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Bridging the Gap: Using Microsociological Theory to Understand How Expressed Emotion Predicts Clinical Outcomes

Victoria Stanhope
New York University

Phyllis L. Solomon
University of Pennsylvania, solomonp@sp2.upenn.edu

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Abstract

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Keywords

Comments

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Victoria Stanhope, MSW & Phyllis Solomon, PhD

AUTHORS

Victoria Stanhope, MSW
Doctoral Candidate
School of Social Policy and Practice
University of Pennsylvania

Contact Information:
School of Social Policy and Practice
University of Pennsylvania
3701 Locust Walk
Philadelphia, PA 19104-6214
Phone: (301) 693-1203
Fax: (215) 573-2099
E-Mail: stanhope@sp2.upenn.edu

Phyllis Solomon, Ph.D.
Professor of Social Policy and Practice
School of Social Work
University of Pennsylvania

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Research has shown that EE among families is a strong predictor of relapse for people with severe mental illness. Recent studies have also found the presence of EE in consumer-provider relationships. Despite high consistency in the findings related to EE and relapse, the concept has weak validity as little is known about how exactly it triggers relapse. Microsociological theory provides a framework with which to analyze social interaction and, more specifically, understand how interactions relate to the emotions of pride and shame. By identifying the components of interaction rituals, the theory provides insight into the key processes underlying EE and demonstrates how methodologies based on direct observation have the potential to measure EE with greater validity. This article describes how microsociological theory can be applied to the concept of expressed emotion (EE).

Key Words: Expressed Emotion, Severe Mental Illness, Methods, Sociology

Introduction

Research into factors associated with relapse for persons with severe mental illness, particularly those suffering from schizophrenia, has isolated a phenomenon among families known as expressed emotion (EE). EE refers to the quality of family interactions, specifically the presence of hostility, criticism, and emotional over-involvement. The concept's influence within psychiatry stems from its high level of consistency in predicting relapse and rehospitalization (1,2). Researchers have placed EE within the diathesis-stress model of psychopathology, characterizing it as an environmental stressor that can trigger psychotic episodes among people with a genetic vulnerability to psychopathology (3). However, there continues to be a lack of theory explaining exactly how EE constitutes an environmental stressor and its strong association with relapse. Initially, researchers tended to attribute EE to inherent traits and behaviors of family members. However, recent research locating EE within consumer-provider relationships and focusing on transactional patterns within families has suggested a more complex understanding about the manifestation of EE. These new findings on bidirectional causal patterns can be considerably strengthened by a theoretical framework that helps illuminate the dynamics of interpersonal process. Microsociological theory provides a way to conceptualize social interaction in terms of emotional states, such as pride and shame, and self-esteem. In addition to providing theoretical support for the empirical findings on EE, the framework also generates improved methodologies for measuring EE by identifying the critical components of interactions.

Expressed Emotion within Families

Studies on EE began in the 1950's and 1960's, with researchers observing that close emotional ties between families could lead to over-stimulation and social withdrawal by the

consumer (4). The emotional expressions that form the basis of EE were selected purely on their substantial association to relapse, rather than a specific theory, causing Greenley (5) to describe it as an "empirically derived measure." As such, EE is vulnerable to criticisms on the basis of validity because it is not clear what underlying construct is being measured by EE behaviors. The EE behaviors are criticism, hostility, and emotional over-involvement (EOI). Criticisms are comments that refer to characteristics of the patient that are resented or considered annoying. Hostility is expressed by general criticisms or attitudes that are rejecting of the patient. EOI manifests itself by exaggerated emotional response, over-intrusive or self-sacrificing behavior, and over-identification with the patient (6). The results of EE studies have continued to be persuasive, with meta-analyses finding twice the rate of relapse among consumers from high EE families as compared to those from low EE families (7,8).

Researchers have since placed EE within the framework of the diathesis-stress model of psychopathology, which more clearly elucidates its relationship with psychiatric relapse. Like other environmental stressors, EE behaviors are not pathological or unique to families with mentally ill relatives, but they have the potential to trigger psychiatric relapse among people with a vulnerability to psychopathology. Zubin and Spring (9) developed the diathesis-stress model as a way to combine both biological and environmental factors to explain the manifestation of psychiatric disorders. In this model, the level of vulnerability to a given psychiatric episode is determined by each individual's tolerance to stressful life events. As EE appears to accurately predict relapse among consumers, the research suggests that family environment may be a significant contributing factor to critical stress levels among people with severe mental illness. Given the diathesis-stress framework, there is still a

need to make the connection between EE and stress levels: to understand the underlying mechanisms and the conditions under which EE leads to psychiatric relapse.

Researchers have postulated various theories on the origin of EE, which Kavanagh (7) summarized into three causal models. The most commonly held is that EE originates from family members and that they have ingrained negative behaviors that place stress on the relative with mental illness, subsequently precipitating relapse (10). The second causal model asserts that EE emanates from patient behavior and symptology, which, in turn, prompts relatives to react to consumers with negative behavior (11). The final model combines the two, characterizing consumer and family member behaviors as part of an essentially interactive process with both parties being integral in generating EE (12).

Hooley (2) has developed a conceptual model that examines both beliefs about locus of control and personality traits among family members to explain manifestations of EE. Specifically, attribution theory suggests that family members are more critical of a mentally ill relative if they believe the individual has control over his or her own behavior. As a result, criticism assumes more of the form of social control and coercion because it is based on the belief that the behavior of the consumer is within his or her control. Similarly, Greenley (5) draws on attribution theory but conceptualizes EE as interpersonal social control. He argues that it makes more sense to understand EE behaviors as informal social control that occur in everyday life among family members.

Findings consistently show that high EE families have different attributional patterns than low EE families (13,14). One study examined differences between high and low EE relatives sharing the same family member with mental illness to see whether differences in controllability perceptions were due to their own traits rather than their family member's

symptoms and behavior (15). This study did not find a difference in controllability perceptions between high and low EE relatives sharing the same family member with mental illness. However, the study did find a significant difference between low EE relatives without high EE relatives and low EE relatives who lived with high EE relatives, with the latter having greater attributions of control. The researchers concluded that this may be due to a "contagion affect" or that there may, indeed, be some aspect of the consumer's behavior that triggers these attributions among relatives. Overall, the study supported the theory that high EE relatives attribute greater controllability to their family members with mental illness, but did not refute that their attribution is independent of their family member's symptoms.

Research attention originally focused on family characteristics due to the lack of association between EE and diagnosis, severity and type of symptoms, or functioning of the consumer. One of the most consistent and striking findings in the EE studies is the lack of difference between consumers from high-EE families and those from low-EE families (1,16-18). As a result, researchers looked to factors other than symptomatology to explain the presence of EE, namely the behavior of the families. But many families perceived the research on EE to be another form of blaming them for the illness of their relatives, in the same vein as the theory of "schizophrenogenic" families had done in an earlier period (19). They argued that researchers show little understanding of caring for a relative with mental illness and the stressors that are involved.

In response to legitimate concerns raised by families, studies began to examine the subclinical psychopathology of consumers as a possible predictor of EE. Subclinical psychopathology refers to behavioral disturbances that are symptoms of mental illness but do not reach the level of clinical severity (20). Researchers argue that family members may be

responding to behaviors that are challenging but are not typically captured and labeled during a clinical assessment. Using measures of subclinical psychopathology, one study observed interactions among families with relatives who had schizophrenia (21). The results indicated that the presence of subclinical psychopathology was significantly more likely among consumers from high EE families. Especially prevalent among high EE families were interactions during which consumers demonstrated odd or disruptive behaviors. A later study examined the non-verbal behavior of these family interactions and, similarly, found more hostile and unusual non-verbal expressions among consumers in high EE families, as opposed to anxious and agitated behaviors that characterized consumers from low EE families (20). If degree of EE is related to symptomotology, even if subclinical, then some researchers hypothesized that EE would vary according to the diagnosis of the consumer. In examining families with relatives with bipolar illness, Miklowitz, Goldstein and Nuechterlein (22) found that, compared to families with relatives with schizophrenia, the families with consumers with bipolar illness made less critical statements.

The research on subclinical psychpathology has also used direct measures of family interactions allowing researchers to test a transactional model for EE. Study of interaction requires sequential measurement in order to capture how each party is reacting to the other's verbal and non-verbal behavior. Rosenfarb and colleagues (21) found that high EE families were more likely to be critical after the consumer had expressed an unusual thought, with the percentage of families making critical comments rising from 26 percent to 63 percent. Furthermore, the expression of criticism by families, in turn, increased the probability of the consumer expressing another unusual thought. Researchers concluded that levels of criticism were neither driven by family member behavior nor by consumer behavior, but their

influence was bidirectional. Another study found that high EE relatives possessed a more negative interactional style with more negative non-verbal affect, more criticism, and more negative solutions (23). In examining interactions sequentially, the investigators found that families with high levels of criticism had longer-lasting negative reciprocal patterns than families with low level of criticism. Futhermore, there were no differences dependent on which party initiated the negative sequences.

The findings on subclinical psychopathology and EE suggest that it is not so much symptoms that contribute to EE among families, but rather social behaviors that are related to the consumer's psychopathology. What is less clear is whether specific diagnoses are more likely to give rise to high EE behaviors. The finding that EE is lower among families with bipolar consumers than families with schizophrenia, even when bipolar consumers are more symptomatic, has led some researchers to hypothesize that EE is related to behaviors associated with schizophrenia. More specifically social impairments, such as deficits in social skills and disturbed behaviors, place more burden on families in interacting with their relative with mental illness (24). Consumers with schizophrenia often have poor social perception that may make them less able to recognize and defuse interpersonal conflicts (16). However, it is not clear that all disruptive social behaviors are unique to diagnosis; one study of families with bipolar consumers found that odd thinking by consumers predicted relapse, a similar finding to studies of families with schizophrenia (21). Moreover, differences in EE among families with consumers with bipolar and with schizophrenia are not consistent, and more recent studies have found that EE is predictive of relapse among consumers with major depression and eating disorders (8).

Another important aspect to consider when analyzing the impact of social behaviors on levels of expressed emotion is how family members perceive these behaviors. In a transactional model, the role of subjectivity, how both parties interpret the other actions, is the vital determinant of their subsequent behavior. Using an attributional framework, it may be that a consumer's subclinical behaviors are not perceived as symptom related by family members and are responded to with more criticism and judgment than clinical symptoms. This would explain why there is significant relationship between EE and subclinical psychopathology and not EE and clinical symptoms. What is clear from the transactional model is that EE depends on both the behaviors of the consumer and their family's response, indicating a "fit" between the two. The model explains both the considerable variation in behaviors within low and high EE groups and the overlap in behaviors between the two groups (23). Hooley and Campbell (14) refer to the fit between the family and consumer when explaining differences in EE levels in relation to negative symptoms, "Patients are clearly doing something to draw criticism or controlling behaviors from their relatives. What irritates one person, however, may not irritate another" (p.1098). Similarly, Hahlweg and colleagues (23) found similar behaviors among both over-involved families and non-involved families and concluded that the differences in EE levels were due to these behaviors being interpreted differently by consumers. Therefore, to accommodate this complicated causal model, researchers need a framework that can explain transactional processes between family members, capturing the role of social behaviors and individual subjectivity.

EE among providers

Another argument leveled against the EE research has been its focus on just families, rather than measuring the presence of EE in other arenas that may influence the consumer,

such as relationships between providers and consumers (19). In response, researchers have

begun to examine EE among providers and their findings give more support to EE being a

transactional phenomena and the importance of social behaviors. Outside of the family

context, the influence of daily social interactions is shown in greater relief. Overall, the

research has found that providers identify similar consumer behaviors to those identified by

family relatives as being difficult to cope with: embarrassing or disruptive behaviors, and

social impairment due to negative symptoms (25). Providers, like families, are more likely to

blame consumers for negative symptoms, whereas positive symptoms are easier to attribute

to mental illness (26).

 Moore, Kuipers, and Ball (27) found in a survey of staff that they exhibited high and

low EE attitudes, evidence of the existence of EE among providers that may predict

consumer outcomes. Other studies have found one to two-thirds of their provider sample

have high EE relationships (26,28). Front line providers in community care facilities often

have prolonged and intense contact with consumers, to a limited extent replicating the stress

of family life with mentally ill relatives. However, overall providers do show lower levels of

EE compared to families, which one would expect given their therapeutic purpose and

professional clinical training, as well as their lesser emotional involvement. Most

importantly, EE among providers has not been associated with overall job stress or provider

characteristics, but rather with specific interactions among certain types of consumers. For

example, Oliver and Kuipers (29) found that providers showed a wide range of reactions to

consumers and a high proportion had at least one EE relationship, demonstrating that EE

relationships were not associated with specific providers.

Difficult social behaviors among consumers appear to be a major determinant of EE in consumer-provider relationships. Moore and colleagues' (2002) study within a forensic unit found EE was correlated with patient irritability, argumentativeness, and history of violence towards staff. Interviews with providers in a long-term care setting showed that criticism was mainly focused on patients with socially embarrassing behavior, difficult behavior, or clinical poverty syndrome (27). Difficult or social embarrassing behavior included hostility, abusiveness, talking to self, sexually inappropriate remarks, or stealing. Clinical poverty syndrome referred to lack of initiative, apathy, inability to make decisions, poor self-care, and social withdrawal. In addition, the consumers in these high EE relationships were twice as likely to make self-denigrating comments about themselves. When the consumers expressed negative feelings, the investigators described how the providers were less likely to challenge those comments, "workers who were rated high EE were likely to draw attention to the patient's shortcomings, either by introducing them as a problem, or by agreeing that the patients were in some way at fault" (30, p.302).

In one study of case managers, 27 percent were rated as high EE. But unlike other studies of providers, the EE ratings were not associated with consumer behavior (25). Instead, EE ratings appeared to be associated with the specific work style of case managers, but not their gender or work experience. High EE relationships were not related to the clinical outcome of consumers. But within the EE measures, the high quality of the relationship did predict positive outcomes, including reduced symptomatology and patient satisfaction. The investigators concluded that in terms of consumer outcomes, the most important factor appeared to be either the presence or absence of positive attitudes on the part of providers as indicated by the quality of relationship, rather than negative behaviors such as

criticism and hostility. Overall, providers show fewer negative attitudes than relatives so that

the absence of positive attitudes more closely resembles high EE behavior of families (25).

Therefore, the more recent research examining both subclinical psychopathology of

the consumer and provider behavior suggests a more nuanced understanding of the origins of

EE. The research provides clear indications that EE lies neither in the personality traits of

family members nor in the specific symptomology of the consumer, but rather in the way the

two parties understand and respond to one another. However, there is also evidence that odd

or disruptive behaviors, which are often considered to be subclinical, are more likely to

prompt higher levels of EE both within consumer-provider relationships and within families.

However, the connection between EE and relapse still remains elusive, and as Ryan (31)

concludes: "While the findings suggests the importance of interpersonal rather than strictly

intrapsychic processes, it remains unclear precisely what those processes are" (p. 168).

The key to understanding EE lies in the ability to examine interpersonal processes: how

certain behaviors disrupt interaction, relate to emotional states, and ultimately precipitate

psychiatric relapse. Although recent studies have moved towards more interactive

conceptualizations of EE, the research has yet to focus on the role of perception and how it

relates to emotional states. In examining interpersonal interaction, researchers need to move

beyond observable behaviors in order to understand how each actor perceives these

behaviors. Consequently, a theoretical framework is needed that elucidates the role of

subjectivity, namely differentiating between how behaviors are interpreted and how they are

intended within interpersonal interactions.

Social Interaction Theory

Microsociological theory provides a valuable framework with which to understand the reciprocal processes associated with relationships between people with severe mental illness and their families and providers. One can attribute high levels of EE to failed social interactions, arising from both parties not adhering to social conventions. These interactions both produce and are determined by emotional states linked to alienation and poor self-esteem, which are triggers of psychiatric relapse. Although social context and the characteristics of the actors play a role in determining outcome, social interactions are essentially dynamic, creating themselves from second to second (32). The microsociological approach provides a theoretical framework for understanding the constant interplay between individual subjectivity, context, and social communication, which shapes how people perceive themselves and others during social interaction. Underlying this complex process are emotional states, which both motivate and are influenced by social behavior.

Goffman (33) characterized social interactions as everyday rituals with specific rules and norms dictating their forms. The sacred aspect of this ritual is "face", the image of oneself that becomes created and communicated through one's interactions with others. The rules that determine "impression management" or "facework" are, according to Goffman, the central organizing forces in everyday interactions. Constant negotiation is required between individuals to ensure that each manages to save face and, if these negotiations break down, the interaction ritual fails. Goffman specifically connects the process of saving or losing face with feelings of pride and shame. Drawing on Cooley's (34) concept of the looking glass self, he argues that one's sense of self is both created and reinforced by others' view of

oneself. Goffman describes how social encounters reflect back on the self and the nature of the encounter dictates whether one is left with a positive or negative image:

> While his social face can be his most personal possession and the center of his security and pleasure, it is only on loan to him from society; it will be withdrawn unless he conducts himself in a way that is worthy of it (1967, p.10).

Social interaction is a series of sequential acts that ensure the protection of face for those participating. Often both participants will avoid any move that may embarrass the other, but if some threat does transpire, corrective processes can be put in place, which involve offering, accepting, and acknowledging a repair to the threat. This suggests that there is an innate equilibrium in interaction rituals, which participants strive to maintain the majority of time. Interaction sequences can have many variations, but their success or failure is contingent on the extent to which both parties' positive sense of self is maintained. Failed rituals are often signified by the parties' embarrassment and a breakdown in communication. Clearly, emotion is intimately involved in these processes, in reflecting what is being done to one's face, but also, in motivating interactional responses. The extent to which people follow the rules of interaction and maintain face indicates how important this activity is to social order. The key behaviors of EE -- hostility, criticism and over-involvement -- all transgress the rules of Goffmanian interaction ritual by undermining face and violating individual boundaries. Consistent transgression of these rules, as seen in high EE relationships, leads to an acute sense of social isolation and low self-esteem. Using the diathesis-stress perspective, the feelings associated with social isolation and low self-esteem can be severe psychosocial stressors with the potential to precipitate relapse among people with severe mental illness.

Social interaction rituals between providers and consumers are largely defined by the treatment context. Consumer-provider relationships are marked by an essential asymmetry

that differentiates them from interactions within families or among people of equal status. In describing the role of deference in interaction ritual, Goffman (1967) refers to the fact that in a psychiatrist-patient relationship the ability to inquire about aspects of one's private life is not reciprocal, the privilege lies only with the psychiatrist. He demonstrates how psychiatrist-patient relationships do not adhere to the patterns of mutual deference. Goffman (35) chose to focus his studies on mental hospitals because he could observe many violations of the rules pertaining to interaction, specifically, privacy and separateness. Even among unequals, Goffman argues that displays of deference can be mutually affirming, as with a subject paying homage to his leader. However, the stripping away of any ability to maintain face results in alienation for the patient. For Goffman, it is the actions of the professional staff that is the source of the failure in staff-patient encounters. Their clinical rules prohibit face saving activities by patients and result in the alienation and mortification of patients.

In contrast, the studies on EE and providers have tended to focus on the actions of the consumers as being the source of high EE relationships. Particularly, hostile, embarrassing or socially withdrawn behaviors by the consumer, which clearly violate the rules of demeanor and deference, have been associated with high EE relationships. Providers, who are unable to accommodate these behaviors, violate the social rules which results in alienating interaction patterns for the consumer. In clinical settings there are potentially two forces at work, created and reinforced by one another, which serve to undermine interaction rituals: clinical rules that have the power to demean a consumer and consumer behavior that violates the rules of social interaction.

Managing emotional processes are an integral part of social interaction. Emotion can be both the determinant of and the result of social interaction, and, therefore, plays a primary

and secondary role in the sequence of actions. Societal reaction, how people perceive and respond to emotion, also shapes the way one expresses emotion (32). Symbolic interaction theorist argue that pride and shame are uniquely social in nature and are the primary emotional forces driving interpersonal interaction (34,36). The maintenance of pride and avoidance of shame drive the constant self-monitoring that goes on among human beings within a societal context. Both pride and shame, reflecting positive and negative self-esteem, rely heavily on how people believe they are being viewed by other people. However, due in part to their social nature, the outward indicators of pride and shame are far more complicated to understand than emotions such as happiness, anger or fear. These emotions accompany complex social interactions where people are vying to both protect and project themselves in a way that will maintain their sense of self-worth.

Scheff (36) argues that experiencing shame in a social encounter can follow a variety of sequences and is often recursive, in that feeling shame promotes additional feelings of shame. Also, feelings of anger can trigger feelings of shame, which in turn provokes more anger, giving another variation of the "shame spiral." Shame appears to be one of the more difficult emotions to express in society. Consequently, feeling ashamed of feeling shame motivates people to hide shame. For Scheff (1990), unacknowledged shame can lead to "a chain reaction with no natural limit to its duration or intensity" (p.288). Within a social interaction, shame can arise from some perceived threat to self, but also can be revealed and dissipated by the other party in the interaction. This closely follows Goffman's idea of repair, that a persistent loss of face can be avoided if there is sufficient repair. However, repair is only possible when shame is visible. Scheff's description of unacknowledged shame

resonates with high EE interactions, which have described relatives becoming "locked-in to chains of iterative negative interactions" (Wearden et al., 2000, p.638).

Social interaction theory provides a logical theoretical framework with which to understand EE. The quality of high EE interactions reflects many of the facets of failed interaction rituals, with both parties failing to adhere to rules designed to avoid embarrassment and humiliation. Failed interactions, therefore, lead to mediating emotional states such as shame, which lead to poor self-esteem and arousal states associated with relapse. On the other hand, strong relationships arise from successful social interactions, which maintain pride and respect for both parties. Providers who manage to negotiate a strong social bond with their consumers, even within a mental health setting that has the potential to be disempowering, may significantly decrease the relapse rate among their consumers. Consumers, themselves, have identified the quality of their relationship with providers as being a key factor in their recovery (37,38). Also, studies on consumer-provider relationships have found that the strength of the therapeutic alliance, which is indicative of social bond, is positively correlated with clinical outcomes (39).

Methodological Implications

A microsociological approach also has the potential to improve the validity of EE measures. Accurate measurement of EE, or any emotions for that matter, is determined by how "close" the researcher can get to the actual raw data of human behavior. The essentially private nature of emotions necessitates an interpretive framework to understand the data. However, research into social interaction and relationships has to expand beyond traditional approaches to capture the dynamic and immediate nature of emotions. Conventional research with questionnaires, scales, and verbal reports unnecessarily distances the researcher from

the human behavior under study (40). Investigations based only on verbal reports of emotions are limited to just "talk" about emotions, their representations within a social context, not the emotions themselves (Katz, 1999).

The primary instrument for assessing EE has been the Camberwell Family Interview, a two-hour interview with a family member, which includes asking about consumer's psychiatric history, symptoms, amount of time the family spends with the patient, nature of relationship, and attitudes of the family member towards the consumer and his/her illness. High or low EE relationships are classified by frequency of statements that relate to criticism, hostility, emotional-involvement and warmth. Due to the protracted length of the CFI interview and the rating process, EE researchers developed an abbreviated instrument entitled the Five-Minute Speech Sample (FMSS) (41). The FMSS departed from the interview format and used the Gottschalk and Gleser (42) verbal sampling procedure. In measuring EE with the FMSS, researchers ask the respondent to talk for five minutes about how they relate to the consumer. The speech is rated according to the quality of the initial statement, the quality of relationship, frequency of hostile comments, frequency of positive remarks, and overall classification of the relationship (43).

Both the CFI and the FMSS are limited by the fact that they do not directly measure the actual interaction between families and consumers or providers and consumers. In fact, Hooley (2001) characterizes EE as, "a measure of attitude of a relative toward an identified psychiatric patient, assessed in the *absence* of the patient in question" (p.70). Researchers have since developed measures of emotional environment that are applied during social interaction between families. Doane and colleagues (44) developed a measure of Affective Style, which is closely correlated with EE, but based upon coding of type-written transcripts

of family discussions. Similarly, Halhweg and colleagues (23) applied the Categorical

System for Partners Interaction which examines, "speaker and listener skills that form the

basis of behaviorally oriented communication and problem-solving treatments" (p.13), using

the family as the unit of analysis.

In addition to verbal content, paralinguistic and non-verbal behavior can play an

important role in social interaction. For instance, the reluctance of people to admit to feelings

of shame verbally means empirical evidence often lies with paralinguistic behavior that

people find more difficult to control. Scheff and Retzinger (45) classified the following

paralinguistic behaviors as markers of shame; hesitation, over-soft speech, filled pauses, long

pauses, silences, stammer, rapid speech, repetition, monotone, mumble, and breathiness. One

study of subclinical psychopathology and EE has investigated both paralinguistic and non-

verbal behavior of families during interactions (20). Using a behavior subclinical rating

system, the study rated non-verbal and paralinguistic expressions of subclinical

psychopathology into ten symptom categories. From these studies, it is evident that focusing

on the dynamics of interaction necessitates the development of methods that observe first-

hand interaction between families and providers and consumers, capturing all aspects of

communication, including non-verbal and paralinguistic.

Conclusion

EE is often characterized as a psychosocial stressor that can precipitate psychiatric

relapse, but its origins and mechanisms have remained unclear. Recent research has focused

on the transactional nature of EE and sought to understand its manifestation in a bidirectional

process between consumers and their families and between consumers and their providers.

Studies have found that certain behaviors on the part of the consumer, which disrupt social

interactions, are associated with high EE relationships. However, the transactional nature of EE means that how families and providers understand and respond to these social behaviors also determines the extent of EE behaviors. Microsociological theory, with its focus on interaction ritual, provides a framework to understand failed social interaction processes, thereby bridging the conceptual gap between high EE relationships and psychiatric relapse. By isolating the key processes at work in EE, researchers can strive to improve the construct validity of their measures and develop methods that can detect the myriad of emotional processes, some overt and some covert, which are both the cause and effect of social interaction. Employing the proposed measurement approach may also increase our understanding of family dynamics and therapeutic relationships within the clinical environment. Ultimately, EE findings can have considerable clinical implications, by identifying the components of successful interactions between consumers and providers, which preserve social bonds and improve the consumer's self-esteem. This knowledge will be especially valuable given the increasing emphasis on providing recovery-oriented mental health services, which promote a genuine sense of connectedness between consumers and providers.

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