning et al., 1999; Waters, 2009). Grunig and Huang (2000) proposed a scholarship enumerate perceptions of trust, commitment, influence, and satisfaction in a relationship. Meng (2007) reviewed the literature on relationships and found definitions followed the cue from Grunig and Huang (2000).

In order to measure the organization-public relationship, Grunig and Linda (1999) developed a reliable PR Relationship Measurement Scale that used six components for measuring existent relationships - Control Mutuality, Trust, Satisfaction, Exchange Relationship and Communal Relationship.

**Public Relations and Customer Loyalty**

Most problems arise from the complex nature of consumer behavior as the needs of consumers keep changing with time. This is because of the exposure to various products, the demand created in the market and the increasing knowledge consumers gain in the purchase process. Organizations cannot control or determine the information sources that consumers have access to, which play a key role in determining consumer behavior towards products. There has been a long debate by many scholars on the influence of public relation activities on consumers. Ledingham and Bruning (1998) reported that the organization – public relationship variables of trust, openness, involvement, investment, and commitment influences consumer behavior. Further research conducted by Bruning (2000) revealed specifically that key publics who share a strong relationship and an identity with the organization are likely to be inclined to that organization even in the face of competition. This is because of the identity they share with the organization that influences their behavior intent. Therefore, organization-public relationships, when managed effectively, positively affect the attitudes, evaluations, and behaviors of key public members (Bruning et al., 2004). Building on this, research scholars Papassapa Rauyruen and Kenneth E. Miller (2007) also reported the importance of relationship quality. Additionally, they also believed the relationship quality has a direct influence on customer loyalty itself. Zeithaml, Berry et al. (1996) proposed a comprehensive multi-dimensional framework to measure customer loyalty. They stated that loyal consumers have (1) high purchase intention (repurchase intention), (2) less price sensitivity (price insensitivity), (3) feedback to the firm (word-of-mouth, complaint behavior), and (4) do more business (frequent purchase and no switching behavior).

Ahluwalia et al. (2000) conducted a study in which results suggested a committed consumer will refuse to give in to information that provokes them to switch behavior, be it negative information about the organization they are committed to or positive information about competitors. Such an information processing predisposition may see re-purchase intentions from
committed consumers. The ratings the public provide, of the relationship organizations share with them, predict the level of loyalty towards an organization (Ledingham, Bruning, et al., 1997). For a better understanding of the relationship quality between organizations and publics, Eyun-Jung Ki and Linda Childers Hon (2007) developed a research model that postulates the linkages among perceptions of the organization–public relationships, attitudes, and behavioral intentions toward an organization by the public. Hon and J. E. Grunig (1999) proposed six relationship indicators, among which perceptions of satisfaction and control mutuality best predict a positive attitude toward the organization. The study revealed that the positive attitude is a forerunner to loyal behavioral predispositions towards the organization. Interestingly, Jeffries-Fox and Weiner (1999) reported positive and proactive public relations campaigns can increase customer loyalty even when organizations reduce advertising spending. Public relation is more about building a good relationship with the publics on a long-term basis. Likewise, a key factor that influences the perceptions of organization-public relationship and the behavioral intentions towards the organization is time. Ledingham, Bruning, et al. (1999) in their study suggested that public relations practitioners at the earliest possible time should develop mutually beneficial relationships with publics, and maintain and enhance the quality of the relationships by continuing public relation activities. It further proposes that established relationships also should foster loyalty toward the organization. Bruning, Melissa, et al. (2008) explored the concept of dialogue and observed how it positively affected the public and their behavioral predispositions. The results proposed that the attitude of the relationship and dialog had a positive effect on public evaluations of an organization and their intended behavior. Further, Hsieh and Kai Li (2008) found consumer reaction to PR depends on levels of self-congruence and how consumer expectations match the company’s properties presented through PR efforts. Further narrowing down to customer loyalty for online portals, Albert Caruana and Michael T. Ewing (2010) conducted a study on the influence of corporate reputation on loyalty in an online context. The study uses two groups of online vendors, one dealing in books and the other in shares. Findings from the two samples suggest that corporate reputation has a direct effect on online loyalty and provides an important mediating effect for perceived value in terms of their impact on online loyalty. Organizations are accountable to the public. All organizations operate in a competitive environment. Public besought by rivals will remain loyal to those organization that earn loyalty consistently and continuously. Therefore, organizations should communicate with a customer driven focus as people support organizations that serve their interests and needs (Ronald Smith, 2013).

Therefore, based on the above literature review, the following are the research hypotheses:

H0: Public relation does not relate positively to customer loyalty.
H1: The awareness and reach of PR activities influence customer loyalty.
H2: The efficiency of PR activities determine its effect on customer loyalty.
H3: The relationship between public relation and customer loyalty has more significance with a moderating factor.
Method

Samples for this study comprised of Flipkart, Ebay, and Jabong users in Chennai. Based on the Alexa rankings, this study uses these top three e-commerce portal users. The study also considers the print media and online media activities of Flipkart, Ebay, and Jabong. A total sample of 188 represented the population. The sample size formula derived the sample size of 188, taking into account the following parameters: 6% as margin of error, 90% as confidence level, 50% as response distribution and 16.16 million as the population size. Stratified random sampling was adopted and 188 samples were classified into three groups; Flipkart (83), Ebay (45), and Jabong (60) users. The authors analyzed the data using SPSS 19.

The total sample of 188 represented an effective response ratio of females (n = 98) accounting 52.1% of the total sample and males (n = 90) accounting for 47.9%. The majority of respondents were in the age group of 20-24 accounting for 71.9% of the total samples, while those over 24 years of age accounted for 19.7%. Of the total samples, 57.4% were working professionals (n = 108) while 41.5% accounted for students (n = 78) and 1.1% accounted for others (n = 2). The study used a survey questionnaire to gauge the relationship between public relation and customer loyalty among the samples.

Analysis

Frequency, percentage analysis and cross tabulation determines the awareness, reach, and efficiency of PR activities of the e-commerce portals. It also determines a moderating factor for the effect of public relation on customer loyalty.

The authors used Likert type data to gauge the awareness and reach of PR activities. Among the total samples, 20.2% read newspapers very frequently, 46.8% read frequently, and 28.2% read occasionally. The findings indicate that around 95% of the samples receive exposure to the print media on a regular basis. Therefore, this gauges the awareness of PR activities. The cross tabulation results of samples who read the news articles they come across in newspapers about these e-commerce portals reveal that of the 22.9% who have come across positive news articles frequently, 9.3% read those news articles very frequently, 46.5% read them frequently and 34.9% read them occasionally. Of the 51.1% who have come across news articles on an occasional basis, 10.4% read them very frequently while 17.7% read them frequently and 40.6% read them occasionally. Only 2.1% have come across news articles very frequently while 16% have come across news articles rarely, 3.2% have come across them very rarely and 4.8% have never come across news articles on these e-commerce portals. These determined the awareness and reach in terms of print media, and the following will determine the same in terms of online media.

The cross tabulation results of the frequency of online medium usage and if articles in the online medium are read reveal that of the 54.8% who use the online media very frequently only 30.1% read articles about these e-commerce portals in the online media while 50.5% read them sometimes. Of the 34% who use the online media frequently, 26.6% read articles online while 48.4% read them sometimes and of the 10.1% who use the online media occasionally, 41.1% read articles online while 26.3% read them sometimes.
In terms of awareness of e-commerce portals having a social media presence, 63.8% accounted for yes while 36.2% accounted for not being aware of the social media presence of e-commerce portals.

Cross tabulation results for checking social media pages of these e-commerce portals for updates and for engaging in their conversations reveal that of the 16.5% who check the social media pages frequently, 32.3% engage in conversation on these pages frequently while 6.5% engage in conversations occasionally while 19.4% engage in them rarely while 29% never do so. Of the 27.1% who check the social media page occasionally, 5.9% engage in social media conversation frequently while 31.4% engage in them occasionally, 33.3% engage rarely and 29.4% never do so. While 9% check these pages for updates rarely, 3.2% checks them very rarely while 42% never checks them.

Comparing print media and online media awareness of PR activities of these e-commerce portals, both the media did not have much of difference in terms of the levels of awareness and reach. When the samples are divided into two groups along the median, 56% accounted for high awareness & reach (n = 105) while 44% accounted for low awareness & reach (n = 83). Of those who accounted for low awareness, 67% are working professionals (n = 56) and only the remaining 33% are students (n = 27).

Further, the PR Relationship Measurement Scale Grunig and Linda developed in 1999, comprising of six parameters namely Control Mutuality, Trust, Satisfaction, Commitment, Exchange relationship, and Communal relationship, measures the efficiency of PR activities of these e-commerce portals. Satisfaction, Commitment, and Trust are the highest efficient factors with 77.8% accounting for satisfaction, 75.7% accounting for commitment, and 67% accounting for trust. Control mutuality accounted for 52.4% while exchange relationship and communal relationship accounted for the lowest efficient factors with 30.3% and 18.4% respectively. The authors divided the samples into two groups – high efficiency & low efficiency of PR activities along the median: 73% of the total samples accounted for high efficiency (n=138) while 27% accounted for low efficiency (n =50).

The effect of public relation on customer loyalty also determines a moderating factor. This study identifies past good experience with the e-commerce portal as a moderating factor for public relation’s influence on customer loyalty with 75% of the total samples accounting for it.

Further, Pearson’s correlation coefficient and independent samples t-test, tests the hypotheses. In this study, the alpha value is 0.05. The null hypothesis is as follows:

H0: Public relation does not relate positively to customer loyalty.

As per Pearson’s correlation coefficient, Table 1 shows r = .311 and p<0.05. Since the p value is less than the alpha value, this rejects the null hypothesis, and the value of r indicates there is a positive correlation between public relation and customer loyalty. This defies the null hypothesis H0 that there is no relationship between public relation and customer loyalty. Therefore, public relation relates positively to customer loyalty.

The first hypothesis is as follows:

H1: The awareness and reach of PR activities influence customer loyalty.
This hypothesis states that level of awareness and reach of public relation activities, impacts the significance of the relationship between public relation and customer loyalty. Results of H0 show that there is a positive correlation between public relation and customer loyalty. To test this hypothesis, the authors divided two groups along the median (m=4) - one group having high awareness of public relation activities of the e-commerce portals (n= 105) and another group having low awareness of the same (n= 83). Table 2 shows the correlation between public relation and customer loyalty of samples having high awareness of public relation activities while Table 3 shows the correlation between public relation and customer loyalty of samples having low awareness of public relation activities.

Comparing Table 2 (r = .421 and p <0.05) and Table 3 (r = .129 and p>0.05), it is evident there is a positive correlation between public relation and customer loyalty only with high awareness of PR activities of the e-commerce portals. However, comparing the r value of H0 (r = .311) from Table 1 and that of H1 (r = .421) from Table 2, the significance of the correlation is better with increased awareness of PR activities.

To confirm this, the researchers used independent samples t-test and compared the means of two groups: one with increased awareness of PR activities and another with low awareness. Table 4 and Table 5 shows the results of the t-test. With the Sig (2-tailed) value <0.05, it is evident that there is a statistically significant difference between the group with high awareness (M=9.43, SD = 2.464) and the group with low awareness (M=10.87, SD = 2.339); t(186) = 4.07 and p = .000.

The second hypothesis is as follows:

H2: The efficiency of PR activities determine its effect on customer loyalty.

This hypothesis states that the efficiency of PR activities determine the relationship between public relation and customer loyalty. To test this hypothesis, samples were divided into two groups; one group rating the efficiency of public relation activities of the e-commerce portals high (n=138) and an other group rating it lower (n= 50). Table 6 shows the correlation between public relation and customer loyalty of samples rating the efficiency of public relation activities high while Table 7 shows the correlation of those rating it lower.

Comparing Table 6 (r = .367 and p<0.05) and Table 7 (r = .127 and p>0.05), it is evident there is a positive correlation between public relation and customer loyalty only with high efficiency of PR activities, while there is no correlation when the efficiency of PR activities is low. However, comparing the r value of H0 (r = .311) from Table 1 and that of H2 (r = .367) from Table 6, the significance of correlation is better with increased efficiency of PR activities.

To confirm this, the authors used independent samples t-test to compare the means of the two groups: one that rated the efficiency of PR activities higher while the other rated it lower. Table 8 and Table 9 show the results of the t-test. With the Sig (2-tailed) value <0.05, it is evident there is a statistically significant difference between the group that rated high efficiency of PR activities (M=9.81, SD = 2.511) and the group that rated it lower (M=10.78, SD = 2.384); t(186) = 2.34 and p = .020.

H3: The relationship between public relation and customer loyalty has more significance with a moderating factor.
Of the total samples, 74.6% (n = 141) accounted for past good experience with the e-commerce portal as a moderating factor. This hypothesis tests the relationship between PR and customer loyalty with past good experience with the portal as a moderating factor. Table 1 shows the relationship between public relation and customer loyalty has more significance with the moderating factor than without the moderating factor. Comparing r value of H0 from Table 1 (r = .311) and the r value from this H3 (r = .365) satisfies this hypothesis. The values r = .365 and p<0.05 support H3.

Findings

Public relation relates positively to customer loyalty. Though it is not a strong correlation, public relation influences customer loyalty to a considerable extent.

However, considering awareness, reach and efficiency factors in the relationship between public relation and customer loyalty as shown in H1 and H2, there is a relationship between public relation and customer loyalty only when there is high awareness & reach and when the efficiency of the PR activities are high. Low awareness, reach, and efficiency of PR activities of the ecommerce portals do not impact loyalty to even the smallest of extent. Therefore, awareness, reach, and efficiency are key factors to assess the effectiveness of public relation activities and its outcome. In other words, e-commerce portals building mutually beneficial relationships with key publics have an impact in the loyalty of customers towards their brand. When the PR activities are more effective, the significance of the relationship between PR and customer loyalty increases.

The awareness and reach of the PR activities carried out by these e-commerce portals in the print media and online media have created almost the same awareness levels in both media with not much of increase or decrease in the other. On the whole, the awareness and reach levels of the PR activities are considerably good, though not at its best. There is more awareness and reach among the student population compared to the working professional population, which is weak.

In terms of the efficiency of PR activities carried out by these e-commerce portals, it is considerably good with satisfaction, commitment, and trust leading the front followed by control mutuality. However, communal relationship and exchange relationship remain weak in terms of efficient levels.

The findings also illustrate that past good experience with the e-commerce portal acts as a moderating factor in the influence of public relation on customer loyalty. It is found that the relationship between public relation and customer loyalty is of higher significance with the moderating factor than without the moderating factor. Therefore, it is the past experience that the users have with the e-commerce portal that motivates them to trust that brand information they see in the print media and online media.

Conclusion

Public relation activities are vital for every organization in order to foster long-term beneficial relationships between the organization and key publics. This study implies that public relation activities of an organization have the ability to influence positively customer loyalty. However, the awareness and reach created by these PR activities is a key consideration factor in
its influence on customer loyalty. The efficiency of the PR messages is a key consideration that creates a strong relationship with key publics through the media. Awareness, reach and efficiency of PR activities at its highest levels, creates a significant impact on customer’s purchase decisions of products/brands. Though there may be PR activities carried out, but with their efficiency levels not up to the mark, it fails to create any impact on the purchase decisions which is a wasted effort by the organization. Therefore, every communication should be effective, rather than just increase the number of media mentions. Though public relation may not be the only factor affecting customer loyalty, there are moderating factors like along with PR that influences customer purchase decisions. Past good experience with the e-commerce portal is one such moderating factor. The previous experience, be it good or bad, acts as a catalyst in aiding consumers in their purchase decisions. Therefore, every service rendered by a product/brand should be of high quality, which motivates consumers to believe and trust what they read in the media about the brands, which, in turn, helps them retain customers. Especially in this competitive market place with everything going digital, PR activities in the print media and online medium play a significant role in drawing more customers and retaining existing customers.

References


Appendix

Table 1  
*Correlation between PR and Customer Loyalty*

<table>
<thead>
<tr>
<th>Public relation</th>
<th>Pearson Correlation</th>
<th>1</th>
<th>.311</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>188</td>
<td></td>
<td>188</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>Pearson Correlation</td>
<td>.311</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>188</td>
<td></td>
<td>188</td>
</tr>
</tbody>
</table>

Table 2  
*Correlation between PR and Customer Loyalty with High Awareness of PR Activities*

<table>
<thead>
<tr>
<th>Public relation</th>
<th>Pearson Correlation</th>
<th>1</th>
<th>.421</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>105</td>
<td></td>
<td>105</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>Pearson Correlation</td>
<td>.421</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>105</td>
<td></td>
<td>105</td>
</tr>
</tbody>
</table>

Table 3  
*Correlation between PR and Customer Loyalty with Low Awareness*

<table>
<thead>
<tr>
<th>Public relation</th>
<th>Pearson Correlation</th>
<th>1</th>
<th>.129</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.245</td>
</tr>
<tr>
<td>N</td>
<td>83</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>Pearson Correlation</td>
<td>.129</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.245</td>
</tr>
<tr>
<td>N</td>
<td>83</td>
<td></td>
<td>83</td>
</tr>
</tbody>
</table>

Table 4  
*Group Statistics, t-test*

<table>
<thead>
<tr>
<th>Awareness</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-test</td>
<td>.00</td>
<td>83</td>
<td>10.8795</td>
<td>2.5679</td>
</tr>
</tbody>
</table>
Table 5
**Independent Samples Test - High Awareness and Low Awareness**

<table>
<thead>
<tr>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>162</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>4.097</td>
</tr>
</tbody>
</table>

Table 6
**Correlation between PR and Customer Loyalty with High Efficiency**

<table>
<thead>
<tr>
<th>Public relation</th>
<th>Customer loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>138</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public relation</th>
<th>Customer loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.367</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>138</td>
</tr>
</tbody>
</table>

Table 7
**Correlation between PR and Customer Loyalty with Low Efficiency**

<table>
<thead>
<tr>
<th>Public relation</th>
<th>Customer loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.380</td>
</tr>
<tr>
<td>N</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public relation</th>
<th>Customer loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.127</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.380</td>
</tr>
<tr>
<td>N</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 8
**Group Statistics, t-test**

<table>
<thead>
<tr>
<th>t-test</th>
<th>Good efficiency</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>138</td>
<td>9.8188</td>
<td>2.51197</td>
<td>.21383</td>
<td></td>
</tr>
<tr>
<td>.00</td>
<td>50</td>
<td>10.780</td>
<td>2.38439</td>
<td>.33720</td>
<td></td>
</tr>
</tbody>
</table>
### Table 9
**Independent Samples Test – High and Low Efficiency**  

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>t-test</td>
<td>Equal variances assumed</td>
<td>.290</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-2.407</td>
</tr>
</tbody>
</table>

### Table 10
**Correlation between PR and Customer Loyalty with Added Moderating Factor**  

<table>
<thead>
<tr>
<th></th>
<th>Mod1added</th>
<th>Customer loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mod1added</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>188</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>Pearson Correlation</td>
<td>.365</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>188</td>
</tr>
</tbody>
</table>
About the Authors

Susan James (susan.j91@gmail.com) is a final year student, pursuing an M.Sc. Electronic Media (five years), in the Department of Media Sciences, College of Engineering Guindy, Anna University, in Chennai, India. She has internship experience in the fields of Corporate Communication with Renault Nissan Technology and Business Centre India Pvt Ltd., in Public Relations with Text 100 and Perfect Relations, and in Journalism with The Hindu. She also has worked for Davis Cup Tennis 2010 as event management staff and was the Head Campus Ambassador for the Chennai Region for Teach for India, a national campaign.

Lavanya Rajendran (lavanyaa2@gmail.com) is an Assistant Professor in the Department of Media Sciences, College of Engineering Guindy, Anna University, in Chennai, India. She did her doctoral research in Voice over Internet Protocol (VoIP). Her areas of interest include Computer Networks, Web Designing, and Video Production. She has worked in advertising, radio, and television prior to taking up a job as a lecturer. She has been a co-coordinator for a project of the Tamil Nadu Corporation for Development of Women in Building Skills of Self-Help Group Women in Establishing and Maintaining the Information Kiosks.

Discussion Questions

1. What effect does PR create on customers besides influencing customer loyalty?

2. How can return-on-investment of PR activities be determined effectively?

3. What are the other significant factors that affect the relationship between PR and customer loyalty?

To Cite this Article

Book Review

Book Details


Reviewer

Anne-Marie Mitchell, J.D.

Synopsis and Evaluation

As the first woman to be appointed as a United States Supreme Court Justice, Sandra Day O’Connor is a hero to many, including myself. Naturally, I was instantly intrigued by her newest book touted as a history of the Supreme Court and its Justices. While it is a lovely read with lots of obscure trivia, the book fell short of truly spectacular. Unsurprisingly, the book is meticulously researched with a slew of cited resources, and yet it barely scratches the surface of the compelling history of the Court. For anyone with even a modest understanding of the Supreme Court, this book may prove to be a bit superficial.

In fairness, part of my disappointment might be attributed to my misaligned expectations. I was hoping to read more of Justice O’Connor’s voice and her personal experiences while serving on the Court in the backdrop of its rich history. Therefore, I was disappointed by the elementary description of monumental Supreme Court cases in favor of rehashing, for far too many chapters, the great difficulties of circuit-riding – an early requirement for Justices to ride on horseback for six months and sit on various courts within a circuit. Instead, this book was a general survey of a few things you might not have known about the Supreme Court, and targeted towards a reader who is unfamiliar with the process of appointing Justices and the workings of the Court.

On a more positive note, the text itself is only about 150 pages; therefore, it can be read tolerably in a handful of hours. A notable highlight in the book was one of the last chapters entitled “Larger-than-life Justices.” This chapter gave an account of four Justices that all shared loud personalities, but varying jurisprudential achievements: Justice Stephen J. Field, an early pistol toting western pioneer; Justice Oliver Wendell Holmes, who largely is revered as the greatest Justice of all time; Justice James McReynolds, a notorious racist and regarded as the worst Justice of all time; and Justice William O. Douglas, an avid conservationist with a scandalous personal life. Additionally, I enjoyed the chapter on Supreme Court traditions,
including assigned seats for the Justices at lunch and the Justices’ hand-shakes before every oral argument.

Although I would have preferred a more in-depth look at the Supreme Court and Justice O'Connor’s reflections, overall it was a pithy overview of the Supreme Court’s history and the development of Constitutional law that is enjoyable to read if your interest is less scholarly.

In the Author's Own Words

“Anyone who sees the Supreme Court today in all its grandeur would be amazed to know its humble beginnings. The early years of the Court were a tumultuous struggle. It had no home, little money, and virtually no cases; it is a wonder it survived at all! Those humble beginnings, and how they were overcome, have helped shape our democracy” (52). “[Chief Justice Oliver Wendell] Holmes wanted to be, and ultimately was recognized as, the greatest legal thinker of his era. He had a remarkable personal intensity and a contagious passion for life, which did not wane with advancing years. The famous journalist Walter Lipmann described him as ‘a sage with the bearing of a cavalier. . . .He wears wisdom like a gorgeous plume, and likes to tickle the sanctities between the ribs.’ And author Henry James, a longtime friend, wrote of the 62-year-old Holmes, ‘I have never seen anyone so unmodified through the years, who had equally lived. . . .Wendell has moved and moved like a full glass carried without spilling a drop’” (p. 134).

Reviewer’s Details

A graduate of the University of Chicago Law School, Anne-Marie Mitchell (annie787@gmail.com) is currently an associate of Stone Pigman and practices primarily in commercial litigation. She also serves as Associate Editor on The Young Lawyer Editorial Board of the ABA’s (American Bar Association) Young Lawyer Division. Her research interests include trial practice, law and economics, and Constitutional law.

To Cite this Review

Book Review

Book Details


Reviewer

Larry Treadwell, M.A.

Synopsis and Evaluation

Technology has flattened the world. Today’s society is one obsessed with information and how it is shared. The demand for information is incessant with the amount of information being created and shared constantly increasing. The advances and obsession with information has enabled companies and governments to collect more and more information on individuals, not only to market services towards a specific population but also to watch them. Individuals themselves through Twitter, Facebook, Instagram, and other social media applications share personal information without realizing the risks associated with making such information available. The increased proliferation not only satisfies the public demand for information but also provides thieves with increasingly new ways to steal it. Identity theft is a serious concern and needs to be vigilantly guarded against. The question is, how does one go about doing it? Worse, what does one do if one is the victim of identity theft? 50 ways to protect your identity in a digital age provides common sense advice as well as relevant information on how to protect oneself from data and identity theft, and how to combat the theft of one’s identity should that unfortunate scenario occur.

50 ways to protect your identity in a digital age is thoroughly researched and easy to read. It covers all types of identity theft from social media threats to data breaches, and the various types of risks of identity theft to children and the elderly, as well as identity theft insurance and the relevant laws and what they mean. The author’s organizing the book by types of identity theft makes it easier for the reader to use the book for reference, application, and personal benefit. Furthermore, the author’s use of real criminal cases for each type of identity theft helps make the book relevant to the reader and helps make it possible for each individual to recognize personal gaps in his or her defenses against identity theft. Each chapter includes a brief introduction, followed by relevant cases with explanations on how identity thieves gather people’s information,
and tips on how to prevent it. The author provides the reader with specific measures to guard against identity theft, but should the reader be unfortunate enough to suffer from identity theft, measures to redress the issue including the necessary forms letters also are provided. Among some of the other gems inside this book are important tips on how to limit data exposure through proper use of computer and browser settings, free resources for virus and data encryption, and tips for securing smart phones and mobile devices against loss of personal data. This book is recommended for public libraries and personal reference shelves.

In the Author’s Own Words

“Identity theft is the biggest and fastest growing crime in the world, and with good reason. It is easy to perpetrate and easy to get away with” (p. 1). “There are no guarantees in life and there certainly is no guarantee that you will not become a victim of identity theft; but by reading this book, you will learn how to do the best you can, and you can certainly narrow your chances of becoming a victim” (p. 2). “Social networking is a part of modern day life, so rather than avoid using it out of a fear of identity theft, the best course of action is to merely take the proper precautions” (p. 232).

Reviewer's Details

Larry Treadwell IV (ltreadwell@stu.edu) is an Associate Professor at St. Thomas University, in Miami Gardens, Florida. His research interests are multidisciplinary in nature and concentrate on the collaboration with the library and faculty of other disciplines, such as counseling, religion, education, and business.

To Cite this Review

Book Review

Book Details


Reviewer

Hagai Gringarten, Ph.D.

Synopsis and Evaluation

Berger’s Contagious: Why Things Catch On (2013) seeks to explain the science behind what makes things popular and why some products, information, and behavior go viral while many others fail. Jonah Berger, the James G. Campbell Assistant Professor of Marketing at the Wharton School at the University of Pennsylvania, combines academic research with interesting stories to explain and enlighten the power of word-of-mouth and social transmission.

Berger (2013) asserts that “Although quality, price and advertising contribute to products and ideas being successful, they don’t explain the whole story” (p. 5). According to Berger (2013), “word of mouth is the primary factor behind 20 percent to 50 percent of all purchasing decisions” (p.7), and it is much more effective than advertising. The reader will be surprised to learn that “only 7 percent of word of mouth happens online” (p. 11). Berger asserts that social influence and word-of-mouth have a huge impact because they are more persuasive, credible, and targeted toward interested audiences. This results in ideas, behaviors, and products going viral and subsequently becoming successful. The way to achieve a viral success is by following six basic principles Berger developed that will make products contagious and catch on. This set of actionable six elements or STEPPS consists of Social Currency, Triggers, Emotion, Public, Practical Value, and Stories.

After analyzing what makes products and ideas contagious, Berger found the same common principles seem to make them go viral and succeed. He coined the six key principles STEPPS as follows:

- Social Currency – People usually will talk about a product or idea that will help them achieve a desired impression such as looking smart, rich, cool, and knowledgeable or feel like an insider. Simply telling others about a product will make us look good and feel good, and will make a certain impression. This is social currency, and companies
need to mint more of it—like the $100 cheese steak sandwich, created by a Philadelphia restaurateur that became a conversation piece. Talking about it made people feel sophisticated and made the brand contagious.

- Triggers – Companies need to create stimuli that will prompt people to think about certain products and ideas. Sometimes, companies benefit serendipitously as with NASA's Pathfinder mission to Mars. The extensive media attention to the Mars mission reminded people of the Mars candy brand and consequently sales increased.

- Emotion – Crafting messages and ideas that evoke the right emotions will increase sharing among target market. Google's “Parisian Love” ad told a love story evolving over time using Google searches. It was romantic and inspiring and became a viral hit.

- Public – Making things public and more observable will increase the likelihood of imitation and make products and ideas advertise themselves. Steven Jobs decided to reverse long held belief and flipped the Apple logo upside-down making it look right to others, rather than the customer, thus making it publicly visible. Today, every Apple laptop user is helping advertise the Apple brand and create brand awareness simply by using it.

- Practical Value – We need to package content as a good deal. It should seem valuable or useful, such as saving money, improving health, or saving time. “Of the six principles of contagiousness...practical value may be the easiest to apply” (p. 177). This might explain why an 86-year-old from Oklahoma became a YouTube sensation: His video about shucking corn had more than five million hits.

- Stories – People like stories. Stories act as vessels and transmit information, and companies should embed “products and ideas in stories that people want to tell” (p. 24). From Peet’s Coffee to Nantucket Nectars, almost any consumer brand today has a story to tell. Making the product an integral part of the story will help spread it around.

Clever and with practical advice on how to make products and content go viral and succeed, Berger's *Contagious: Why Things Catch On* (2013) is an enjoyable and inspiring read. Berger uses real life anecdotes and academic research to illustrate and reveal techniques companies use to harness the power of word of mouth and social transmission. Thought provoking and smart, this book is entertaining and educational, at times reminding us of bestselling author Malcolm Gladwell. Berger's unique subject matter and storytelling make it a great addition to this genre, and will benefit anyone who would like to create things that are contagious and will catch on.
In the Author’s Own Words

“Certain stories are more contagious, and certain rumors are more infectious. Some online content goes viral while other content never gets passed on. Some products get a good deal of word of mouth, while others go unmentioned. Why? What causes certain products, ideas, and behaviors to be talked about more? That’s what this book is about” (p. 13).

Reviewer's Details

Hagai Gringarten, Ph.D. (hagai@stu.edu), St. Thomas University. Hagai Gringarten’s research interests include branding, international business, and marketing. He has authored a non-fiction bestselling book, Over a Cup of Coffee (Shiram Shachar, 2000). He also pursued postgraduate studies at the Harvard Graduate School of Business and the Kellogg School of Management. He currently teaches branding, marketing, and other business courses at St. Thomas University and serves as the Editor-in-Chief of the Journal of Multidisciplinary Research.

To Cite this Review

Editors’ Choice
Recent Books of Interest – Summer 2013


Ben-Shahar is a professor at Harvard and has authored two other books, which are international best sellers, Happier and Being Happy. In his new book, Choose the Life You Want, Ben-Shahar explains how the small choices we make every day, based on the situations we are in, have a huge impact in our daily lives. He discusses, through 101 lessons, how these small choices affect our overall happiness.


McGraw, commonly known as Dr. Phil, is a six-time New York Times Number 1 best-selling author. In his book, Life Code, he once again seeks to help people live a fulfilling life. Dr. Phil teaches readers to spot people in their lives who are “BAITERs” (Backstabbers, Abusers, Imposters, Takers, Exploiters, Reckless), and he explains how readers can protect themselves from the negative impact these people can have in their lives.


Defending your Brand won the EMM Marketing Book of the Year, 2013. This book discusses how important it is for business owners to defend their business and their brand. In his book, Calkins shows business leaders how to create and maintain a defensive strategy including how to understand and get competitive intelligence; how to determine if your brand or company is at risk; how to create a defensive strategy; how to blunt your competitor’s efforts; and much more.

This book provides a first person account, given by a Navy Seal, of the planning and execution of Osama Bin Laden. Readers follow 24 Navy Seals as they train for and carry out the mission to capture Bin Laden. The author provides a play-by-play of the final moments of Bin Laden's life and how the Seals made history.


This work addresses India’s economic development and the ongoing lack of concern for the profound needs of many of its people – including the poor and women. Two renowned economists take the reader through analyses of systems, infrastructures, and policy attitudes in view of potential democratic actions.


*Man Repeller: Seeking Love, Finding Overalls* is Medine’s first novel. The inspiration for her book came from Medine’s blog, *Man Repeller*, which she started in 2010. By 2012, *Time* magazine ranked *Man Repeller* among its 25 best blogs. In the same year, Medine was on *Forbes*’s list of “Top 30 Under 30” most influential trendsetters of 2012. *Man Repeller: Seeking Love, Finding Overalls* is a unique memoir that follows Medine on a journey from kindergarten, where she claims her first kiss left her with chickenpox, to her realization that her inability to find a boyfriend stems from the way she dresses. This book is sure to leave readers, especially her blog followers, with a better understanding of the experiences that have molded Medine into the woman she is today.


Advertising is everywhere, and Tundate’s new book, *Adland: A Global History of Advertising*, gives readers a glimpse into what happens behind the scenes of this multi-billion dollar industry. Tundate explains the history of advertising, tracing its roots to the industrial revolution, and how the industry will look in the future. Tungate provides readers with exclusive interviews from key players in the industry, including Tom Bernadin, CEO of Leo Burnett; Jean-Marie Dru, President and CEO of TBWA Worldwide; and John Hegarty, Chairman of BartleBogleHegarty. This book is a must-read for anyone interested in the advertising industry.

Jackson’s book, *Eleven Rings: The Soul of Success,* is a motivational book intended to help readers become successful. The book was written by the head coach of the Chicago Bulls and Los Angeles Lakers, Phil Jackson, who won more championships than any coach in the history of professional sports. Jackson led the Chicago Bulls to the NBA championships six times and led the LA Lakers to the NBA championships five times. Throughout his career, Jackson developed an innovative approach to leadership, which is based on freedom, authenticity, and selfless teamwork. This leading approach, which he shares in his book, changed the face of sports forever.


Kidder wrote his new book, *The Startup Playbook: Secrets of the Fastest-Growing Startups from their Founding Entrepreneurs,* with the purpose of helping the hundreds of thousands of new businesses that start each year become and stay successful. To achieve this goal, Kidder shares his interviews with 40 entrepreneurs, including the founders of PayPal, LinkedIn, Flickr, and more, where they offer advice and insight into what it takes to build up a small business. All aspiring entrepreneurs and small business owners should have this book in their library.


Written by *Time Magazine’s* Executive Editor Nancy Gibbs and Washington Bureau Chief Michael Duffy, *The Presidents Club* gives readers an inside look at The Presidents Club, which was established at Dwight Eisenhower’s inauguration by Harry Truman and Herbert Hoover. This book is distinguished from other books of its kind because it gives an in depth look at the relationships between the current and past presidents. This book shows readers the conflicts that arise between presidents and how they deal with each other. This book is sure to entertain all who read it, regardless of their political party affiliation.
“Metamorphosis of the Swan” (2013)
Acrylic on canvas (18 × 24 in.)
Painting by Pedro A. Figueredo

Image Copyright © by Pedro A. Figueredo
All rights reserved. Used with permission.

This painting tries to conjure the transformation of the princess back into a swan in the ballet “Swan Lake.”
Instructions to Authors

Criteria for Publication

Authors should strive to produce original, insightful, interesting, important, and theoretically bold research. Demonstration of a significant “value-added” contribution to the field’s understanding of an issue or topic is crucial to acceptance for publication. All articles published in the Journal of Multidisciplinary Research (JMR) must make strong empirical contributions. Methodological articles are welcome, but they must contain accompanying theoretical and empirical contributions. All articles published in the JMR also must be relevant to practice. The best submissions are those that identify both a compelling multidisciplinary issue and a strong theoretical framework for addressing it. We realize that practical relevance may be rather indirect in some cases; however, authors should be as specific as possible about potential implications. All articles published in the JMR must be accessible to a wide-ranging readership. Authors should make evident the contributions of specialized research to general leadership theory and practice, avoid jargon, and define specialized terms and analytic techniques.

Authors should write manuscripts as simply and concisely as possible, without sacrificing meaningfulness or clarity of exposition. The journal editor-in-chief will evaluate manuscripts in terms of their contribution-to-length ratio – i.e., he or she will permit manuscripts that make strong contributions more pages than those making narrower contributions. Manuscripts should be no more than 26, double-spaced pages (justified, using one-inch margins, and the Times New Roman 12-point font), including an abstract (200 words maximum), keywords (seven terms maximum), references, and discussion questions (up to five) as well as any relevant tables, figures, and appendixes. At his or her own discretion, the editor-in-chief will allot additional space to papers that intend to make very extensive contributions or that require additional space for data presentation or references (such as meta-analyses, qualitative works, and work using multiple data sets). It is generally in an author’s best interest to be very judicious about manuscript length, yet the editors recognize that some manuscripts are more complex and extensive than others, and will consider such differences.

Submission Requirements

When authors submit their manuscripts to the JMR for publication consideration, they agree to abide by JMR publication requirements. Specifically, an author must:

• Agree that his or her manuscript is not under review for publication elsewhere and will not be submitted to another publication entity during the review period at the JMR.
• Attest that the manuscript reports empirical results that have not been published previously. Authors whose manuscripts utilize data reported in any other manuscript, published or not, are required to inform the editors of these reports at the time of submission.
• Confirm his or her manuscript has not been submitted previously to the JMR for review. Submission of manuscripts published previously in conference proceedings is acceptable; similarly, prior presentation at a conference or concurrent consideration for presentation at a conference does not disqualify a manuscript from submission to the JMR.
• Agree that, during the review process, he or she will take down working papers, prior drafts, or final versions of submitted manuscripts posted on any Web site (e.g., personal, departmental, university, or working series sites).

• Follow the fifth edition (or later) of the *Publication Manual of the American Psychological Association* (APA). Manuscripts prepared inappropriately tend to be reviewed less favorably and may be returned to the author for revision prior to submission to the full review process. Submitted articles must support the core values of St. Thomas University (http://www.stu.edu).

The Review Process

*Desk rejections.* When he or she receives a manuscript, the JMR’s editor-in-chief makes an initial judgment (sometimes with the assistance of an expedited blind review) about the suitability of the manuscript for the JMR. The editor-in-chief may reject manuscripts he or she deems not to fit with the mission of the JMR (e.g., no conceptual foundation or no empirical data, for example) or to be extremely weak (e.g., containing fatal methodological flaws or no incremental theoretical or empirical contribution).

*Normal review process.* The JMR is a peer-reviewed journal. For each manuscript that passes the initial review stage, the editor-in-chief assigns an action editor (him- or herself, or an associate, contributing, or guest editor) and two to three reviewers; at least two reviewers will be external to the university. The manuscript’s action editor makes publication decisions about it. He or she makes these decisions, however, in conjunction with recommendations members of the JMR’s Editorial Board or other qualified reviewers provide. All submissions will be blind reviewed; manuscripts prepared in a way that compromises blind review may be returned for revision prior to being reviewed.

Submission of a manuscript to the JMR also carries an implicit quid pro quo: willingness to review for the JMR. The cornerstone of the editorial process at the JMR is the willingness of colleagues to provide each other feedback through the peer review process. Authors who submit manuscripts to the JMR for review are expected to reciprocate by reviewing for the JMR if called upon to do so.

The JMR strives to provide constructive and developmental feedback to authors within approximately five weeks. However, the initial quality of the manuscript can influence dramatically both the efficiency and effectiveness of the review process. The better developed a manuscript and the ideas it contains, the easier it will be to review, and the better the feedback its author will receive. Therefore, manuscripts should always be reviewed by your scholarly colleagues prior to submission to the JMR.

*Technical note.* Authors who use the tracking facility of the reviewing tool in working on successive versions of their manuscripts should be aware that the latest versions of Word (e.g., those using Windows XP and later) show corrections to previous versions if the “Showing Markup” option is clicked when the Reviewing tool bar is activated. To prevent showing corrections before submitting your manuscript, you should (1) click on “Final,” (2) select the entire document, and (3) save this version as a new file under a new name. Then, submit this ‘clean’ version.

To submit a manuscript, first make sure you have a Microsoft Word file from which you have removed the title page and all author-identifying references. Then, e-mail your manuscript to the Editor-in-Chief at hgringarten@stu.edu
About the Journal

Advertising
For information on advertising, please contact the journal editor-in-chief (hgringarten@stu.edu).

Disclaimer
The journal publisher, editor-in-chief, managing editor, associate editors, and reviews editor, and the members of the editorial review committee cannot be held responsible for errors or any consequences arising from the use of information contained in the Journal of Multidisciplinary Research; the views and opinions expressed do not necessarily reflect those of the publisher, editor-in-chief, managing editor, associate editors, or reviews editor; neither does the publication of advertisements constitute any endorsement by the publisher, editor-in-chief, managing editor, associate editors, or reviews editor of the products advertised.

Indexing and Listing
The Journal of Multidisciplinary Research is indexed in ProQuest, EBSCO, Gale/Cengage, de Gruyter, and the Elektronische Zeitschriftenbibliothek (EZB). It is listed in the Directory of Open Access Journals, AcademicKeys, JournalSeek, MediaFinder, NewJour, the CUFTS Journal Database, and the Open University of Hong Kong Electronic Library. It is accessible via the NIST Research Library (National Institute of Standards and Technology, part of the U.S. Department of Commerce).

Open Access Journal
The Journal of Multidisciplinary Research does not charge readers or their institutions for access. Our users have permission to read, download, copy, print, search, or link to the full text of articles.

Permissions and Reprints
For information on permissions and reprints in relation to the Journal of Multidisciplinary Research, please contact the journal editor-in-chief (hgringarten@stu.edu).

Sponsorship
This journal is made possible by the generosity of Dr. Craig Reese and the financial support of the St. Thomas University School of Business.

To Cite Articles
To cite articles from the Journal of Multidisciplinary Research, you may use the following example:
The Editorial Review Board consists of selected individuals, expert in their field(s), reviewing submissions to the journal and serving for one year.

The Hon. William Altfield, Miami-Dade County Court Judge, Florida
Barbara Beliveau, Ph.D., St. Mary's College of Maryland
Eldon Bernstein, Ph.D., Lynn University
Paul Breman, D.B.A., Utrecht School of Applied Sciences, The Netherlands
Attilio M. Costabel, Esq., Costabel P.A.
Michael E. Dillon, Jr., Ph.D., Lincoln Memorial University
Claudia E. Fisher, Ph.D., Lemontree Brand Strategy Consulting, Munich, Germany
Leandro D. Gryngarten, Ph.D., Georgia Institute of Technology
Elias Kirche, Ph.D., Florida Gulf Coast University
Anne-Marie Mitchell, J.D., Stone Pigman Walther Wittmann, New Orleans, U.S.A.
Lloyd Mitchell, M.B.A., C.P.A., St. Thomas University
Khaldoon Nusair, Ph.D., University of Central Florida
Christy A. Powers, J.D., LL.M., St. Petersburg College
Selen Razon, Ph.D., Ball State University
Craig Reese, Ph.D., St. Thomas University
Michelle I. Seelig, Ph.D., University of Miami
Song, Seok-Ho, Ph.D., St. Thomas University
Rick A. Swanson, J.D., Ph.D., University of Louisiana-Lafayette
Tseng, Chien-Chi, Ph.D., University of Florida
Patricia Widener, Ph.D., Florida Atlantic University
Margaret Wilkins, Ph.D., University of Tennessee
Cristina Ziliani, Ph.D., University of Parma, Italy