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CHAPTER 22

When Presumed Influence Turns Real

An Indirect Route of Media Influence

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ow do messages shape one's attitudes and behaviors? Various theoretical lenses have been offered in this volume to understand the workings of persuasive communications through eliciting intended cognitive or emotional responses in the target audience. Media messages, however, can also inadvertently "cause" behaviors. Penn State University students, following the firing of the football coach Joe Paterno in a recent scandal, stormed into the downtown streets and overturned a television news van, a symbol of the news media, as they believed news reports had exaggerated Mr. Paterno's role in the scandal and misled the public (Schweber, 2011). Or earlier in 2011, in the wake of the nuclear plant crisis in Japan, a great "salt rush" hit the east coast of China after messages were spread on the Internet that the iodine contained in the salt would help prevent sickness from radiation exposure. Whereas salt purchase itself could be a direct effect of those messages, purchasing in bulk and hoarding was a preemptive response fueled by fear of "competing" others who must have been persuaded by the messages. In both cases, individuals

displayed such behaviors not primarily because the messages in question directly convinced them to do so, but because they thought that such messages must have influenced other people.

Such scenarios depict an image of message recipients that is eclipsed in traditional persuasion research: Message recipients, like us persuasion and media effects scholars, also ponder over the persuasive effects of messages. They have their own lay theories about the power of messages on other audience members, such as the belief that the news reports about Joe Paterno had skewed the public's perception about him, or the messages about the iodine in salt would lead others to hoard salt. Such presumptions about media effect, when transformed into actual behaviors, become the real effect of the media messages (Gunther, Perloff, & Tsfati, 2008).

This indirect route from message to attitudinal or behavioral outcomes via speculations about other audience members is succinctly characterized as "the influence of presumed influence" (IPI, hereafter; Gunther & Storey, 2003). Different from traditional persuasion perspectives focusing

on direct, intended effects of persuasive messages, it shifts analytical attention to how recipients' subjective perceptions about message effects shape their personal or social behaviors. This chapter is organized as follows. First, I will sketch out the larger theoretical background from which IPI originated, with a focus on the third-person effect framework (TPE, hereafter; Davison, 1983). Then I will take a look at IPI as a process model and review the empirical findings from the extant literature. Following that I will engage in a substantive analysis of the key components of IPI, mapping out some underlying conceptual dimensions and bringing forth a few conceptual issues. Finally, based on the previously mentioned review and analysis, I will discuss problems with current IPI research in terms of empirical rigor, theoretical vigor, and practical significance, and call for more efforts from future research to tackle these challenges.

Theoretical Background

Theoretical Origin: The Third-Person Effect (TPE)

Influence of presumed influence is an outgrowth of the third-person effect, an influential framework in the past three decades that has rerouted theoretical thinking about media effects. The idea of TPE is quite simple: Individuals tend to perceive a persuasive communication to have a greater impact on other people—the "third persons"—than on themselves (the perceptual component); and such beliefs may lead to real actions (the behavioral component; Davison, 1983). On the perceptual component, findings from a wide array of media contexts have attested to the robustness of the perceptual bias. A recent meta-analysis (Sun, Pan, & Shen, 2008) yields an average effect size of d =.646 (r = .307) based on 372 effect sizes from 106 studies, falling between the "medium" (d =.50) and "large" effect (d = .80; Cohen, 1988), and

not subject to variations in methodological factors, such as study setting, population, and design.

Theoretical explanations of such perceptual disparity have been proposed and examined. There is some, but inconclusive, evidence for both motivational accounts, which theorize the perceptual difference as a "bias" resulting from individuals' inherent drive to protect or enhance their ego (e.g., "self-serving bias," Gunther & Mundy, 1993; or "self-enhancement bias," Perloff, 2002), and cognitive accounts, which treat the perceptual difference as an "error" in cognitive processing and judgment-making due to differential cognitive schema or information structure related to self and other (e.g., fundamental attribution error, Gunther, 1991; the self-categorization explanation, Reid & Hogg, 2005). So far the existing evidence suggests that the self-other perceptual difference is probably determined by multiple factors (Perloff, 2009), and TPE scholars are working toward developing an integrated theoretical framework that can "differentiate, incorporate, and explain" both cognitive and motivational factors (Shen, Pan, & Sun, 2010, p. 51).

The empirical research surrounding the behavioral component has yielded a less clear picture. Whether and how the self-other perceptual disparity leads to behavioral consequences remains an open question. Though Xu and Gonzenbach's (2008) meta-analysis of studies on the TPE behavioral hypothesis reports an overall effect size of r = .13, which the authors claim is "not that trivial" for mass communication research (p. 382), the pool is worryingly small (10 studies with 26 effect sizes) with almost all the studies with inconsistent findings excluded through screening procedures (e.g., Atwood, 1994; Salwen, 1998; Salwen & Driscoll, 1997; Tewksbury, Moy, & Wei, 2004). Understanding of the behavioral component is also limited by a strong bias in empirical research in favor of investigating media regulation or censorship behaviors in negative contexts.

For example, 17 out of the 26 effect sizes in Xu and Gonzenbach's (2008) meta-analysis are related

to censorship behaviors. A rough count of the journal articles published recently (from 2008 till September 2011) on the TPE behavioral component (counted only when self-other perceptual gap is used as a predictor) reveals a sustaining trend: 13 out of the 21 articles have examined support for censorship or media regulation as the outcome variable. When other behavioral contexts are examined, the evidence is often null or counterhypothetical (e.g., Chia, 2007, Choi, Leshner, & Choi, 2008, on ideal body image and dieting behaviors or body dissatisfaction; Eisend, 2008, on scarcity appeal in advertising and purchasing intentions). Given the lack of consistent empirical evidence, the constraint to censorship behaviors, and theoretical under-explication, what we know about the behavioral component of TPE remains quite limited.

Influence of Presumed Influence

Rooted in TPE, IPI grows out of the interest in explaining behavioral reactions as enacted perceptions about media influences. Compared to TPE, IPI posits a similar process: "People perceive some influence of a message on *others* (italics added) and then react to that perception of influence" (p. 201, Gunther & Storey, 2003). The critical difference between IPI and TPE is that the posited causal antecedent of behaviors in IPI is perceived effects on others, instead of self-other perceptual difference as in TPE. In other words, the presumed influence on *others* alone, regardless of perceived effect on self, is postulated to be a basis for attitudinal or behavioral decisions.

This theoretical move, as Gunther and Storey (2003) claim, makes IPI a "more general" model "with broader application" (p. 201). According to them, as perceived message influence on others in either positive or negative directions may lead to behavioral consequences, IPI is freed from constraints to negative message contexts and regulation behaviors. As a more general model, they argue, IPI allows for a wider range of attitudinal or behavior consequences to be examined. Indeed, as

the empirical review shows in the next section, a much more diverse catalogue of behavioral contexts have been examined under the umbrella of IPI (though it should be noted that this difference is more an outcome of researchers' choices and does not necessarily reflect the different theoretical scopes of the two frameworks).

Though Gunther and Storey (2003) go as far as to declare that "the third-person effect is just a special case of this broader general model" (p. 201), this claim is somewhat premature. As IPI and TPE propose different causal antecedents (i.e., presumed influence on others vs. self-other perceptual differences), the two are virtually competing hypotheses for the message perceptionbehavior process. The viability and/or contingency of these two frameworks require further theoretical and empirical investigations. This chapter's focus on IPI, rather than suggesting that IPI supersedes or transplants TPE, stems from the very recognition that the two literatures need separate scrutiny and synthesis. IPI is chosen as the focus of this chapter for two reasons. First, a few extensive reviews focusing on TPE are already available for interested readers, such as Perloff (2009), Gunther et al. (2008), and Tal-Or, Tsfati, and Gunther (2009), to name a few recent ones. Second, IPI tackles behavioral consequences in a more direct and focused way, and thus is more pertinent to the study of persuasion processes. The wider range of behaviors examined in extant IPI literature also renders the review and discussion more interesting to persuasion scholars.

Current Findings on IPI: A Process View

IPI as a Multistep Process

Drawing on the previous work on "persuasive press inference" (Gunther, 1998), Gunther and Storey (2003) delineate a few consecutive steps to describe the indirect route from message to behavioral outcomes. First, individuals form basic

impressions about the media content upon exposure (self-exposure). Second, through "presumed reach" (Gunther, Bolt, Borzekowski, Liebhart, & Dillard, 2006), individuals assume that the media content they are exposed to reaches a broader audience. Based on their own exposure to the media content, they infer other audience members' level of exposure (self-exposure → otherexposure). Third, individuals further assume that others, who presumably have viewed or will view the media content, have been or will be influenced by it accordingly (other-exposure → presumed influence). Finally, the presumed reactions by others to the media content serve as guidance for individuals' own attitudinal or behavioral decisions (presumed influence on others → influence on self). Figure 22.1. depicts this entire process.

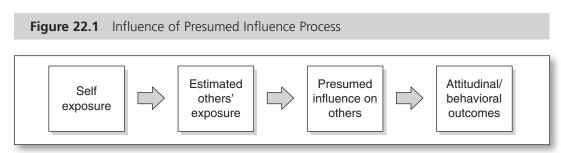
This process has been tested in an array of behavioral contexts, with variations at times in terms of what elements are included or how they are measured. The overarching goal guiding these studies is to verify the mediating role of presumed influence on others between message exposure and attitudinal/behavioral manifestations. Empirical findings from different contexts are reviewed next.

Health-Related Attitudes and Behaviors

Smoking

Using data collected from sixth through eighth graders from the spring and fall terms of 2003, Gunther and colleagues examined how smoking-related messages may indirectly influence teenagers' smoking attitudes and intentions. Testing the IPI process with regard to both prosmoking and anti-smoking messages with the data from the spring, Gunther et al. (2006) ascertained that the indirect pathways were significant and in the expected directions. More specifically, teenagers' exposure to both pro-smoking and anti-smoking messages, via increased estimates of peer exposure to such messages, influenced their perceptions of smoking prevalence among their peers, which then affected their smoking attitudes and susceptibility.

Paek and Gunther (2007), focusing on antismoking messages using the data from the fall, analyzed non-smokers and smokers separately, and for each group, investigated the potentially differential roles of proximal peers ("your close friends") versus distal others ("other students your age in your school"). The expected IPI process, for smokers and nonsmokers alike, was confirmed when close friends were the referent others. When distal others were considered, presumed influence had no significant relationship with attitude toward smoking. Consistent with these findings, Paek's (2009) study on nonsmoking college students found that presumed influence of cigarette advertising on close peers, but not on distant others, mediated the relationship between self-reported exposure to such advertisements and smoking intention. Taking advantage of the two-wave panel data, Paek, Gunther, McLeod, and Hove (2011) examined how the IPI



Source: "The Influence of Presumed Influence," by A.C. Gunther and J.D. Storey, 2003, Journal of Communication, 53, p. 199-215. Copyright 2003 by Wiley.

process might unfold over time. Presumed influence of anti-smoking messages on close peers at Time 1 had no direct impact on smoking attitudes or susceptibility at Time 2, though its indirect effect was significant, mediated by presumed influence at Time 2.

Ideal Body Images on the Media and Body Dissatisfaction

Teenagers who consume media representations of ideal body images can be impressionable to the portrayed media norm and perceived peer judgment. Through an in-depth interview, Milkie (1999) uncovered prevalent perceptions held by high-school girls that they were judged by their peers in accordance with the norms portrayed on the media. Gentles and Harrison (2006) showed that African American adolescent girls were not immune to this process either: Increased consumption of media body images led to heightened perceptions of peer expectations using the media images as the standard. More specifically, girls with larger body size tended to think that their peers expected them to be smaller, and those with smaller body size felt the opposite.

Park's (2005) study, formally testing the IPI process using structural equation modeling (SEM hereafter), showed that exposure to beauty and fashion magazines was associated with perceived prevalence of the thin-ideal images, which then led to greater presumed influence of such images on others. The presumed influence had an indirect impact on one's desire to be thin, mediated by the presumed influence on self. Direct association between presumed influence and behavioral intentions, however, was either negative, opposing the hypothesis (when other women were considered), or nonsignificant (when other men were considered). In their study of male college students in Singapore, Chia and Wen (2010) found that perceived effects of media portrayals of ideal body images on male friends and female friends were unrelated to body dissatisfaction, intention of going on a diet or going to a gym regularly, but negatively related

to intention of going through cosmetic surgery (for "male friends") and taking diet pills (for "female friends") respectively.

Sexual Attitudes and Behaviors

Studies that applied the IPI framework to adolescents' sexual attitudes and behaviors have revealed a rather complicated picture. On one hand, there was supportive evidence suggesting that greater exposure to sex-related media content, positively predicting perceived peers' exposure to these contents (Chia, 2006; Chia & Lee, 2008), led to adolescents' perceptions of increasingly permissive peer norms (Chia, 2006; Chia & Gunther, 2006), which then fed into their own sexual attitude and their intentions to engage in sexual activities (Chia, 2006). On the other hand, across these three studies, there was equally strong evidence for the "projection effect" as an alternative explanation (which posits that perceptions of peer norms are a result of one's projecting their own attitudes onto others). Chia and Gunther (2006) concluded that college students' misperceptions of peer sexual norms could be a function of both presumed influence of sexual media content and projection of their own attitudes.

Advertising

Advertising and Materialism

Chia and her colleagues adopted the IPI framework to examine how the expanding advertising landscape in Asian countries may contribute to increased materialistic values. Studies of Chinese college students (Jiang & Chia, 2009) and adolescents in Singapore (Chia, 2010) supported the indirect effect of self-exposure to advertising on materialistic attitudes, mediated by perceived peer exposure, and presumed influence on peers. Perceived parents' viewing of advertisements, however, did not predict perceived level of materialism of the parents (Chia, 2010).

Direct-to-Consumer Advertising

Huh and Langteau's (2007) study examined how physicians' perceptions of the influence of DTC advertising on patients may affect their support for government regulations of DTC ads and their own prescription decisions. Support for regulation was explained mainly by physicians' attitude toward DTC advertising, not by presumed influence on patients. Among a host of prescription-related decisions that were examined in the study, only the refusal to prescribe requested drugs was predicted by the perceived detrimental influence of DTC advertising.

Political Communication

In political realms, IPI has been used as a tool to understand individuals' decisions on political issues and politicians. Tsfati and Cohen, in their studies of minority groups in Israel (such as Arabs in Israel, Tsfati, 2007; peripheral developmental towns, Tsfati & Cohen, 2003; and Gaza settlers, Tsfati & Cohen, 2005), showed that members of a minority group, perceiving the media coverage of their group to have influenced the general audience, believed that such coverage created or reinforced the negative, stigmatized image of their group in the mind of the public. Such perceptions culminated in a stronger sense of political and social alienation (Tsfati, 2007), greater political inefficacy (Tsfati & Cohen, 2005), and a stronger inclination toward relocation (Tsfati & Cohen, 2003; Tsfati & Cohen, 2005).

Cohen and Tsfati (2009) applied IPI to the study of strategic voting—shifting one's vote away from a personally preferred party in order not to waste the vote—in Israel, where the multiparty system makes strategic voting more important. They measured strategic voting both using self-report survey data from the years 2003 and 2006, and by identifying actual shifts in votes after the election. Their findings showed that above and beyond the perceived effect of media

coverage on self and a host of other relevant factors, the presumed influence of media coverage of the elections on others consistently predicted strategic voting. Sophisticated voters, as shown by their studies, seem to indeed assess the trend of public opinion by gauging the possible media effect on other voters and then make voting decisions on that basis.

Cohen, Tsfati, and Sheafer (2008) turned their attention to political elites and examined how political elites' belief in media power may play a role in their use of media for achieving political goals. Surveying 56 members from the Israeli Knesset, the authors showed that political elites' perceptions of media influence on the public, via increasing media motivation and effort, were associated with the increased media coverage they received as well as their parliamentary activities. In other words, the belief in media power on the public was shown to lead politicians to more actively use media to promote their political agenda.

Conceptual Underpinnings: A Component View of IPI

Explicating "Influence"

The *influence* of presumed influence, the endpoint of the process that anchors the importance of the model, refers to an individual's attitudinal and/or behavioral responses resulting from considerations about how relevant social others may react to certain media messages. Taken as a "process concept" (McLeod & Pan, 2005, p. 17), it implies changes as a result of preceding causes. Taken as a "variable concept" or a "mega-concept" (p. 17), it denotes a collection of responses—attitudinal or behavioral—that come about in various message contexts of interest.

In IPI studies, the construct of "influence" has been operationalized in diverse ways. Based on existing studies and a few previous categorizations (i.e., Gunther et al., 2008; Tal-Or et al., 2009), we can delineate two conceptual dimensions undergirding the behavioral responses.

One dimension concerns the *direction* of response, that is, where an individual shifts his or her actions in relation to the presumed trend of others' responses. One can decide to act either largely *with* (converge with) or *against* (diverge from) the perceived trend. The second dimension concerns the *mechanism* of response (i.e., the nature of considerations and motives that primarily drive the behavioral decision). Behaviors can be driven primarily by considerations of others' expectations, interpersonal or social pressures (i.e., normative influence), or by considerations of potential consequences or implications of others' behaviors (i.e., ecological influence).

Crossing these two dimensions, four categories of behaviors can be derived (Table 22.1.). Compliance versus defiance characterizes the bifurcation of behavior responses resulting from *normative* considerations (also see Tal-or et al., 2009). *Compliance* behaviors refer to instances where individuals bring their behaviors closer to the perceived expectations of the referent group. Such compliance can be in the form of initiation or reinforcement of attitudes/behaviors perceived to be prevalent in and/or sanctified by the referent

group, for example, teenagers starting to smoke to be part of the peer group (Gunther et al., 2006). Compliance can also be changes from the other end of the behavioral spectrum (i.e., giving up behaviors or positions perceived to be "unacceptable" or "undesirable" to the referent group). Peripheral developmental town residents' consideration of relocating away from a town that they believed was disliked by the majority others is a case that illustrates such behaviors (Tsfati & Cohen, 2003). Or the heightened sense of alienation and political inefficacy (Tsfati, 2007; Tsfati & Cohen, 2005) as a result of perceived normative expectations is also a subtle form of being co-opted by the "mainstream view" (Gunther et al., 2008, refer to such responses as "withdrawal" behaviors).

Defiance behaviors, in contrast, refer to those that run counter to the perceived norms. These behaviors are not researched as much in extant IPI research. One example is from the Tsfati and Cohen's (2005) study, which showed that Gaza settlers who perceived greater negative media influence on the public opinion about their group felt more resistant against evacuation and more justified to resort to violence. Chia and

Table 22.1 Typology of Behavioral Outcomes Along Two Dimensions

		Direction	
		Convergent	Divergent
Nature of Influence	Normative	Compliance	Defiance
	Ecological	Coordination	Rectification

Wen's (2010) finding that the more influence college male students perceived of media portrayals of ideal bodies on other friends, the *less* likely they were to indicate an intention of going to a gym regularly may also be suggestive of resistance against or "defiance" of perceived norms.

Under ecological considerations, coordination and rectification are two possible types of behavioral responses. Coordination reactions (see also Cohen & Tsfati, 2009) refer to adaptive behaviors based on calculations of how others' possible behaviors may affect the chances to achieve their own goals. For example, Cohen and Tsfati (2009) showed that sophisticated voters switched their vote from their preferred, smaller party to a bigger one that appeared to be more favored by the media and therefore more influential on other voters (Study 2). In an experimental study conducted by Tal-Or, Cohen, Tsfati, and Gunther (2010), they showed that when respondents believed that the article they read on a sugar shortage had more influence on others, they indicated a stronger intention to rush to the stores to purchase sugar.

On the other hand, there are situations where perceived behavioral reactions by others are regarded to inflict harm or sustain some lessthan-optimal conditions. Under such circumstances, individuals may be motivated to take up actions to fix the problems or deficiencies and improve their surroundings. Sun, Shen, and Pan (2008) use the term "rectification" to designate such behaviors. It includes, but is not confined to, restrictive or regulatory reactions toward media messages (labeled as "prevention behaviors," Gunther et al., 2006, Tal-Or et al., 2009). Rectifying behaviors can also include other actions designed to redress situations deemed problematic. Lim and Golan (2011) showed that respondents were more likely to participate in "social media activism" behaviors, including posting comments or their own countering video online, when they believed that a YouTube parody video on Al Gore and global warming negatively influenced others. Such "corrective" behaviors (also see Rojas, 2010) are aimed at dispelling potential

misperceptions or correcting biases that may be propagated by the media. Even in the context of media content with positive influences such as public service announcements, Sun et al. (2008) argued, "rectification" could take the form of promotional behaviors to further disseminate the messages and amplify their influence. All of these behaviors, restrictive, corrective, or promotional, share the goal of improving the less-than-desirable social conditions due to perceived excessive or insufficient media influences on others.

Unpacking "Presumed Influence"

"Presumed influence" (PI in short) denotes one's subjective perceptions of the exerted or potential impact of the given media content on some referent others. Though seldom explicitly explicated, PI entails two connected aspects. The primary aspect is the subjective estimate of the extent or likelihood of message influence on the referent others. Operational measures are typically variants of this more general formula: "How much influence do you think [the media message] has on [the referent others]?" The second, ensuing aspect is the presumed collective responses from others (deemed either potentially possible or already actualized) resulting from such influence. For instance, Gunther and colleagues' (2006) study employed the perceived smoking prevalence among peers as a proxy measure of presumed influence of smoking-related messages. The first aspect is an estimate of message influence in terms of its extent and magnitude, whereas the second aspect captures speculations of the substantive effects of the message on others, that is, how it may have made others (re)act in certain ways.

Both aspects are important to the construct validity of PI. Without including the first aspect, the notion of *media as a source of perceived norms* would be missing. Perceptions of peer smoking prevalence, for example, can be a result of direct observation or communication, instead of an inference based on presumed media influence.

On the other hand, not measuring the second aspect, the presumed responses from others, can also be inadequate. Sheer perception of the magnitude of influence does not necessarily prompt behavioral responses. Rather, "how one responds to a message depends largely on what the message is thought to do to [others] (italics added)" (Tewksbury et al., 2004, p. 140). Jensen and Hurley's (2005) study included what they called "presumed behavior" to explicitly capture the likelihood that others were thought to do something (such as talking about the issue or acting on the issue), and found that such presumed behaviors associated with different referent others had varied roles in motivating respondents to engage in behavioral responses.

Emphasizing the second aspect is also to highlight that inherent to PI is a media-referent relationship that is context-bound and referent-specific. The presumed message influence is a relational assessment, not a context-free evaluation of the message content or other message properties alone. This difference distinguishes PI from other related notions, such as perceived effectiveness/argument quality of a message, or perceived utility/gains of a message system/tool, the focal assessment of which is the properties of the evaluated object (though such evaluation inevitably evokes some referents in the mind of the respondents, Dillard & Sun, 2008).

Delimiting borderlines between PI and these other notions serves to maintain the theoretical identity of IPI. Take as an illustration Tsfati, Cohen, and Gunther's (2011) study, where "presumed media influence" was measured in terms of how "published research featured in the mass media" is believed to give scholars more publicity, help their academic careers, get research funding, and so on (pp. 152-153). Strictly speaking, these items capture individuals' beliefs about the benefit or utility of publicizing research on the media outlets, an assessment not bound to specific referents or contexts. As such, they can very well be measures of the "belief" component in the Theory of Attitude (Attitude= $\Sigma b_i e_i$; Fishbein & Ajzen, 1975) in predicting attitude toward the behavior in question. The study could be regarded as a test of the direct linkage between beliefs (about media as a tool to advance some relevant goals) and attitudes (toward using media as such a tool), instead of an indirect route between media messages and behaviors via reasoning about referent others as postulated in IPI.

Self, Others, and Messages

Self and Referent Others

Though the perceived influence on self is no longer a critical element in the theoretical formulation of IPI (Gunther & Storey, 2003), the construal of self-other relationship is nonetheless intrinsic to the perception-behavior process. The self-other relationship in IPI studies can be broadly put in two categories. One type is nested, where self (the respondent) is part of the referent group on the dimension evaluated, such as friends or other college students (Gunther et al., 2006), or other voters in the country (Cohen & Tsfati, 2009). The other type of self-other relationship is juxtaposed, where the referent others belong to an out-group on the characteristics defined by the context of the study. Such ingroup and out-group distinction can be based on demographic characteristics, such as gender (e.g., female respondents vs. "other men in general," Park, 2005), race (e.g., Israeli Arabs vs. Israeli Jews, Tsfati, 2007), or party affiliation (e.g., Democrats, Independents, and Republicans, Hoffner & Rehkoff, 2011). Groups can be sociologically or institutionally defined as occupants of different positions in a specific social system (i.e., physicians vs. clients in the DTC advertising context, Huh & Langteau, 2007; or congressmen vs. the public, Cohen et al., 2008). Perceptions of group boundaries can also be created through media portrayal, such as the "featured group" of media reports on some issues vs. the rest (for example, the Gaza settlers vs. other audience members in Tsfati & Cohen, 2005).

Do all the referent others weigh the same on one's decision-making? The existing evidence suggests not. Presumed influence of anti-smoking messages on distant peers was not related to one's own smoking attitudes or intention, but that on close friends was (Paek, 2009; Paek & Gunther, 2007). The indirect effect of advertising on materialism was mediated by teenagers' perception regarding their friends, but not that regarding their parents (Chia, 2010). These findings have shown that "Not all others are equal." The literature to date, though, does not yet offer compelling arguments as to why they are not equal. Although the relevance of the referent group seems to be an easy explanation to evoke, the ad hoc usage of such an explanation borders on tautology if self-other relationships are not theoretically explicated a priori and examined as an empirical question on its own. A combination of individual, interpersonal, and contextual factors may be responsible for differential judgment processes involving different referent others.

Message

Message tends to be the "backgrounded" element in IPI research. In most IPI studies, researchers usually provided the respondents with a general description of media messages in a broad topic area, such as "news media coverage of the elections" (Cohen & Tsfati, 2009), "anti-smoking messages on TV" (and magazines, billboards, etc.; Gunther et al., 2006), or "media content that includes talk about sex, sexual behavior, and sexual relationship" (Chia & Lee, 2008). Respondents were asked to recall their own exposure to these messages before estimating others' exposure to such messages and the presumed influence on others. Message characteristics and individuals' own perceptions and interpretations of such messages are rarely measured.

Such operational practice can marshal some defense. That is, when the goal of the study is to explain the formation, reinforcement, or change in one's attitudes or behavior in a given message environment resulting from a cumulative process involving constant exposure to such messages, a

vague, broad measure has face validity in terms of capturing the immersion of the individual in the message environment. In a theoretical light, however, such self-report exposure measures without attention to message characteristics are problematic in at least two ways. First, using exposure as the antecedent factor presupposes that individuals use the "exposure is effect" heuristic to make judgments about influence on others. This assumption does not necessarily hold. Lim and Golan's (2011) experimental study just demonstrated the opposite: The perceived likelihood of exposure, manipulated as high versus low numbers of views on YouTube, had no significant effect on presumed influence on others, whereas perceived persuasive intent of the message (manipulated through source intent) did. Broken linkages between exposure variables and presumed influence were also shown in a few other studies, especially when the referent others were regarded as distant (e.g., distal peers in Paek & Gunther, 2007; Paek, 2009) or different (i.e., parents, Chia, 2010; male others, Park, 2005) from self.

Second, without examining conceptual characteristics of messages, the theoretical processes between message construal and judgment-making remain opaque. The problem of the lack of specific message explication looms large when unexpected results turn up and require further explanations. As Paek et al. (2011) lamented, "our global measure of exposure... does not allow further explication of the reasons for the unintended association" (referring to the positive association between exposure to anti-smoking messages and smoking outcomes; p. 141). Though ad hoc explanations could be summoned up, they remain uncompelling speculations.

Directions for Future Research

Based on the review of empirical evidence and the conceptual analysis, I will make three critical observations of problems or challenges that face IPI research. (I) Despite a sizable body of research studies on the process of IPI, its empirical credence is not yet quite established due to inconsistencies in extant findings and a general lack of causal evidence.

Inconsistencies in Empirical Findings

Though most studies show satisfying model fit indices, inconsistencies in specific findings should not be overlooked. For example, in the context of anti-smoking messages, the direct effect of selfexposure to anti-smoking messages on smoking susceptibility was shown to be nonsignificant in Gunther et al. (2006), but counterintuitively, positive in other analyses (Paek & Gunther, 2007; Paek et al., 2011). In Paek et al. (2011), the overall indirect effect from anti-smoking message exposure to smoking susceptibility at Time 1 was negative (-.02, p < .05), but positive at Time 2 (.04, n.s.). Such results, both internally inconsistent and in contradiction with some external literature (i.e., meta-analytic findings on the effectiveness of antismoking campaigns, Sussman, Sun, & Dent, 2006), call for more investigations in this context, especially as the findings reported in these three studies were all based on the same data source.

Some other inconsistencies include Gunther and Storey (2003), where the predicted process received support from the self-report data, but not when actual measures of observed interactions were used as an outcome variable, or Park (2005), which showed positive indirect effect but negative direct effect of presumed influence on other women on one's desire to be thin. Though the authors made ad hoc explanations for these inconsistencies, more empirical investigations are needed in future research to replicate or explain such findings.

The Lack of Causal Evidence

As extant studies rely heavily on cross-sectional self-report survey data (Tal-Or et al., 2009), a prominent concern with IPI research is that the evidence does not translate to causal

interpretations. Studies that use SEM analysis seldom test out alternative models. When reversed causal links did get tested, the evidence tended to be equally favorable for the alternative models. For example, reversing the causal path between self-exposure and smoking attitudes/susceptibility produced a model fit as good as (Paek & Gunther, 2007), or even a slightly better fit than (Gunther et al., 2006), the original model. Chia and her colleagues' research on sexual norm perceptions also showed equivalent support for the alternative explanation, the projection effect.

Simply acknowledging the lack of causal evidence as a weakness in discussion sections, which most research papers do, is not enough. How to parse out causal processes poses methodological as well as theoretical challenges that should be taken up by future IPI research. Randomized experimental studies and longitudinal studies, as effective ways to establish causal evidence, should be conducted more often. So far, only two experimental studies (Lim & Golan, 2011; Tal-Or et al., 2010) and one longitudinal study (Paek et al., 2011) bespeak such efforts.

A Cautionary Note About SEM

As SEM has been a popular technique used in IPI studies, a note of caution should be made emphatic. One common misuse of SEM, as SEM scholars have alerted us to, is to prioritize "adjudging" fit over theory-testing (Hayduk, Cummings, Boadu, Pazderka-Robinson, & Boulianne, 2007). A symptom of such misuse in IPI studies is that variables are sometimes added to or removed from the originally posited IPI process without theoretical justifications. For example, in Park (2005) presumed influence on self was inserted between presumed influence on others and attitudinal outcome, a modification of the original IPI model without sufficient theoretical justification. In Paek et al. (2011), peer exposure was removed from the model solely based on model trimming procedures without any discussion of the theoretical reasons and implications.

Moreover, another problem of overemphasis on model fitness indices (FI) is that the conventionally used FIs have less bona fides than usually credited with. Saris, Satorra, and Van Der Veld (2009) showed with simple examples that the conventional FIs could lead "substantively relevant misspecification" (e.g., imposing wrong restrictions on certain parameters) to be retained and "substantively irrelevant misspecification" (e.g., good enough for practical purposes though not exactly the same as the "true" model) to be rejected. FIs are also unable to detect common perils to SEM analysis (such as common method variance and simultaneity, to which IPI studies are particularly vulnerable) that can inconsistently bias path coefficients and invalidate causal inferences (Antonakis, Bendahan, Jacquart, & Lalive, 2010; Cole, Ciesla, & Steiger, 2007). IPI scholars should use SEM with more discretion, prioritize theory-testing, and interpret the results with great care.

(II) The lack of conceptual explication and theoretical explanation can jeopardize the development of the IPI framework. More theory-building efforts are needed to move IPI from a descriptive model to an explanatory and predictive theoretical framework.

IPI, in its current formulation, is a depiction of "regular succession" (Psillos, 2002). It describes, but does not explain. Using Dubin's (1978) terms, it involves the "what" and "how" elements, but not "why." Though the process formulation of IPI contains causal propositions (e.g., presumed influence causes attitudinal/behavioral change; or exposure of others leads to presumed influence on them), it has yet to offer cogent causal explanations. Without answering the "why" questions, IPI will remain an interesting descriptive framework, but not a theory.

Theory-building is a long-term project. One starting point is conceptual explication. The "component" analysis section of this chapter engages a little bit with this task. Delineating formal conceptual typologies, like the one for

behavioral consequences discussed earlier, is an important task in constructing theories (Hage, 1972). Such conceptual categories have heuristic functions in generating theoretical questions that build up for theory-development.

For example, with the conceptual categories of behavioral outcomes, questions can be raised about the contingent conditions and different mechanisms responsible for different types of behaviors. Does IPI have the same explanatory or predictive power across the subdimensions? How may different types of involvement be related to normative or instrumental behaviors? What are the factors that may determine the tipping point toward "convergent" versus "divergent" reactions? Such inquiries will help IPI scholars deductively derive a set of testable propositions and shed light on the underlying causal mechanisms.

Conceptual characteristics of the self-other relationship should also be more carefully analyzed to understand how construal of others (in relation to self and message context) influences one's own attitudinal/behavioral outcomes. Though extant literature has examined different kinds of referents, conceptual characteristics of the self-other relationship have not been directly explicated or examined yet. A more fundamental question that faces IPI research is what are the situations in which the thought of referent others arises and matters in the first place. In other words, when referent others are specified to the respondents in the surveys in current IPI research, the assumption is that the real-world decisionmaking process involves these others. Are there conditions under which such an assumption simply does not hold? Do we risk reifying the notion of presumed influence if we leave that assumption unchecked? Since "there are many different grounds that could lead one actor to treat a subset of other actors as a comparison point" (Marsden & Friedkin, 1993), which referent others are called for by different message contexts and behavioral domains? Some qualitative, exploratory research is needed to establish a more solid foundation to justify the referent other measures and explicate the conceptual dimensions.

(III) Finally, a bigger question for IPI scholars to ponder over is what theoretical space and practical grounds IPI can carve out for itself in the landscape of media effects and persuasion research.

IPI Versus TPE

As briefly argued earlier, though Gunther and Storey (2003) suggest that IPI is a broader model under which TPE is a special case, we should not rush to that conclusion without adequate theoretical and empirical investigations. The two frameworks posit different causal antecedents (i.e., perceived effects on others vs. self-other perceptual gap), and therefore imply different theoretical explanations for behavioral responses. For example, IPI, by uncoupling perceived effect on others and that on self and placing sole emphasis on the former, implies that individuals' assessment of the normative or ecological environment is used as a separate piece of social information in behavioral decisions. In TPE, on the other hand, using the self-other perceptual difference as a predictor highlights a social comparison process, where the latitude of difference between perceived self-position and other-position generates motivation for actions. Perceptions of how differently others are affected by messages than self account for variance in behavioral inclinations, instead of considerations of others' reactions alone. Given that both frameworks have garnered some empirical support (for example, Rojas, 2010, and Lim & Golan, 2011, respectively supported TPE and IPI hypotheses regarding "corrective actions") and both are theoretically underexplicated, we need more theorizing as well as more carefully crafted and purposeful research designs to identify the conditions for the viability (or nonviability) of each framework.

IPI versus TRA

The Theory of Reasoned Action (TRA) also includes the thought of others in the equation to predict behavioral outcomes. The primary difference between IPI and TRA is that IPI connects the dots between messages and others, explicitly specifying the relationship between the two. In TRA, the "others" usually refer to close individuals, such as family members or partners, and the perceptions of their thoughts are presumably based more on intimate knowledge or experiences. In IPI, referent others are usually a broader group, and presumptions about them are inferences made based on media messages. In addition, in terms of the mechanism of influence, the subjective norm component in TRA is mostly about the normative influence, whereas in IPI, as discussed earlier, other types of mental calculations can be encompassed.

Practical Implications? Message, Message, Message!

Generally speaking, a major practical contribution of IPI is the very knowledge that media messages have indirect, unintended effects that can also be consequential. If nothing else, this at least reminds campaign practitioners that they need to pretest indirect effects in addition to the direct, intended effects of messages.

What about implications of IPI for intervention strategies and message design? Though IPI scholars have suggested that a social-norm approach be used in media campaigns to correct erroneous perceptions (e.g., Chia & Gunther, 2006; Paek et al., 2011), this is not a unique contribution of IPI. Research on peer norm and peer influence has long found that the misperceptions of norms contributed to risk behaviors and correction of such norm perceptions can be another venue for behavioral change (Clapp & McDonell, 2000; Prentice & Miller, 1993). Furthermore, social-norm campaigns have already been widely implemented and so far produced rather mixed results (i.e., Clapp, Lange, Russell, Shillington, & Voas, 2003; Wechsler et al., 2003), casting doubt on their effectiveness.

So far IPI research has yielded few practical insights regarding message design and strategies in the context of persuasion campaigns. As discussed

before, unlike in other persuasion perspectives, the message element in IPI is rather neglected. Lim and Golan's (2011) study showed that explicating message content can and should be a new direction for IPI research, and can potentially open up a fruitful area where IPI meets traditional persuasion theories to generate interesting questions. Their experimental finding that the perceived persuasive intent of the message led to greater presumed influence has clear practical implications for message design. It also suggests the feasibility for IPI scholars to move away from exposure as the exogenous explanatory factor and switch to message factors as the theoretical anchor of the process. Such a switch has practical value in addition to theoretical importance. More specifically, knowledge about the effect of exposure itself does not have much practical utility, as limiting or increasing individuals' exposure to the media content would be a rather constrained or ineffective intervention strategy in real life. A lot can be done, however, if we have a solid stock of knowledge about how message characteristics directly or indirectly influence message processing and relate to attitudinal or behavioral consequences. Such knowledge will help practitioners design more effective persuasion messages and intervention programs.

Summary

This chapter presents a review and an analytical discussion of the research on influence of presumed influence. Representing an indirect model of media effects, IPI complements traditional persuasion perspectives with its central idea that a message can indirectly influence individuals' attitudes or behaviors by shaping their presumptions about the message influence on other audience members. A review of extant findings from a wide range of health, advertising, and political contexts largely shows support for the postulated IPI process, though the inconsistencies in extant

findings and the lack of causal evidence require that future investigations pay attention to such problems and make efforts to resolve them.

The component view of IPI attempts some conceptual explication of the key components of IPI through which some underlying conceptual dimensions are clarified and a few conceptual issues are raised. Future research should engage in more in-depth conceptual and theoretical explications and investigate causal explanations for the posited relationships. IPI should move from the "descriptive" stage to the "explanatory" stage of theory development, where theory construction, theory testing, and theory reformulation are focal tasks (Reynolds, 1971, p.155). Theoretical explications, combined with experimental studies or longitudinal studies, are necessary to make that move.

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