

No Alternatives? The Relationship between Perceived Media Dependency, Use of Alternative Information Sources, and General Trust in Mass Media

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This article combines three concepts of communication research — media dependency, trust in mass media, and the use of media and alternative information sources — to answer several research questions: Is there a relationship between individual perception of media dependency and trust in the media? Does use of media or alternative non-media sources correlate with the feeling of being dependent on mass media? And is there an association between use of media or alternative sources and the level of trust in mass media? Based on a representative telephone survey, this study seeks answers to these questions.

Introduction

In many instances, the relationship between the mass media and their users is asymmetrical. Usually, mass media have the resources to deliver information that people need. Media users have hardly any effect on the way media producers handle these resources (Ball-Rokeach, 1998, p. 17). The major resource of the mass media is news. An informed public is a prerequisite in a democracy in which citizens must cope with complex and ever-changing reality (McQuail, 1983, pp. 82–83). By fulfilling this function more or less comprehensively, mass media have become the most important source of information in modern societies (Lippmann, 1965; Luhmann, 2000). Although many people have access to interpersonal networks or alternative information systems, mass media remain a central element in people's acquisition of knowledge of areas beyond an individual's direct experience. In fact, when decisions are pending, at the ballot box for example, citizens who want information have no other choice but to rely on mass media, even if they have doubts about it (Luhmann, 2000, pp. 1–9).

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For this reason, the issue of trust in the media is vital: "Given that media deal with the distant world, audiences usually find it difficult to verify media reports with nonmedia sources" (Tsfati & Peri, 2006, p. 170). The less an issue relates to personal experience, the more significant the role that trust plays in the relationship between the media and their users (Kohring & Matthes, 2007, p. 248). When people can rely on alternative sources, the problem of trust is not crucial: They can avoid the media mainstream. However, if people have no functional alternatives to mass media (or do not see them), media dependency becomes crucial: In this case, citizens need to trust mass media as the sole provider of information.

Why is it important to deal with the relationship between trust, media dependency, and the use of alternative information sources? From a communication researcher's point of view, trust in the media is a decisive variable as it facilitates media use (Tsfati & Cappella, 2003; Tsfati & Peri, 2006), moderates the relationship between media users and content and thus enables direct media effects. Furthermore, mass media exist specifically to provide information. For them, losing credibility results in losing audiences, societal influence, and legitimacy. In addition, media dependency can be regarded as both a gateway for media effects and a general indicator of the significance and the power of the mass media in a societal context (Ball-Rokeach, 1998). In systems with low pluralism and few alternatives, the media are powerful and users' dependency is quite strong. A low level of media dependency might indicate a comparatively high degree of media pluralism, with various sources available. In such pluralistic systems, trust in the mainstream media may be less widespread, and media effects are less likely to be direct. In this sense, the existence and use of alternative information sources reflect the openness of a society, the empowerment of its members, and their media literacy.

The three central concepts of this study — trust in the media, media dependency, and the use of alternative information sources — are thus interrelated issues. People with access to alternative information sources may feel less dependent on the media in general. They may also be less confident in mainstream media and less susceptible to media effects. Those without access to such functional alternatives may feel more dependent on mass media. Potential consequences are frequent exposure to the media mainstream, high degree of trust in its protagonists, and potentially strong direct media effects. Therefore, there are three central questions to be answered in this article: Do people have more trust in mass media when they feel dependent on them? Are these people more or less willing to search for non-media alternatives? In other words, is there an association between trust in the media, the perception of having no alternative information sources, and the use of non-media information sources? And are there any distinctive socio-demographic patterns and/or patterns of media use associated with the three major concepts of this investigation?

Theoretical Background

Media Dependency

The introduction has posited the importance of media dependency. According to Ball-Rokeach (1998, p. 15), the media dependency theory concerns the conditions that give rise to media power and the conditions that constrain it (Ball-Rokeach & De Fleur, 1976). The potentially powerful role of mass media in modern society is deduced from its control over information resources that individuals and

groups must access to attain their goals. The scope of personal and social goals requiring access to media information grows with the complexity of a society and its culture (Ball-Rokeach, 1998, p. 16). Media dependency becomes manifest on both macro and micro levels (Ball-Rokeach, 1998; Patwardhan & Ramaprasad, 2005). The micro refers to the individual and his or her goals and resources; the macro deals with the media system and its goals and resources.

The present study focuses on the individual, or micro, level. Relations are defined as "the extent to which attainment of an individual's goals is contingent upon access to the resources of the media system, relative to the extent to which attainment of media system goals is contingent upon the resources controlled by individuals" (Ball-Rokeach, 1998, p. 18). Media dependency relations at the micro level vary, for example, according to the intensity of the dependency relation (Ball-Rokeach, 1998, p. 19; Patwardhan & Ramaprasad, 2005, p. 3). Intensity is defined as the perceived exclusivity of resources for goal attainment. For individuals, the intensity of the dependency relation grows with the perceived helpfulness of the media in attaining personal goals.

The power of mass media in modern society is based on an asymmetrical relationship between individuals and the media system. Individuals and interpersonal networks do not control those resources, which directly affect the welfare of the media system (Ball-Rokeach, 1998, p. 17). The media system exerts control over the resources that directly affect the goals of individuals and interpersonal networks as regards understanding or orientation. This asymmetry particularly occurs in periods of social change or dramatic conflicts when there is a growing demand for information (Ball-Rokeach & DeFleur, 1976, p. 3). In addition to such periods, there are issues that go beyond citizens' first-hand experience so that they have to rely on second-hand information presented in the media. This imbalance in the relationship between individuals and the media system may disappear when users have access to alternative media or non-media options.

Using Alternative Sources of Information

According to the media dependency theory, mass media are most powerful in times when the mainstream media system either controls information resources that are not otherwise available to the public or when alternative media are missing. This control generates media power. It is unlikely, however, that mainstream media will be able to continue this degree of exclusive control. Major changes are under way in the media system and media/consumer relationships that enable consumers to become producers as well. In recent decades, audiences have been confronted with an ever-growing number of information sources (Tsfati & Peri, 2006, pp. 165-166). However, the mere existence of these new options does not mean that most people avoid mainstream media. Research on selective exposure indicates that the mere opportunity to choose between different information sources does not lead people to generally prefer congenial media or non-media information (Stroud, 2008, p. 342).

Alternative sources of information (e.g., oppositional, partisan, radical or subculture media; [Downing, 2001; Atton, 2002; Rodriguez, 2008]) are not new. Many of them came into being long before the Internet (Ball-Rokeach, 1998, p. 26). However, the Internet has opened new forums of communication that exert a multiplying and diversifying effect on communication, and audience segmentation is a likely consequence. Some researchers speculate about a trend toward selective exposure that eventually leads to a more polarized, segmented, or extreme climate of opinion (Katz,

1996, p. 26; Stroud, 2008, p. 343). Media diversification has spawned a large body of research in the last few years, but little is yet known about why audiences consume such non-mainstream outlets (Tsfati & Peri, 2006, p. 166).

Alternative media, such as subculture magazines, oppositional radio stations, and newspapers for ethnic minorities, are the product of an editorial production process that is part of the media system. They are positioned at one end of a continuum with mainstream media on the other end. In addition, alternative media do not exist in a vacuum; often, they are directly linked to the mainstream media system (Ball-Rokeach, 1998, p. 25). Many of these sources further distribute information that is first presented in the traditional news media (Kepplinger & Maurer, 2005, pp. 58–63). The present study relies on a clearer differentiation because the dichotomy mainstream vs. alternative media is not sufficient. It is necessary to differentiate between media sources and non-media (information) sources: Non-media sources can be defined as alternative sources outside of the editorial production process of the media system. Typical non-media sources can be, for example, experts and scientists presenting their expertise or research findings on websites; official authorities; organizations and institutions providing information via fliers or books; telephone hotlines, etc. Many traditional media outlets rely on these sources as well. Their output, though, does not just mirror these data because all incoming information is subject to multiple steps of journalistic filtering and weighting. The term alternative information sources therefore encompass everything that might serve as an independent non-media information source.

In fact, many of these sources — e.g., non-official government reports — are not available to lay persons, although others are. Moreover, many people may rely on mainstream media for information because they do not have access to functional alternatives, whether media or non-media. In addition, it is unlikely that individuals consume only non-media information. And it is unlikely that there are citizens who rely exclusively on alternative media and are unaffected by mainstream media. Finally, the degree of exposure might make a difference: It is very likely that individuals relying exclusively on mainstream media are somewhat different from those preferring non-mainstream information or non-media information. It takes more effort to get information from outside the mainstream channels. Hence, it is likely that users of alternative sources, regardless of whether they use alternative media and/or non-media sources, show different socioeconomic profiles, different political and/or social attitudes, and varying patterns of media use.

Research on media exposure demonstrates how a wide variety of perceptions, goals, and needs influence users' media choices. Moreover, individuals selectively expose themselves to media content (Katz, Blumler, & Gurevitch, 1973–1974; for an overview, Stroud, 2006, 2008). Here, mistrust or skepticism can be a relevant predisposition. It is plausible to assume that individuals with low confidence in the mainstream media are more likely to search actively for alternative information sources. Tsfati & Cappella (2003, p. 518) argue that media skeptics have more diversified information sources: they have less mainstream news as a part of their media diets and seek more alternative news sources than their more trusting counterparts. This assumption should be true for users of non-media information sources as well. Consequently, non-media sources (as defined above) need to be considered as part of citizens' information diets. Compared with their trusting counterparts, media skeptics may resort to information

offered by experts, including research institutes presenting information on Web pages, and official authorities.

From a theoretical point of view, this search for non-media information might be a more reliable indicator of mistrust in the media than is the reliance on people's willingness to use alternative media. Hence, Tsfatı and Cappella's assumption (2003, p. 504) "that when people trust the mainstream media, they consume more mainstream news. When they mistrust the media, they seek alternatives" has to be translated into the following research questions: Do individuals with low trust in the media tend to resort to non-media information sources? And do their trusting counterparts, on the other hand, consume more mainstream media?

Trust in the Media

Tsfatı & Cappella's (2003, p. 508) conclusion "that people will expose themselves to news information they trust" can serve as a bridge between the paragraphs of this theoretical discussion. Communication research has largely confirmed that media use and trust in the media are positively related (Wanta & Hu, 1994; Johnson & Kaye 1998, 2000; Tsfatı & Cappella, 2003; Tsfatı & Peri, 2006), but most studies focus more on media credibility than on trust in the media (Hovland, Janis, & Kelley, 1953; Rimmer & Weaver, 1988; Kohring & Matthes, 2007). Compared to credibility research almost no significant theories of media trust nor a larger body of empirical research focusing on trust exists. This does not mean that credibility and trust are fundamentally different concepts: Credibility is a central component of trust. In the case of the media-user relationship, the user attributes credibility to the information source (Tsfatı & Cappella, 2003, p. 505). In typical studies, it is assumed that users trust because they regard the medium as credible (see Hovland et al., 1953; for an overview, Kohring & Matthes, 2007).

Kohring and Matthes (2007, p. 248) argue that the less an issue relates to personal experience, the more important is trust in the relationship between users and the media. In principle, users are uncertain about the trustworthiness of the media as information sources, nevertheless, everyday life is full of situations in which information from mass media is vital. To remain capable of making informed decisions, individuals usually search for cues indicating that the information they receive is reliable. Credibility is such a cue. The perception that a certain source is trustworthy is the result of an attribution process and serves as a rationale for having trust in uncertain situations. Trust, however, is a more comprehensive concept. It can be defined as an "expectancy held by an individual or group that the word, promise, verbal or written statement of another individual can be relied upon" (Rotter, 1967, p. 651). Trust plays a vital role in almost every human interaction, not only in media-recipient relationships; it is an important basis for social order and a foundation for social cohesion; it is a prerequisite for a functioning society (Kohring & Matthes, 2007, p. 231).

Research Questions

Against this theoretical background, it is reasonable to connect the major concepts of the study, primarily trust in the media and media dependency. In the latter, the individual's dependency on mass media stems from the complexity of modern life. Trust is the core mechanism for reducing complexity (Luhmann, 2000). At the same time, both approaches point out that this complexity gives the modern media system a prominent position in modern society. Both research traditions argue that the media

system has more power than the individual because it controls resources that directly affect the individual's goal attainment. "It is only the information from the news media that enables the members of the audience to act in a modern society" (Kohring & Matthes, 2007, p. 239). Individuals need to rely on information from the mass media. By this, they give up control in favor of somebody else. This mechanism is the core element of trust. Furthermore, trust can be considered as a crucial variable for media effects. Media dependency theory deals with conditions that give rise to or constrain media effects. Dependency on certain media may lead individuals to trust them, and the media in turn can exert control over the information that is necessary for its consumers to understand their environment and to act in it. Trust, therefore, may serve as the link between media dependency and media use.

The following empirical investigation focuses on the relationships between the three main concepts: the feeling of being dependent on mass media, the use of alternative sources, and the trust that users of them ascribe to the media. These concepts will be investigated with respect to two sets of control variables: socio-demographic characteristics and patterns of media use. From the theoretical background outlined in the previous paragraphs, two research questions serve as guideline for the empirical investigation presented here:

Primary research question:

Is there a significant relationship between the three main concepts media dependency, trust in the media, and/or the use of alternative media? More precisely, are there plausible associations that fit into the body of theory and empirical research established so far?

Secondary research question:

Are there distinct socio-demographic characteristics and/or patterns of media use related to the feeling of media dependency, trust in the media, and/or the use of alternative sources?

Study Design

Data Collection

To answer these research questions, a fully standardized questionnaire with 45 questions was presented to the participants of a telephone survey of a representative German population. It was conducted by a professional survey research institute May 8 through 30, 2008. Among a random sample of the German population aged 16 and older, 850 interviews were completed. The average age of the respondents was 48 years; the youngest participant was 16, the oldest 93 ($SD = 18.45$, $SE = .64$). A little more than half (51.7%) were female, 48.3 male ($M = 1.51$, $SD = .50$, $SE = .02$). Most lived in the western states of Germany (83.3%), 16.7% were in East Germany. As to educational attainment, 21.9% had a comparatively low level, (no or primary school graduation only), 29.4% graduated from the German equivalent of junior high school or secondary school (medium level of educational attainment), and 48.4% had at least a university entrance diploma or a university degree (high level of educational attainment) (M

= 4.49, $SD = 1.26$, $SE = .04$). People of higher age and with higher educational attainment were slightly overrepresented, as were inhabitants of Western Germany.¹

Measuring Media Dependency

In this study, the term media dependency is defined as a feeling or perception of having no alternatives other than the mass media to get informed about reality. Within the framework of the media dependency theory, this definition can be regarded as comparatively narrow and close to the concept of intensity in a dependency relationship. The latter is defined as the "perceived exclusivity of resources for goal attainment" (Ball-Rokeach, 1998, p. 19). According to the theory, the intensity of a dependency relation is influenced by the perception that the media are an exclusive information system: Individuals considering the media as exclusive are more dependent on them. For the research purpose at hand, however, this perception of exclusivity can be equated with the individual perception of being dependent on mass media and seeing no alternatives to them.²

To measure the perceived media dependency, respondents were given the following statement: "If somebody wants to make up his mind about an important issue, such as the war in Iraq or climate change, one is totally dependent on the coverage of the mass media." The response options were "I agree, one is totally dependent on the media," "I don't know," and "I disagree, one can get information elsewhere." The reference to the war in Iraq and climate change served as examples of "important issues" in the first part of the question.³

Measuring Trust in the Media

Aside from a scale measuring the slightly different concept of trust in journalism developed by Kohring and Matthes, (2007, p. 232), there is no standardized scale for measuring trust in media. Research predominantly focused on the measurement of source or media credibility (for typical scales, see Berlo, Lemert, & Mertz, 1969; Roper, 1985; Gaziano & McGrath, 1986; Meyer, 1988). The reasons for this deficit can be found in various methodological problems associated with trust (Kiousis, 2001; Kohring & Matthes, 2007).

¹ Regional distribution and age were used as weight variables; by this procedure, the over-representation of higher educational attainments was also attenuated.

² Whether respondents have alternatives for information is not relevant in this context. In order to answer the question of whether perceived media dependency is associated with media trust, it is important to find out only whether media consumers believe that there are no alternatives. In accordance with the Thomas theorem (Thomas & Thomas, 1928, pp. 571-572), it can be stipulated that if individuals believe that they are dependent, they behave as if they are.

³ In order to validate the choice of measurement, a short follow-up study was conducted: Two student samples were presented the above presented model (A: $n=28$) and an alternative model combining the same question with a 5-point-scale (B: $n=31$). Both question models produced quite similar results (A: $M = .53$; B: $M = .49$). Although this superficial test seems to validate the question model applied in this investigation, future research should apply a continuous variable for measuring the perception of media dependency.

The survey for this study included three questions to measure trust in media. The items are quite similar to the scales used by Tsfaty and Cappella (2003, p. 522). First, respondents were asked if they trust media reports and were given four possible responses: wholeheartedly, somewhat, not very much and not at all. In order to differentiate between everyday reports and coverage of important issues and to test a less idiosyncratic instrument, respondents were asked an alternative question: "And what about really important issues — e.g., environmental problems, health risks, political scandals: do you think it is possible to trust in the media or not?" Respondents were given five answering options: wholeheartedly, somewhat, "It depends," hardly, and not at all. Respondents were also asked to indicate their confidence in different professions (e.g., journalists, police, politicians) and institutions (e.g., media, police, politics) using a four-point scale: much confidence, some confidence, little confidence, or no confidence. These three variables were summed up in a trust index ranging from -6 ("no trust in the media") to +6 ("total trust in the media") ($M = 1.23$, $SD = 2.18$, $SE = .08$). Given the small number of items that constitute the index, the comparatively low value of Cronbach's alpha, .69 ($n = 824$), represents an acceptable level of reliability for the purposes of this exploratory study.

Measuring Media Use and the Use of Alternative Sources

The questionnaire included measures of the frequency of television and Internet use.⁴ The study relied on the use of two popular news magazines, *Der Spiegel* and *Focus*⁵ to distinguish different types of audiences in the German print media market.⁶ In addition, the study deployed measures of the use of Germany's most widely read tabloid newspaper, *Bild*,⁷ which has the widest circulation of all print publications in Germany. Frequent readers of *Bild* were expected to differ distinctly from people disliking it because of its political (populist, conservative) standpoints and sensationalism. *Bild*, *Spiegel*, and *Focus* are three of the most important opinion leading publications in Germany (Reinemann, 2003) and serve as point of co-orientation for journalists working for all media types.

To measure the use of alternative non-media sources, two questions were developed: First, respondents were asked whether they rely exclusively on mass media or on non-media sources, such as official authorities or experts, to get information about important issues in general. Second, respondents were asked specifically how they get information about bird flu, as an example of an issue with high audience involvement. For further analyses, both variables were summed up in a new variable (ranging

⁴ TV consumption: "Could you please say how many hours you watch television on an average working day, how many hours at an average each day? Options: none, one hour at most, about two hours, about three hours, and four hours and more. Internet use answering options: every day/almost every day, once a week/several times a month, once a month, less frequently, and never.

⁵ "Do you regularly read *Der Spiegel* or *Focus*?" Answering options: *Spiegel*, *Focus*, both and neither.

⁶ Readers of these political magazines usually have a greater interest in politics, higher levels of education, and a better income; they can be regarded as "elite" recipients.

⁷ "Do you regularly read *Bild*?" Answering options: every day/almost every day, several times a month, Yes, several times a year and never.

from 0 = "no use of alternative sources" to 3 = "use of alternative sources"). Because of the small number of items, Cronbach's alpha was again quite low ($\alpha = .55$, $n = 812$).

Results

Because bivariate relationships between the three main concepts could be spurious without simultaneous control of third variables such as socio-demography or media use, hierarchical multiple regression analyses were conducted several times, with each main concept as dependent variable. Past research indicated that socio-demographic variables and/or patterns of media use could be related to at least one of the three major concepts, as discussed in the theoretical outline of this article, so these variables were first entered into the regression equation (steps 1 and 2).⁸ These first steps should help answer the secondary research question. In subsequent steps (3 and 4), the major concepts were added in order to find answers to the primary research question. By this stepwise procedure, the relationship between all three concepts was investigated while controlling for important third variables. Table 1 summarizes the results of the hierarchical multiple regression models.

⁸ Additional hierarchical regression analyses with media use as dependent variables show that regular media use is an independent rather than dependent set of variables: The use of political magazines is associated with socio-demographics ($\Delta R^2 = .03$; $p = .009$) and the use of alternative sources ($\Delta R^2 = .02$; $p = .014$) but not with trust in the media or media dependency. The same applies to the use of the Internet, which is associated with socio-demographics ($\Delta R^2 = .40$; $p = .000$) and the use of alternative sources ($\Delta R^2 = .01$; $p = .014$). Reading *Bild* is associated with socio-demographics only ($\Delta R^2 = .07$; $p = .000$). TV consumption is the only variable that is associated with trust in the media ($\Delta R^2 = .03$; $p = .000$). Furthermore it is associated with socio-demographics ($\Delta R^2 = .11$; $p = .000$) and the use of alternative sources ($\Delta R^2 = .02$; $p = .003$).

Table 1. Hierarchical multiple regressions: Predictors of media dependency, media trust, and use of alternative sources.⁹

Predictor	Media dependency		Media trust		Use of alt. sources	
	ΔR^2	β	ΔR^2	β	ΔR^2	β
<i>Step 1</i>	.05***		.00		.01	
Age		.20***		.03		-.05
Gender		.01		.01		-.02
Education		-.07		-.01		-.05
<i>Step 2</i>	.00		.03*		.06***	
Television		.02		.12**		-.11 [†]
Pol. mag.		-.05		-.04		.14**
Internet		-.02		-.06		.13 [†]
<i>BILD</i>		.05		.09 [†]		-.08
<i>Step 3</i>	.03***				.01	
Trust		.14**				-.09 [†]
<i>Step 4</i>	.03**		.01			
Alt. sources		-.19***		-.09 [†]		
<i>Step 5</i>			.02*		.04***	
Dependency				.14***		-.21***
<i>Total R²</i>	.11***		.06***		.12***	
<i>n</i>	740		772		784	

[†] $p < .05$. * $p < .01$. ** $p < .005$. *** $p < .001$

⁹ Additional in-depth analyses of the associations in the triad show that all three variables are more or less independently associated with one another: (1) There is a significant positive association between trust in the media and media dependency ($\beta = .171$; $p = .000$), which is slightly influenced by the significant negative association between the use of alternative sources and dependency (the Beta is somewhat lower: $\beta = .140$; $p = .002$). When entering the use of alternative sources first into the regression equation, a significant association with dependency appears ($\beta = .209$; $p = .000$). The Beta sinks slightly when adding trust as second independent variable ($\beta = .182$; $p = .000$). (2) There is a significant negative association between the use of alternative sources and trust ($\beta = -.102$; $p = .004$), which is slightly influenced by the significant positive association between the dependency and trust. However, the association between the use of alternative sources and trust is still significant ($\beta = -.89$; $p = .024$). When entering dependency first into the equation, there is a significant positive association between dependency and trust ($\beta = .151$; $p = .000$); the Beta slightly sinks when entering alternative sources as second independent variable ($\beta = .137$; $p = .000$). (3) There is a significant negative association between trust and the use of alternative sources ($\beta = -.086$; $p = .014$). The Beta is slightly lower when entering dependency as second independent variable into the regression equation ($\beta = -.079$; $p = .046$). When entering dependency first into the equation, a significant negative association between dependency and the use of alternative sources can be found ($\beta = -.178$; $p = .000$). This association is slightly influenced by trust; the Beta is somewhat lower ($\beta = -.166$; $p = .000$).

Media Dependency

Of the three main socio-demographic variables that were entered in the first step of the regression analyses, only age was statistically significant, indicating that older respondents were more likely to feel dependent on the media ($\beta = .196$; $p = .000$). Education ($\beta = -.067$; $p = .195$) and gender ($\beta = .006$; $p = .912$) did not play a significant role here. Entering patterns of media use in a second step did not produce significant results. TV consumption ($\beta = .021$; $p = .709$), the use of the Internet ($\beta = -.015$; $p = .829$), the use of political magazines ($\beta = -.054$; $p = .311$), and the reading of *Bild* ($\beta = .048$; $p = .373$) were not significantly related to the feeling of being dependent on the media. In a third step, the association between the main constructs, media trust and media dependency, was studied while controlling for the potentially intervening factors. The analyses revealed a significant relationship between trust and media dependency, indicating that individuals expressing higher levels of trust felt some dependency on media ($\beta = .140$; $p = .002$). In a fourth step, the other main construct was entered into the regression. Again, a significant relationship was found, indicating that individuals using non-media sources felt less dependent on mass media ($\beta = -.187$; $p = .000$).

Trust in the Media

For analyzing the relationship between trust in the media, the control variables, and the other main constructs, analyses proceeded in the same manner. The results indicated no significant relationship between age ($\beta = .031$; $p = .399$), gender ($\beta = .014$; $p = .713$), education ($\beta = -.006$; $p = .860$), and trust in the media. Entering patterns of media use into the regression analysis revealed that TV consumption and the reading of *Bild* were significantly related to trust in the media. Heavy viewers were more likely to trust in the media ($\beta = .119$; $p = .004$). The same applied to readers of *Bild*, who were significantly less skeptical than non-readers ($\beta = .090$; $p = .018$). There was no significant relationship between trust in the media and the use of the Internet ($\beta = -.058$; $p = .220$) or the reading of political magazines ($\beta = -.041$; $p = .274$). Entering the use of alternative sources and media dependency into the regression analyses again revealed significant relations between the main concepts of this study: individuals actively seeking non-media information were less likely to trust in the media than their counterparts who were not ($\beta = -.089$; $p = .024$). And individuals feeling significantly dependent on the media were more confident in the media than individuals feeling somewhat independent ($\beta = .144$; $p = .000$).

The Use of Alternative Sources

The first step of the analyses indicated that age ($\beta = -.050$; $p = .329$), gender ($\beta = -.023$; $p = .660$) and education ($\beta = -.054$; $p = .252$) were not significantly related to the use of alternative sources. Three variables measuring media use, however, were significantly related to the use of non-media information: individuals reading political magazines were more likely to search for non-media sources ($\beta = .142$; $p = .007$); the same was true for frequent Internet users ($\beta = .125$; $p = .048$). Individuals watching TV heavily were less likely to use alternative information sources ($\beta = -.112$; $p = .039$). No significant relationship was found between the reading of *Bild* and the use of alternative information sources ($\beta = -.078$; $p = .138$). Entering media dependency and media trust into the regression equation again revealed

statistically significant results: Trust in the media was significantly related to the use of alternative sources; media skeptics were more likely to actively seek non-media information ($\beta = -.086$; $p = .014$). And individuals feeling somewhat dependent on the media were less likely to look for non-media information ($\beta = -.212$; $p = .000$).

Summary of the Findings

The primary research question of this study can be answered as follows: first, respondents who actively search for non-media information feel less dependent on the media, as do respondents with low confidence in the media. Second, respondents feeling somewhat independent on the media express lower levels of trust, as do frequent users of non-media information sources. Third, media skeptics tend to search more actively for alternative sources, as do respondents feeling somewhat independent from the media.¹⁰ The multivariate examination provides no indication of the direction of these correlations. Despite the limitation that the causal direction of associations summarized above may be questioned, which is part of the next discussion, it can be concluded that all three concepts are significantly related to one another.

These central findings do not imply that there are no significant correlations between the two sets of control variables. Multivariate analyses suggest the following answers to the secondary research question of this study: Younger respondents feel less dependent on media.¹¹ The expressed level of trust is related to TV consumption and the reading of *Bild*: media skeptics watch less TV than respondents expressing confidence in mass media. In addition, they are less likely to read *Bild*. The use of non-media sources is related to TV consumption, Internet use, and the use of political magazines: heavy TV viewers search less actively for non-media information than do respondents watch TV. Frequent Internet users and readers of political magazines search more actively for information outside the media system. Because using the Internet, political magazines, and non-media information sources takes more effort than watching TV, these results are plausible. However, associations between the control variables and the major concepts are not responsible for the significant relations between media dependency, media trust, and the use of alternative sources. Multivariate analyses confirm that the associations between these concepts are independent of the influence of the different control variables.

Discussion

There is a preferred reading of survey findings: Individuals feeling dependent on the media express significantly higher levels of trust in them, individuals using alternative (non-media) information sources are partly relieved from feeling media-dependent, and media skepticism leads to more interest in alternative information sources. However, the opposite reading of these findings is plausible as well: for example, individuals searching somewhat actively for alternative information develop lower levels of trust

¹⁰ The described relations between all three concepts are not influenced by statistical interactions: analyses based on general linear models did not produce significant results for trust as dependent variable ($\eta_p^2 = .005$; $p = .151$), for the use of alternative sources ($\eta_p^2 = .009$; $p = .170$), or for media dependency ($\eta_p^2 = .007$; $p = .088$).

¹¹ Younger respondents also use the Internet more frequently ($r = .55$; $p < .001$).

in the media because they are confronted with alternative or perhaps media-critical impressions of the world because of these alternative information channels (Stroud, 2008, pp. 342, 361). Furthermore, it can be argued that trust in the media is the reason for a feeling of media dependency and not the other way around.

Compared with the first interpretation of these data, this alternative reading does not appear to be particularly conclusive. "However, the analysis of cross-sectional data cannot reveal the direction of the association" (Tsfati & Peri, 2006, p. 185); the question of causality is a major problem in studies dealing with these issues (see also Tsfati & Cappella, 2003, p. 520). It may be plausible, for example, to conclude that trust in the media is one reason for the use of alternative information sources (as well as media sources). This direction of causality is most likely and is supported by critical reasoning, especially with regard to existing theories of selective exposure which "have claimed and demonstrated that the direction of the association is from audience attitudes and needs to media exposure" (Tsfati & Peri, 2006, p. 185). Media skepticism, therefore, can be regarded as an individual predisposition that is responsible for media use and the use of alternative information sources. Critical reasoning suggests that the feeling of dependency is a cause for trust in the media, but it can be argued that trust in certain media leads to exposure and through it to media dependency. In any case, future research should use superior designs to explore the causal direction of the associations outlined in this study.

Moreover, additional predispositions need to be considered as independent variables. It is likely, for instance, that political interest or political participation as well as trust in political or societal institutions is associated with trust in the media and/or with the use of alternative information sources. Individuals with high levels of political efficacy or engagement may be somewhat skeptical and thus seek more alternative media and/or non-media information (Stroud, 2008, pp. 344–345). In addition, these individuals may feel less dependent on the media. The same applies to individuals who are generally skeptical about institutions or authorities. Furthermore, trust in the media, media dependency, and the use of non-media sources may differ according to psychological characteristics, such as individual persuasiveness, need for cognition, and the willingness to trust: Confiding individuals, those with a little need for cognition, or people who are susceptible to persuasive stimuli may have more trust in the media and thus refrain from seeking alternative information (see Hovland & Janis, 1959; Oskamp & Schultz, 2005; Oliver, 2008, p. 3580).

A further limitation of this study is measurement.¹² As telephone surveys are generally limited in length, it was not possible to apply comprehensive question models for all three major concepts. Media dependency, for example, is a complex phenomenon that encompasses aspects and levels of relations that cannot be understood by simply focusing on the perceived exclusivity of the media system or the feeling of being dependent on the media. For the explorative purposes of this study, however, this measurement appeared to be sufficient because it uncovered the relevant associations first. Furthermore, it can be argued that the scales for trust in the media and the use of alternative information sources are based on

¹² As the R-squares in all three models presented in the results section are relatively low, measurement is not the only limitation with regard to methodology. It is the most important one, however, because it is most likely to be responsible for these low values.

two or three indicators only; further research should focus on implementing more comprehensive scales. In addition, the measurement of Internet use could be improved in future research in order to enable a differentiation between traditional media and non-traditional sources presenting information in the Internet.

Moreover, the measurement procedures were probably not apt to uncover inconsistencies between the answers of the respondents and their real attitudes and behavior. There might be, for example, a feeling of dependency despite the fact that many people do have access to alternative information sources. However, even if there are many information alternatives, people do not usually invest much effort in seeking information: Media recipients are cognitive misers (Fiske & Taylor 1991): they try to avoid investing too much cognitive resources in information research (see e.g. Brosius 1999). Hence, many people habitually try to get information the most convenient way, from mass media. The statement that there is no alternative to media information may be a pretense to defend a widespread low-cost strategy in information management: Furthermore, some respondents may state that they are somewhat independent, even though they do not seek other information, because they wish to be seen as autonomous individuals who act without influence from others.

There are other limitations grounded in the fact that humans usually do not behave unambiguously when using media. Even if many respondents say they do not trust in the media, most of them use media information, and many of them use it to the exclusion of information from other sources. One reason for this apparently contradictory behavior can be found in the uses-and-gratifications approach: "[N]ews gratifies diverse needs when trust is abrogated. Obtaining information about the world is just one motivation for watching the news. When other motivations are present, trust in the media becomes less relevant" (Tsfati & Cappella, 2003, p. 519).

Despite its limitations, this study makes several contributions to communication research. First, it has entered new fields and uncovered some significant correlations. There are almost no previous studies that deal with the connection between media dependency and trust. This inquiry demonstrates that combining these concepts is a fruitful task. Another contribution is the shift from observing characteristics of media dependency relations to the personal perception of such relations. In addition, this study includes use of non-media information sources and suggests that searching for non-media alternatives may be important when investigating trust in media and media use. People who search actively for first-hand information have until recently not been considered in research on media use; in communication research, the determinants "of individuals' overall information exposure are rarely examined" (Knobloch-Westerwick, 2008, p. 2266). However, the deliberate decision to rely on non-media information is a clear and strong indication of media skepticism. Moreover, it demonstrates a certain level of empowerment in the way that citizens search for information. It would be interesting to use this indicator in studies of trust in media, selective exposure, and other topics.

The study also provides the first evidence from outside the United States and Israel concerning the association between skepticism of mainstream media and exposure to it. In Germany as in Israel, research provides some interesting insights and a test case (Tsfati & Peri, 2006, p. 183). The German media landscape has undergone major changes in the last 20 years: private television channels have

amended the somewhat centralist public broadcasting system; the press sector melted down significantly as a result of concentration processes in the press market; media companies became bankrupt; journalistic jobs were massively reduced; TV channels and print publications had to merge in order to survive with effects on the quality of news content (see e.g. Röper, 2002; Wolff, 2003; Mast & Spachmann, 2003). Since the early 1990s, the Internet has won large audiences throughout Germany (Reitze & Ridder, 2006). Many of the developments characteristic of the German media system can be regarded as paradigmatic for the Western European democracies, so some of the findings presented in this study might be interesting for respective analyses in other countries as well.

Future research might focus on the bridging of potential reasons for trust in the media (e.g., media dependency) and research on media effects and on their potentially catalyzing effect. Individuals feeling somewhat dependent on the media while expressing high levels of media trust may be highly susceptible to media influence. It would be interesting to trace these correlations for gateways for media effects.

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