Interpersonal Sensitivity
Theory and Measurement

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13. Synchrony refers to the extent to which the behaviors and behavioral stream of each interactant were similar to and coordinated with each other (see Bernier & Rosenthal, 1991). Manifestations of synchrony may take the form of posture mimicry, simultaneous movement, coordinated movement, or a combination of these.

14. Attractiveness refers to the dyad mean physical attractiveness of both interactants as rated by a group of naïve undergraduates.

15. Attractiveness discrepancy refers to the absolute difference between the rated physical attractiveness of each member of the dyad after standardizing within sex.

16. Posture shifts refers to the frequency with which the interactants changed their posture or appeared to shift their weight in the chair.

17. Pointing frequency refers to the number of times someone directed his or her partner’s gaze to a specific location.

Smooth, successful social interactions involve sensitivity to the feelings, affect, and behavior of others as well as to the ability to transmit and communicate cues in order to elicit desired responses from others. Thus, both the ability to judge and to be judged accurately serves an adaptive function in social interaction (Ambady, Hallahan, & Rosenthal, 1995). Consistent with our own experiences and intuitive judgments, research reveals that individuals exhibit high degrees of consensus in their judgments of others (Albright, Kenny, & Malloy, 1988; Funder, 1995; Kenny, Albright, Malloy, & Kashy, 1994; Passini & Norman, 1966; Paunonen, 1991; Watson, 1989). Such judgments have been found to be surprisingly accurate in predicting targets’ self-reported characteristics on the basis of quite minimal information (Albright et al., 1988; Passini & Norman, 1966; Watson, 1989). This chapter discusses the implications of the interpretation of such minimal information, or “thin slices,” of behavior for our understanding of interpersonal sensitivity. We define the characteristics of thin slices, discuss the methodology, describe two measures using thin slices to assess interpersonal sensitivity, review the moderators of interpersonal sensitivity as judged from thin slices, and suggest potential contributions of this methodology to the study of interpersonal sensitivity.
5. THIN-SLICE METHODOLOGY

THIN-SLICE METHODOLOGY

Thin-slice methodology affords researchers a number of flexible alternatives that result in a methodology that is ecologically valid and informative. This approach can accommodate variations in the amount of exposure time presented to judges, communication channels presented to judges, and the types of variables judged from the slices.

Length of Exposure

Typically, the slices usually fall in a fairly broad range, from 2 seconds to 5 minutes. Clips are drawn randomly from the first few minutes, the middle few minutes, and the last few minutes of an interaction. In addition to allowing for a wide representation of behavior, this technique conveniently allows for the assessment of behavior change over time. Although meta-analytic evidence indicates that length of exposure does not seem to affect accuracy (Ambady & Rosenthal, 1992), more research is needed to facilitate further understanding of potential moderators of sensitivity that may interact with exposure time, such as characteristics of the judge or characteristics of the target.

Channels

Thin slices can be extracted from diverse channels of communication, including silent videotapes, audiotapes, content-filtered audiotapes (the removal of specific high band frequencies leaving only tone of voice cues), and standard videotapes. This flexibility in the type of channel allows researchers to assess the predictive value of various channels of communication. In addition, this flexibility also permits secondary analyses of existing datasets. Meta-analytic findings indicate that thin slices from both nonverbal and verbal channels of communication accurately predict criterion variables (Ambady & Rosenthal, 1992).

Variables Judged

Variables judged from thin slices vary considerably as does the nature of such judgments. In general, judgments of impressionistic, fuzzy, molecular variables related to affect and interpersonal functioning yield more accurate judgments than do counts of microlevel behaviors such as smiles and nods. This is because the same specific behavior might signal very different types of affect. Consider the example of a smile. A smile, depending on the context and accompanying behavior, may signal warmth, anxiety, or hostility (Ambady & Rosenthal, 1993). Molecular judgments, by directly assessing warmth, anxiety, or hostility, capture the overall, gestalt impression conveyed in the slice. Thus, thin slices are...
typically rated by naive (untrained) judges on a variety of molar variables theoretically related to the criterion variable. Such judgments can be used to form the basis of predictions regarding social and clinical outcomes or to measure acuity to individual characteristics (e.g., judging someone’s personality or judging the level of rapport and empathy between members of a dyad).

MEASURES OF INTERPERSONAL SENSITIVITY USING THIN SLICES

Thin slices have been used to assess individual differences in sensitivity to expressive cues. Two published measures of interpersonal sensitivity are composed of a series of thin slices. The Profile of Nonverbal Sensitivity (PONS; Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979) consists of 220 video clips, each lasting 2 seconds, from which observers are asked to make judgments about the expressor’s affective state or the interpersonal situation he or she is in. Each slice is extracted from a brief scene where a woman portrays herself in a number of different social and interpersonal situations (e.g., admonishing a small child, asking for forgiveness, returning an item purchased at a store). Although the verbal content has been removed from each of these clips, judges’ accuracy is above chance, demonstrating the richness of information contained within a mere 2 seconds of behavior (Rosenthal et al., 1979). Thus, the PONS is a useful tool for examining individual differences in sensitivity in general and also for examining sensitivity to different channels of communication.

Another measure, the Interpersonal Perception Task (IPT; Costanzo & Archer, 1989), is composed of longer clips ranging from 30 to 60 seconds, and unlike the PONS, the IPT preserves all of the channels of communication. The observer of the IPT views a series of brief clips and makes judgments regarding deception, intimacy, status, kinship, and competition. Given that all channels of communication are accessible to the observer, the IPT may tap into a different element of interpersonal sensitivity than the PONS (see Hall, chap. 8, this volume, and Archer; Costanzo, & Akert, chap. 9, this volume).

ASSESSMENT OF INTERPERSONAL SENSITIVITY FROM THIN SLICES: MODERATORS

There is general consensus that individuals vary in their level of interpersonal sensitivity. A number of factors appear to moderate sensitivity to social and interpersonal characteristics of others. In this section we discuss the role of individual differences in personality, affect, and culture, as well as individuals’ familiarity with the domain being judged on the assessment of sensitivity from thin slices.

5. THIN-SLICE METHODOLOGY

Personality and Individual Differences

What characteristics distinguish more from less interpersonally sensitive individuals on thin-slice judgment tasks? In a meta-analysis on the accuracy of person perception, Davis and Kraus (1997) found that people who are more accurate judges of others tend to be more intelligent, more cognitively complex, less dogmatic, better adjusted, and more interpersonally oriented. Although these findings are based on studies with a range of different methodologies, including self-reports and peer ratings, accurate judges of thin slices seem to possess similar attributes.

Characteristics of individuals who score higher on the PONS have been examined in some depth (Rosenthal et al., 1979). People who score higher tend to be less dogmatic and less Machiavellian and more democratic, extraverted, and socially adjusted than people who score lower. In addition, people who perform better on the PONS tend to be rated more interpersonally sensitive and more popular by people who know them well, such as their clients, teachers, supervisors, and spouses, than people who perform worse on the measure (Funder & Harris, 1986; Rosenthal et al., 1979). Furthermore, several studies have found that both adults and children who have more successful interpersonal relationships are more sensitive to the behavior of others (Baum & Nowicki, 1998; Boyatzis & Satyaprasad, 1994; Funder & Harris, 1986; Gottman & Porterfield, 1981; Noller, 1980; Noller & Feeny, 1994; Nowicki & Carton, 1997). In a similar vein, shyness and social anxiety have been associated with poorer sensitivity on the IPT (Schroeder, 1995a, 1995b). These results suggest that thin-slice judgments who are valid measures of interpersonal sensitivity—people who are rated by others as more interpersonally skilled and better adjusted perform better on these tasks than people rated as less skilled and less adjusted.

Are people who score better on tasks using thin slices to assess interpersonal sensitivity also more intelligent? The relationship between intelligence and sensitivity is less consistent. Whereas cognitive ability has been positively related to empathic accuracy (Davis & Kraus, 1997) and judgments of each other from thin-slice video clips (Lippa & Dietz, in press), other work suggests that intelligence is not related to performance on the PONS (Rosenthal et al., 1979) or the judgment of interactant rapport from thin slices (Bernieri & Gillis, 1995a). Thus, it might be useful to further explore under what conditions cognitive ability relates to interpersonal sensitivity judged from thin slices.

Recent work suggests that the role of individual differences in interpersonal sensitivity may depend on the type of judgment task. For instance, a recent study using the PONS (Rosenthal et al., 1979) and the IPT (Costanzo & Archer, 1989) in addition to two “in-house” thin-slice judgment tasks involving rapport assessment (Gesn, Bernieri, Gada-Jain, & Grahe, 1999) revealed fairly low intercorrelations between the four tasks with a median intercorrelation of
.01. As previously suggested, this may be due to the type of channel information available for each task.

Another study found that occupational therapy students in a pediatric rehabilitation setting judged to be better performers by clinical fieldwork supervisors were more sensitive to body cues of emotions as assessed by the PONS, whereas those judged to be better performers in psychosocial rehabilitation were more sensitive to facial but not body cues on the PONS (Tickle-Degnen, 1997). Thus, people in different roles and contexts perform differently on different subscales (e.g., full body vs. face only), suggesting that different elements of sensitivity may be context relevant and dependent. This work also indicates that individuals' strengths in terms of sensitivity have real-world implications for their ability to work and interact efficiently. What remains ambiguous, however, is whether individuals bring their expertise to the context or whether exposure to particular contexts increases sensitivity to specific expressive cues.

Affect

A considerable body of literature suggests that affect and mood influence many different domains of human performance (Forgas, 1992). There is some indication that induced mood influences the nature of impression formation judgments. For example, induced mood can increase the extremity of positive and negative judgments made by children (Forgas, Burnham, & Trimble, 1988). There is also evidence for mood congruency in social judgments. For example, Forgas and Bower (1987) reported that happy participants formed more favorable impressions and made more positive judgments than did sad participants. Mood also appears to influence what information is attended to and how it is evaluated (Bower, 1991; Clore & Parrott, 1991; Fiedler, 1991; Forgas, 1992; Schwarz & Bless, 1991).

How might induced mood influence interpersonal sensitivity on the basis of thin slices? Some research suggests that positive moods should be associated with improved accuracy in interpersonal perception (Forgas, 1992; Sinclair, 1988). One study examined the differential effects of mood on thin-slice judgments of teacher effectiveness and dyadic relationships (Ambady, 2000). Positive and negative moods were induced by having subjects watch a 5-minute film clip. Interestingly, the positive mood condition was associated with improved accuracy in judging both teacher effectiveness and the type of dyadic relationships compared with a control group. Negative mood was associated with decreased accuracy compared with a control group with no mood induction. Thus, it seems that positive affective states facilitate and negative affective states impede the processing of thin slices. These findings complement work reviewed in the previous section suggesting that people who are more accurate judges tend to be better adjusted and more popular than those who are less accurate judges. Presumably, happier people are both better adjusted and more popular with others.

5. THIN-SLICE METHODOLOGY

Whereas temporary positive moods facilitate the accuracy of thin-slice judgments, a mixed pattern of results emerges for stable, rather than laboratory induced, affective traits. Work on depressive realism would suggest that depressed people should be more accurate in their judgments of others (Alloy & Abramson, 1979, 1982). Chronic negative states, such as depression, have been associated with increased accuracy of judgment, particularly for negative stimuli (Bargh & Tota, 1988; Ruhlmnan, West, & Pasewak, 1985). On thin-slice judgments of rapport, Bernieri and Gillis (Bernieri & Gillis, 1993; Gillis & Bernieri, 1993) found that moderately depressed participants were slightly more accurate at judging rapport. Further, depressed observers were more likely to track the negative partner in the dyad, suggesting schematicity for negative information. Increased interpersonal sensitivity associated with depression has been documented in other research as well (Giannini, Fols, & Fiedler, 1989; Pietromonaco, Rook, & Lewis, 1992). However, other research has reported decreased interpersonal sensitivity associated with depression (Albe & Whiffen, 1996; Carton, Kesler, & Pape, 1999; Russell, Stokes, Jones, Cogalik, & Rholeder, 1993; Zuiffer & Colussy, 1986), and still others have reported no differences between depressed and nondepressed individuals (Prakashin, Craig, Papageorgis, & Reith, 1977). Perhaps the severity of depression is relevant here. It is possible that severe depression might be associated with poor thin-slice judgments, whereas mild or moderate degrees of depression might be associated with more accurate judgment compared with nondepressed individuals.

In summary, both theory and research suggest that state- and trait-related affect seem to moderate interpersonal sensitivity assessed with thin slices. Because of the relative paucity of work in this area, however, the links between affect and interpersonal sensitivity need to be further examined.

Culture

Culture is another important moderator of interpersonal sensitivity. For example, the PONS test was administered to over 2,000 individuals from 20 nations. Americans were the most accurate judges, suggesting that people are most accurate at judging targets from their own culture. Furthermore, people from cultures more similar to the United States were more accurate than people from less similar cultures. Thus, cultures whose languages most closely resembled English performed better than those whose language was not quite so similar (Rosenthal et al., 1979).

Bernieri and colleagues investigated thin-slice judgments of rapport in American student interactions in over a dozen countries including Greece, Colombia, Lebanon, and Indonesia (Bernieri, Gillis, & Grahe, 1999). (Bernieri & Gillis, 1993a) In contrast to the PONS work, similarity ratings were not made for each country. However, judgments still showed remarkable agreement with those made by their American counterparts although few participants could speak English or had ever traveled to the United States.
Additional evidence regarding the moderating role of culture on thin-slice judgments is provided by work on cultural differences in judgments of vocal cues from thin slices (Lee & Boster, 1992; Peng, Zebrowitz, & Lee, 1993). For example, whereas Korean speakers associated tension judged from thin-slice audio clips with power and competence (Peng et al., 1993). Thus, although some vocal cues seem to be interpreted consistently, other cues seem to be interpreted quite differently across cultures (Montepare & Zebrowitz-McArthur, 1987).

Cultural familiarity and accessibility of constructs also affect thin-slice judgments. Ambady and Hecht (2000) found that interpersonal sensitivity is affected by culture, norms, values, and practices. Thus, individuals from a more hierarchically structured culture, Korea, were more sensitive to the status of targets (whether the target being addressed was a subordinate, peer, or superior) than were Americans, who belong to a more egalitarian culture. Finally, it appears that certain characteristics are easier to judge cross-culturally than others. Thus, work on the accuracy of personality judgments in the zero-acquaintance paradigm suggests that extraversion can be judged most accurately across some cultures (Albright, Malloy, Dong, Kenny, & Fang, 1997). Thus, culture may affect interpersonal sensitivity judged from thin slices more on some dimensions than others, suggesting a culture-judgment relationship.

Domain Familiarity and Sensitivity

The previous section regarding cultural effects on judgments suggests that familiarity with the domain and behaviors being judged influence sensitivity. Results from a study on the accuracy of judging sexual orientation from thin slices provides further evidence of familiarity effects (Ambady, Hallahan, & Connor, 1999). Whereas heterosexual and homosexual men and women were equally accurate at judging the 10s silent slices, gay men and lesbian judges were more accurate than heterosexuals as information became more sparse (1s clips). This result suggests that people who are more experienced or familiar with making judgments of a certain domain are more sensitive to cues in that domain.

Thus, interpersonal sensitivity as judged from thin slices is affected by a number of different moderators. Researchers using thin slices to assess interpersonal sensitivity should keep in mind potential moderators such as personality, culture, and familiarity with the domain being judged.

THIN-SLICE JUDGMENTS AND INTERPERSONAL SENSITIVITY: SOME FUTURE DIRECTIONS

How can thin slices be used to assess individual differences in interpersonal sensitivity? This methodology promises to be useful in contributing to the knowl-

edge of interpersonal sensitivity by addressing a number of interesting issues. We list a few of many potential avenues of inquiry. Is there a general ability to judge others regardless of the length of observation? Are some people better at judging thinner versus thicker slices? Similarly, does interpersonal sensitivity vary by the channel of communication being judged? Are certain people more accurate in judging slices from the audio channel and are others more accurate at judging video clips? Further, are there individual differences in sensitivity to different attributes or characteristics? Are individuals for whom certain attributes are chronically accessible or schematic more accurate at judging those attributes? Work on depressive realism reviewed earlier in this chapter suggests that this might be a possibility. Finally, what is the relationship between individual differences in personality and affect and the type of thin-slice judgment task? For example, are extraverts better at judging extraversion as opposed to judging conscientiousness and are such judgments affected by the channel being judged?

To increase understanding of interpersonal sensitivity, it seems important to develop more instruments to measure sensitivity along the lines of the PONS and IPT that tap different aspects of the construct. Although the correlation between the IPT and the PONS is generally low (Ambady et al., 1995; Bernieri & Gillis, 1995b; Hall, chap. 8, this volume), both measures seem to predict aspects of interpersonal functioning (Ambady et al., 1995), suggesting that interpersonal sensitivity is multifaceted and that other measures could be developed to evaluate other facets of the construct. For instance, measures could be developed to evaluate sensitivity to culturally appropriate and inappropriate behavior; to evaluate knowledge of social and cultural norms, standards, and patterns of behavior; and to evaluate the decoding of emotions beyond those evaluated by the PONS. Moreover, measures could be developed that assess sensitivity to brief slices as well as longer slices, that evaluate sensitivity to different channels of communication, and that evaluate sensitivity to people of different races, classes, and cultures.

LIMITATIONS

Thin-slice methodology is still in need of development and refinement. First, the types of variables that can accurately be judged using this methodology need to be further established. The work reviewed earlier in this chapter suggests that judgments based on thin slices are probably most accurate for observable, interpersonal, or affective variables (Ambady & Rosenthal, 1992). This may be because affective, observable dimensions are the ones that need to be judged quickly for survival and adaptation to the environment (McArthur & Baron, 1983).

One's own experiences as a social being can attest to the fact that people do in fact make a broad range of judgments of other people in daily life. The conse-
quences of such decisions often remind individuals of this. However, the question inevitably arises: Does the process of asking people to make these judgments substantially alter the process and accuracy of judgments? Although thin slices might be drawn from ecologically valid sources, is the making of such judgments as done in the laboratory also ecologically valid? Thin-slice methodology, despite having a history within the nonverbal communication and interpersonal sensitivity literature, is still in its infancy. Knowledge of the predictive and diagnostic utility of this methodology is still developing. Thus, for instance, researchers still need to identify the domains in which certain variables and channels are maximally predictive of and maximally conducive to interpersonal sensitivity. Such attempts need however to parallel other emerging conceptualizations of sensitivity and take into account the multifaceted nature of sensitivity.

CONCLUSION

With the advent of modern technology and inexpensive audio and video recorders, it is now fairly easy to capture thin slices of the behavioral stream. The availability of relatively inexpensive yet powerful computers suggests a number of intriguing avenues of exploration, such as the assessment of both accuracy and latency of judgments to provide further insights into interpersonal sensitivity. We are not suggesting that thin slices be used to the exclusion of other measures of interpersonal sensitivity, but we suggest that in tandem with other measures, judgments of thin slices can provide unique insights regarding the dynamics and processes underlying interpersonal sensitivity. The measurement of interpersonal sensitivity is still evolving. Thus, at this point, it is too early to assess the relative contributions of different types of measures to the assessment of interpersonal sensitivity. The use of multiple methodologies to examine interpersonal sensitivity will deepen our understanding of the construct and constituent processes.

In conclusion, intuitive judgments about others based on thin slices can be used to assess social acuity as well as to form the basis of predictions regarding social, clinical, and psychological outcomes. The use of thin slices can facilitate successful explorations of sensitivity and accuracy in several different domains, can contribute to the literature regarding interpersonal perception and communication, and has implications for health care, clinical psychology, and education (Ambady & Rosenthal, 1992; Ambady, Bernieri, & Richeson, 2000).

Additionally, thin-slice methodology has considerable pragmatic utility. Briefly, this methodology has been found to yield rich insights while allowing researchers to save time and money, to predict several important outcome variables, and to assess social acuity. We are optimistic that the thin-slice methodology can be used to contribute to an understanding of interpersonal sensitivity.

ACKNOWLEDGMENT

The authors gratefully acknowledge support from National Science Foundation (PECASE Award, BCS-9733706).

REFERENCES

5. THIN-SLICE METHODOLOGY


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