**Identifying Signals of Suffering by Linking Verbal and Facial Cues**

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# ABSTRACT

Here, the authors describe microanalytically the two main behavioral states in suffering (enduring and emotional suffering) so that in subsequent research, appropriate comforting responses to ease and relieve suffering can be identified for each behavioral state. Their objectives were to describe the facial expressions of enduring and emotional suffering, and to link them with verbal narrative and thus develop a microanalytic description of each behavioral state. Using Ekman’s modified EMFACS, they videotaped interviews with 19 participants and coded co-occurring verbal text and expressions. They also documented differences between each behavioral state and the transitions from enduring to emotional suffering. Enduring and emotional suffering are distinct and identifiable behaviors. These formerly implicit behavioral cues can be used in clinical assessment and research.

***Keywords:*** *suffering; facial expression; enduring*

**S**uffering is a human response to physical and psychological loss. Although it is a complex emotional and behavioral phenomenon that is of central concern to nursing, it remains poorly understood. It has been extensively documented from narratives of those who are suffering, but the behavioral indices of suffering have not been described. Nurses are the primary “caretakers of suffering” (Morse, Whitaker, & Tasón, 1996), and nursing texts—in particular, communication texts—describe strategies, such as empathy, touch, or listening, to comfort and console those who are suffering. Despite the ubiquitiousness of suffering, we have not documented individuals’ behavioral cues or signals of suffering. To date, the facial expressions of the sufferer have not been described, so comforting responses of others (i.e., actions and interactions) are based largely on intuitive cues learned by the trial and error in everyday life and are largely classified as intuitive knowing in clinical practice. By exploring the behavioral cues of suffering and developing a means to interpret an individual’s facial expressions and by linking these to the individual’s story, important insights into the expressive nature of suffering will be obtained. Thus, the objectives of the study were

1. to describe the facial expressions manifested by individuals while experiencing suffering,

2. to link the individual’s story with co-occurring facial expression(s), and

3. to identify the triggers that initiate transitions from states of enduring to emotional suffering.

# LITERATURE REVIEW

Despite the large amount of literature microanalytically analyzing facial expressions, ethologists have primarily examined facial expression independent of other behavioral indicators: They have not simultaneously linked facial expression to the individual’s narrative or to the context. Furthermore, psychological research linking facial expression with emotion has largely been conducted using simulated triggers, such as film or actors, to stimulate and “standardize” emotional responses of participants in controlled conditions. It is an assumption in our research that if conditions of trust are established in the interview and adequate time is provided for participants to tell their story of suffering, the participants’ inner emotions will be consistent with and reflected in their narration and facial expression.

## Do Facial Expressions Reflect Inner Emotions?

There is some disagreement about the relationship between inner emotions and observable facial expression. Izard (1971) and Ekman and Friesen (1971) found a cross-cultural association between descriptions of emotions and facial expression, and universal interpretation of these expressions (Ekman, 1972; Friesen, 1972). For instance, the facial expressions ofNewGuinea tribesman could be interpreted accurately in the United States (Ekman, 1972).More recently, psychologists using experimental methods have attempted to code consistent emotional experiences using Ekman and Friesen’s (1978) Facial Action Coding System (FACS) and movie segments as stimuli (Rosenberg & Ekman, 1994), or relying on self-report of emotions (Ruch, 1995). These researchers generally agree there is a moderate relationship between inner emotion and facial expression, although facial expression can also be used to mask or cover inner emotion (see, for instance, Carroll & Russell, 1996; Matsumoto, 1987). Furthermore, when comparing voluntary facial expressions of sighted and congenitally blind individuals, Galati, Scherer, and Ricci-Bitti (1997) ascertained little difference in facial expression, suggesting that facial expression of emotion is innate.

## Do Facial Expressions Communicate Emotions?

Ekman’s (1992) theory of facial affect programs identifies patterns of facial expressions that accompany six basic emotions: happiness, surprise, fear, anger, disgust, and sadness. Not all of these components might be consistently present in a single expression, and they might occur in varying degrees of intensity (Ekman, 1984). Furthermore, emotions are complex and because of the context can co-occur with other emotions or be artificially manifested, suppressed, or exaggerated by the individual. Thus, contextual factors weaken the relationship between the experienced and expressed emotion and the emotion that is communicated. When the situation is not threatening or the emotion is one of the six basic emotions, the face “provides information relevant to emotion, but does not signal a specific emotion” (Carroll & Russell, 1996, p. 205).

Through attempts to explore the relationship between experienced and expressed emotion using film or slides, researchers have tested the ability of individuals to identify the expressions with the inner emotion of the subject. Despite the problems of mixed expressions, Kirouac and Dore (1984) demonstrated that subjects could accurately recognize an emotion within 7 seconds. When exploring development of expression from onset to apex, Edwards (1998) found that participants were able to place slides in chronological order, thus indicating that people can recognize the trajectory of emotions in facial expression. Nevertheless, even within the six basic emotions, it is evident that some emotions are communicated more accurately than others. For instance, Carroll and Russell (1997) showed that the Duchenne (genuine) smile is associated with happiness only 97% of the time.

## Documenting Facial Expression

Early research about the relationship between facial expression and emotion examined facial expressions cross-culturally to determine if facial expression was a cultural universal to the conveyance of specific emotions (see Ekman & Friesen, 1971; Izard, 1971). Although findings seemed to indicate cross-cultural consistency in facial expressions, researchers relied on the individuals’ descriptions of their emotions rather than on an external measurement tool. This research was therefore confounded by variation in cultural meaning of incidents. To remedy this problem, subsequent researchers have developed a variety of standardized measurement tools, ranging from trained observers watching video segments depicting facial expressions to computer software that detects movement of the facial muscles (Ekman, 1982). One of the most widely used systems for microanalytic description of facial expression is the FACS (Ekman & Friesen, 1978). FACS was developed by assigning specific facial movements numbers, or “action units” (AUs), with each AU representing one distinct and observable muscle movement (e.g., AU 1 = inner brow raise, AU 2 = outer brow raise). As FACS does not provide a means for interpreting or assigning meaning to the facial movements, EMFACS was developed to help identify emotions associated with facial movement (Ekman, Irwin, & Rosenberg, 1994). EMFACS uses only AUs shown to be associated with commonly expressed emotions, facilitating faster coding and making it easier to determine patterns of facial expression associated with emotion. Concealing of emotions by masking will be minimized.

Psychologists have concluded that more than simply facial expression is needed to determine another’s emotional state and encouraged researchers to change their research design to reflect naturally occurring situations rather than laboratory experiments (see Carroll & Russell, 1996). Researchers are advocating the use of both spontaneous displays of emotion and consideration of other contextual cues to discern the emotional state of an individual (Algoe, Buswell, & DeLamater, 2000; Carrera-Levillain & Fernandez-Dols, 1994; Carroll & Russell, 1996, 1997), but to date, this has not been accomplished.

## Suffering

Although suffering is a very human response to loss, research into the behavioral manifestation of suffering is surprisingly sparse. Under the rubric of suffering, we find a cluster of concepts: chronic sorrow, distress, loss, grief, and bereavement. Most researchers have focused on the alleviation of suffering, with the goal of minimizing and easing bodily and psychological distress to improve individual and family functioning (Eriksson, 1997; Fagerstrom, Eriksson,& Engberg, 1998; Kahn& Steeves, 1994; Lindholm & Eriksson, 1998; Rodgers & Cowles, 1997). Researchers into suffering per se have frequently focused on how nurses infer patients’ suffering (Davitz, Pendleton, et al., 1969; Kreidler, 1984; Mason, 1981; Starck & McGovern, 1992; Steeves, Kahn, & Benoliel, 1990), have attempted to measure or assess suffering (Bayes & Comas, 1997; Starck, 1984), or have attempted to elicit the meaning of suffering from narratives (Steeves & Kahn, 1987; Watson, 1986).

Researchers have often treated suffering as a static phenomenon and not one that varies over time in intensity and form. For example, Eriksson (1997) and Fredriksson (1998) have primarily explored suffering using retrospective interviews and consider individual suffering styles, and patients’ styles of suffering as constant over time. We consider this to be only partly true. Although culture, personality, gender, and context play a role in the manifestations of suffering, different phases in the trajectory of suffering also result in various types of behaviors evident within a patient’s personal style of expression.

This variation can be partially explained through two behavioral states that occur within suffering:

* enduring, a state of emotional suppression; and
* emotional suffering, or releasing emotions (Morse, 2001).

This variation in the suffering response is evident in patient narratives describing the course of illness or injury from onset to rehabilitation (Morse & Carter, 1995). *Enduring*. When enduring, emotions are suppressed to enable the person to get through the moment, and the effort required to suppress emotions also inhibits spontaneous bodily and facial movement. The individual moves in an upright, perfunctory manner, with the head erect. Facial expressions can appear “wooden.” The voice lacks expression; sentences are short and the content a factual relaying of events rather than subjective description. The person appears disconnected emotionally and is focused on the present. From nurses’ descriptions of patients who were enduring, Flaming (1995) classified four segregates: “to bear it,” “to stay in control,” “to protect,” and “to strengthen.”

*Emotional suffering*. On the other hand, emotional suffering is a state in which emotions are released and expressed. The individual’s posture is stooped, the face is lined and drooped, and the expression reflects sadness. The individual cries, tears, or sobs, is articulate expressing subjective emotions, and speaks with a sorrowful voice. These persons are aware of the ramifications of the lost past and altered future.

*Transition*. Individuals can move between enduring, in which emotions are suppressed, and emotional suffering, in which emotions are released. Transitions between these two states, the triggers and the pacing of emotional change, have not been described previously in the literature.

## Significance of Understanding Transitions

The association between facial expression of emotion and narratives designed to elicit a specific emotion has previously been explored by Carroll and Russell (1996) using a controlled laboratory experiment design. Slides of actors with simulated expressions were paired with stories that displayed slightly different emotions.

Results showed that participants consistently selected the emotion communicated by the narrative rather than the one suggested by the facial expression. These authors recommend that future researchers use spontaneous and natural settings to examine facial expression to determine which facial actions are associated with specific emotions. Few studies have been conducted by observing participants in natural settings. Bonanno and Keltner (1997) conducted narrative interviews with individuals who had recently experienced the death of a spouse using EMFACS to determine the emotional affect of the participants. Subjects sat alone in a room with two cameras focused on their face for 10 minutes to obtain baseline data. A researcher then entered and asked them to talk freely for 6 minutes about their relationship with their spouse, followed by 12 minutes of responding to interviewer prompts about descriptions of memories of the deceased. Such contrived conditions interfere with the development of inner emotion. The mode of data collection might have subsequently muted the development of facial expression and interfered with the validity of the research. Researchers have recently begun to acknowledge the importance of context in the display and interpretation of facial expressions. Merten (1997) reported that participants’ facial expressions did not always match their reported affect while engaged in a political discussion and cautioned that emotional interpretation of facial cues only be conducted once the context (including verbal, nonverbal, and situational cues) has been considered. Thus, the purpose of this study was to fill this research gap by conducting an observational study to examine the sequence of transitions in facial expression and to link these with events described in participants’ interviews. This research will enable practitioners to identify accurately the transitions between enduring and emotional suffering

using complex interrelated behavioral indices in facial expression and verbal utterances.

## METHOD

### Design

This research was an observational study designed to provide the opportunity for participants to recall distressing experiences of suffering that would manifest responses of enduring and emotional suffering. By videotaping participants as they told their story, we recorded facial expressions of enduring and emotional suffering and the transitions between the two states. These facial expressions were coded, described, and linked with textual data, and they enabled the examination of the triggers, pacing, and timing of transitions.

**Instruments**

Facial Action Coding System (FACS) (Ekman & Friesen, 1978) is a system to code observable facial muscle movements. The instrument consists of a total of 44 action units (AUs), with additional codes for head and eye position. Each muscle movement is scored for intensity (from 1 to 5). An absence of muscle contractions is described as neutral, although it can appear expressive (for example, some faces appear to be smiling or frowning though the individual was not moving any muscles). As such, FACS codes only movements of facial muscles to ensure that an individual’s neutral expression is not being coded. Ekman, Irwin, et al.’s (1994) EMFACS procedure is based on FACS and codes only the AUs associated with emotion. Modified EMFACS was used in the present study to code facial expression, along with transcripts of co-occurring verbal utterances and other expressions such as sighing or crying on a 1-second time bar (as seen in Figure 1). Intercoder reliability was obtained in two ways: (a) randomly selected clips were coded by two certified coders (78.5% intercoder reliability obtained), and (b) reliability was obtained by having one coder recode each of the transitions over the entire 6 months (76.5% agreement). In addition, all discrepancies were examined and discussed until consensus was achieved. Patterns were identified for describing the typical suppressing, transition, and releasing expressions. Codes were added to EMFACS for tearing, the quality of the expression (facial tension in neutral and releasing expressions) and gaze (blank vs. directed stare).

[ INSERT FIGURE 1 ABOUT HERE]

**Data Collection**

The current study was part of a research program examining the trajectory of suffering. Following IRB approval, we invited participants who had experienced a life threatening illness or who had cared for a significant other with a terminal illness to participate in a study explicating suffering behaviors. We interviewed 2 men and 17 women between the ages of 24 and 79 and recorded the interviews with a Canon XL1 Digital Video Camcorder in natural lighting to maximize visibility of facial expressions. We obtained informed consent for videotaping and additional consent allowing us to publish the images for public use for educational purposes. All participants agreed to be in the study; all but 3 agreed to have their image released. Of the 19 participants, 10 remained in a state of enduring or moved into transition and returned to enduring, and 9 exhibited both enduring and emotional suffering states. Despite our efforts to establish rapport, because of the research conditions, including the presence of a camera, participants struggled to remain in control, resisting crying publicly. Furthermore, one participant used esophageal speech1 and explained that he did not permit himself to become upset because he could not speak when he was distressed. Analysis of the transitional states was conducted using the interviews of the 9 participants who transitioned from enduring to emotional suffering during the interview.

We requested that participants relate their stories of illness or caregiving with minimal interruptions from the interviewer. While recalling and describing events, participants re-experienced emotional responses to those events, suppressing emotions and entering a state of enduring. Likewise, while discussing events that were emotionally distressing, participants exhibited emotional responses of distress, such as crying and pausing while they reflected on the event.

## DATA ANALYSIS

Verbatim transcription of the audio portions of the tapes was prepared. We identified periods of transition for each participant in both the video and text files. Using a minimum of 1 and a maximum of 8 transitions from enduring to emotional releasing during their interview, we included 28 instances of transition from 9 participants in the analysis.

**Transcription and Textual Analysis**

We placed the text corresponding to each transition on a time bar to show the pacing of the speech in seconds. We also marked vocal qualities (e.g., sighing, voice cracking, or crying) in real time on the transcript. We examined the text for narrative cues that might have triggered the participant to move from enduring and transition into emotional suffering.

**Coding of Behaviour**

We proceeded with analysis by concurrently examining facial expression and text or the video; we developed data displays to maintain the integrity of the interaction of these components. Researchers coded head position, eye position, and upper face and lower face movements, consistent with EMFACS coding. In addition, vocal qualities and other gestures, including breathing, sighing, and hand gestures, were recorded. All behavioral cues were coded in relation to the pacing and timing of the speech.

## RESULTS

As participants told their stories and described what happened, the interview provided an opportunity for participant reflection and recollection of emotional reactions felt at the time. As such, retrospective interviews are a strategy to enable the “emotional reenactment” of events (Morse, 2002). Thus, the interview method compensated for limitations in earlier studies in that participants revealed events that were emotionally significant to them, and there was no time restriction or investigator control of the narration. In this section, we discuss facial expressions of enduring, transition, and emotional suffering, link the text from the participant’s interview to facial expression, and then discuss the trajectory of suffering as participants moved from enduring into emotional suffering.

### The Facial Expression of Enduring

When in the state of enduring, participants’ faces were neutral. The lack of expression was evident, giving faces a “blank” appearance. Participants’ facial muscles appeared to lack tone and shape (see Figures 1 and 2). Their lips and mouths moved only slightly as they spoke, their eyes were still and unfocused, and their gaze centered in the distance, away from the interviewer. Their gaze moved around the room, and they rarely blinked.

[ INSERT FIGURE 2 ABOUT HERE]

**The Facial Expression During Transition**

The first indicator of transition from enduring to emotional suffering was the movement of participants’ eyes, which made frequent and rapid, undirected movements. The eyes darted around the room but remained unseeing and unfocused. Then, as the emotions broke through neutral facial expressions, participants frowned, with their inner forehead raised and their middlebrow lowered (AU 1+4). As they lost control, their lips quivered, causing the participants to tighten their lips and raise their chin to attempt to control this movement and their affect. Often, at this point, participants covered their mouth with their hands. If they continued talking, the upper lip and cheeks began to rise (AU 6+10), and lips would begin to stretch as they tried to control their lower face and mouth to keep talking (AU 20) (see Figures 1 and 3).

**The Facial Expression of Emotional Suffering**

As participants reached a state of emotional releasing, their brows remained furrowed (AU 1+4). If they were not speaking, the corners of the mouths dimpled (AU 14), and they raised their chins (AU 17) as they pressed their lips together (AU 24) while sometimes lowering the corners of their mouth (AU 15). If they continued to speak, their lips would remain stretched (AU 20) and pressed (AU 24), with their chin raised (AU 17), again while sometimes lowering the corners of their mouth (AU 15) (see Figures 1 and 4).

[INSERT FIGURE 3 ABOUT HERE]

**The Concurrence of Facial Expression and Interview Text**

There was an interdependence between the content of the participants’ narratives and the facial expression. When individuals were enduring, they tended to relate factual events (such as treatments or the course of events) or actions of others (and sometimes themselves) in a dispassionate manner. In almost every case, as the topic moved from a discussion of the other to references to the self (“I” or “me”) or to references to the future ramifications of the event, the person moved into transition.2 The trigger to move into emotional suffering was the threat to self. For example,

199 John ((husband)) said to me, “I–I think I am dying.” (1.3) So, um, 4.6) =

200 = he didn’t see::m any different than he had, (0.5) you know? He was still =

201 = John (0.7) ((husband)) and still very much alert. (2.5) I guess I didn’t =

202 = see the changes as much as every body else (1), you know, because I, =

203 = (0.9) I went through the different stages with him. (2) Part of me =

204 = (.hhh) (5.1) part of me ((voice breaking)) was dying (.h h .h h) (2.9) =

205 = as John ((husband)) was dying. ((crying)) (15.1).3

The verbal utterances of participants at this time were extraordinarily patterned among participants. As the individual began to reflect on the self, speech was marked with swallowing and cracking of the voice, pausing, and uneven pacing of speech. Behavioral cues accompanying this text mirrored the text, moving from neutral (i.e., their general expression), to transitioning, to releasing suffering, and then back into enduring as they tried to regain control. Examining the text and facial expression concurrently on a time line enabled microanalysis of these transitions. The mean time for these transitions from enduring to emotional suffering was 18.89 seconds, ranging from 7.5 to 35 seconds.

[ INSERT FIGURE 4 ABOUT HERE]

**THE TRAJECTORY OF SUFFERING**

When enduring, cues in the story, as well as subtle transformation in facial expression, indicated that a transition was imminent. As participants narrated the events, they re-experienced what they felt at the time. Participants appeared very still and calm, their faces would become neutral, with a blank, unfocused gaze, and their voices assumed a flat monotone. Some participants would try to keep talking to maintain control. If successful, they returned to a neutral expression, signaling emotional suppression and enduring. If unsuccessful in controlling emotions, they paused in an attempt to regain control.

A few seconds after entering the state of emotional suffering, participants attempted to transition back to enduring. Participants would pause, hold their breath, swallow, or sigh. If successful in maintaining control, as they resumed speaking their voices became calmer, their expression neutral, and they again made eye contact with the interviewer. If control was unsuccessful, participants would inhale and resume speaking while emotional suffering (cracked voice, suffering expression, crying). They would continue pausing, trying to move out of emotional suffering by taking deep breaths. Alternatively, they became agitated and “tried to find something to do” with their hands (such as grasp a tissue, fiddle with the coffee cup) or started rocking back and forth. We interpreted this behavior as a way to “ground” and to gain control of their bodies and what they were doing. This behaviour enabled them to return to enduring, to resume a neutral expression, and the interview text revealed they simultaneously returned to a less distressing aspect of the story.

## DISCUSSION

This study is the first observational study linking verbally expressed emotions and facial expressions within a particular context. It enabled description of the faces of enduring and emotional suffering and a description of the triggers, pacing, and behaviors of transition. As such, the study supported earlier participant observation and interview research that the behavioral states of enduring and emotional suffering were distinct. It provides important microanalytical insights into course of suffering. The present debate as to the validity of facial expression as a means to understanding actual emotion versus relying on participant self-report is, from the perspective of the study, interesting. It is surprising that previous researchers have not attempted to examine both of these data sets concurrently, as in this study. Furthermore, the context or stimulus for the emotion is neither artificially produced (as it is when acting) nor contrived. Although the transitions to emotional suffering were clearly involuntary, the interview situation and the videotaping probably resulted in participants’ attempts to control crying, to suppress emotions, and to return to enduring. Although these attempts were largely unsuccessful, they might have reduced the emotional display to some degree. However, this threat to validity is not as serious as in those studies that have used actors to simulate sadness and other emotions (e.g., see Carroll & Russell, 1997).

This research demonstrates that, similar to the other basic emotions, responses to suffering produce patterned facial cues. These normative responses can be described and easily recognized. These normative patterns now may be used in future research to document, for example, the efficacy of comforting responses.

The apparent threat to self and recognition of the future ramifications of the event in almost every case served as the stimuli that permitted emotional suffering to “break through” and release the suppressed emotions of enduring. This finding has important implications for the use of empathy in the clinical setting, particularly the acute care setting, where both patients and relatives are coming to terms with illness and its ramifications. When patients’ conditions are unstable and serious, relatives intuitively sense that it is important not to lose control by releasing emotions and usually remain in a state of enduring. If caregivers use empathetic statements, statements that invariably are targeted to the self (such as “this must be difficult for *you*”), these statements refocus the individuals, moving them against their will into transition and emotional suffering. We have shown elsewhere that this “sideswiping” can even result in emotional collapse of the relative (Morse, 2001; Morse & Pooler, 2002). Thus, these findings have significant implications for caregivers and care providers. Furthermore, there is a need to examine the goals of counseling and the use of empathy as a carte blanche approach to patient care, particularly in emergency situations. There is an urgency to identify the therapeutic nature of suppressing emotions in the state of enduring for individuals in crisis and to document appropriate ways for caregivers to support this behavior.

## FUTURE RESEARCH

There is increasing concern that people with illness and their relatives do not have enough, or appropriate, assistance in dealing with the distress associated with the illness. Recognition of distress is a critical aspect of patient care, yet some studies show that this is often not recognized by the health care provider (Ford, Fallowfield, & Lewis, 1994). The challenge of breaking bad news that might be distressing in health care consultations is well established. However, it has been estimated that less than 24% of information available to guide clinicians, patients, and families in meeting these challenges is based on the systematic collection of original empirical data (Walsh, Girgis, & Sanson-Fisher, 1998). This study contributes to helping clinicians identify, using multisensory modalities, the key points in both facial expression and narrative clues that indicate imminent or possible transition in emotional states of suffering. Future research is needed to explore the extent to which these transition clues are recognized by clinicians and the consequence of responding to facilitate or block transition to emotional suffering.

**NOTES**

1. Esophageal speech is a technique of speaking following laryngectomy. Air is forced (“swallowed”) into the top of the esophagus, then pushed out again through the mouth. The vibration of the top of the esophagus, tongue, lips, and teeth form the sounds of the words as the air is pushed through the mouth.

2. One participant transitioned while relating how her father, on seeing his grandchildren for the last time before he died, said good-bye to them.

3. The quote was transcribed according to Jeffersonian conversational analysis (LeBlanc, 1998).

Transcription conventions are as follows:

= Latching of contiguous utterances

.h Audible in-breath

(1.3) Time paused, in seconds

(( )) Transcriber’s comments

h Audible outbreath

: Prolonged sound

[Underlining] Stressed sound

## REFERENCES

Algoe, S. B., Buswell, B. N., & DeLamater, J. D. (2000). Gender and job status as contextual cues for the interpretation of facial expression of emotion. *Sex Roles*, *42*, 183-208.

Bayes, R.,& Comas, M. D. (1997).Away to screen for suffering in palliative care. *Journal of Palliative Care*, *13*(2), 22-26.

Bonanno, G. A., & Keltner, D. (1997). Facial expressions of emotion and the course of conjugal bereavement. *Journal of Abnormal Psychology*, *106*, 126-137.

Carrera-Levillain, P., & Fernandez-Dols, J. M. (1994). Neutral faces in context: Their emotional meaning and their function. *Journal of Nonverbal Behavior*, *18*, 281-298.

Carroll, J. M., & Russell, J. A. (1996). Do facial expressions signal specific emotions? Judging emotion from the face in context. *Journal of Personality and Social Psychology*, *70*, 205-218.

Carroll, J. M., & Russell, J. A. (1997). Facial expressions in Hollywood’s portrayal of emotion. *Journal of Personality and Social Psychology*, *72*, 164-176.

Davitz, L. J., Pendleton, S. H.,& Members of the Class of TN 4600. (1969). Nurses inferences of suffering. *Nursing Research*, *18*, 100-107.

Edwards, K. (1998). The face of time: Temporal cues in facial expressions of emotion. *Psychological Science*, *9*, 270-276.

Ekman, P. (1972). Universals and cultural differences in facial expressions of emotion. In J. Cole (Ed.), *Nebraska symposium on motivation, 1971* (pp. 207-283). Lincoln: University of Nebraska Press.

Ekman, P. (1982). Methods for measuring facial action. In K. R. Scherer & P. Ekman (Eds.), *Handbook of methods in nonverbal behavior research* (pp. 45-135). New York: Cambridge University Press.

Ekman, P. (1984). Expression and the nature of emotion. In K. Scherer & P. Ekman (Eds.), *Approaches to emotion* (pp. 319-344). Hillsdale, NJ: Lawrence Erlbaum.

Ekman, P. (1992). Facial expression and emotion. *American Psychologist*, *48*, 384-392.

Ekman, P.,& Friesen, W.V. (1971). Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology*, *17*, 124-129.

Ekman, P., & Friesen, W. V. (1978). *Facial Action Coding System: A technique for the measurement of facial movement*. Palo Alto, CA: Consulting Psychologists Press.

Ekman, P., Irwin, W., & Rosenberg, E. (1994). *EMFACS: Coders instructions (EMFACS-8)*. San Francisco: University of California San Francisco Press.

Eriksson, K. (1997). Understanding the work of the patient, the suffering human being: The new clinical paradigm from nursing to caring. *Advanced Practice Nursing Quarterly*, *3*, 8-13.

Fagerstrom, L., Eriksson, K.,& Engberg, I. B. (1998). The patient’s perceived caring needs as a message of suffering. *Journal of Advanced Nursing*, *28*(5), 978-987.

Flaming, D. (1995). Patient suffering: A taxonomy from the nurse’s perspective. *Journal of Advanced Nursing*, *22*, 1120-1127.

Ford, S., Fallowfield, L., & Lewis S. (1994). Can oncologists detect distress in their out-patients and how satisfied are they with their performance during bad news consultations? *British Journal of Cancer*, *70*, 767-770.

Fredriksson, L. (1998). The caring conversation—Talking about suffering: A hermeneutic phenomenological study in psychiatric nursing. *International Journal of Human Caring*, *1*, 24-32.

Friesen, W. V. (1972). *Cultural differences in facial expressions in a social situation: An experimental test of the concept of display rules*. Unpublished doctoral dissertation, University of California, San Francisco.

Galati, D., Scherer, K. R., & Ricci-Bitti, P. E. (1997). Voluntary facial expression of emotion: Comparing congenitally blind with normally sighted encoders. *Journal of Personality and Social Psychology*, *73*,1363-1379.

Izard, C. E. (1971). *The face of emotion*. New York: Appleton-Century-Crofts.

Kahn, D. L., & Steeves, R. H. (1994). Witnesses to suffering: Nursing knowledge, voice and vision. *Nursing Outlook*, *42*, 260-264.

Kirouac, G.,& Dore, F. Y. (1983). Accuracy and latency of judgment of facial expressions of emotions. *Perceptual and Motor Skills*, *57*, 683-686.

Kirouac, G.,& Dore, F.Y. (1984). Judgment of facial expressions of emotion as a function of exposure time. *Perceptual and Motor Skills*, *59*, 147-150.

Kreidler, M. (1984). Meaning in suffering. *International Nursing Review*, *31*(6), 174-176.

LeBlanc, H. P., III. (1998, April). *Teasing that works: Sharing the play frame*. Paper presented at the Sixty- Eighth Annual Meeting of the Southern States Communication Association, San Antonio,TX(ERIC Document Reproduction Service No. ED 420 373). Retrieved June 11, 2003, from <http://communication>. utsa.edu/leblanc/articles/art18.pdf

Lindholm, L., & Eriksson, K. (1998). The dialectic of health and suffering: An ontological perspective on young people’s health. *Qualitative Health Research*, *8*, 513-525.

Mason, D. J. (1981). An investigation of the influences of selected factors on nurses’ inferences of patient suffering. *International Journal of Nursing Studies*, *18*(4), 251-259.

Matsumoto, D. (1987). The role of facial response in the experience of emotion: More methodological problems and a meta-analysis. *Journal of Personality and Social Psychology*, *52*, 769-774.

Merten, J. (1997). Facial-affective behavior, mutual gaze, and emotional experience in dyadic interactions. *Journal of Nonverbal Behavior*, *21*, 179-201.

Morse, J. M. (2001). Toward a praxis theory of suffering. *Advances in Nursing Science*, *24*, 47-59.

Morse, J. M. (2002). Emotional reenactment [Editorial]. *Qualitative Health Research*, *12*, 147.

Morse, J. M.,& Carter, B. J. (1995). Strategies of enduring and the suffering of loss: Modes of comfort used by a resilient survivor. *Holistic Nursing Practice*, *9*(3), 33-58.

Morse, J. M., & Pooler, C. (2002). Family-nurse-patient interaction in the trauma-resuscitation room. *American Journal of Critical Care*, *11*(3),33-45.

Morse, J. M., Whitaker, H., & Tasón, M. (1996). The caretakers of suffering. In J. Chesworth (Ed.),*Transpersonal healing: Essays on the ecology of health* (pp. 91-104). Newbury Park, CA: Sage.

Rodgers, B. L., & Cowles, K. V. (1997). A conceptual foundation for human suffering in nursing care and research. *Journal of Advanced Nursing*, *25*, 1048-1052.

Rosenberg, E. L., & Ekman, P. (1994). Facial expression and the affective component of cynical hostility in male coronary heart disease patients. *Health Psychology*, *17*, 376-380.

Ruch, W. (1995). Will the real relationship between facial expression and affective experience please stand up: The case of exhilaration. *Cognition and Emotion*, *9*, 33-58.

Starck, P. L. (1984). Patient’s perception of the meaning of suffering. *International Journal of Logotherapy*, *7*, 137-142.

Starck, P. L., & McGovern, J. P. (1992). The meaning of suffering. In P. L. Starck & J. P. McGovern (Eds.), *The hidden dimension of illness: Human suffering* (pp. 25-42). New York: National League for Nursing.

Steeves, R. H.,& Kahn, D. L. (1987). Experience of meaning in suffering. *Image: Journal of Nursing Scholarship*, *19*(3), 114-116.

Steeves, R. H., Kahn, D.,& Benoliel, J. Q. (1990). Nurses’ interpretation of suffering of their patient. *Western Journal of Nursing Research*, *12*(6), 715-726.

Walsh, R., Girgis, A., & Sanson-Fisher, R.W. (1998). Breaking bad news 2: What evidence is available to guide clinicians? *Behavioral Medicine*, *24*(2), 61-72.

Watson, J. A. (1986). Suffering and the quest for meaning. In R. De Bellis, E. Marcus, A. Kutscher, C. S., Torres, V. Barrett, & M. Siegel (Eds.), *Suffering: Psychological and social aspects in loss, grief, and care* (pp. 175-188). New York: Haworth.

### FIGURE 1: The Transition From Enduring (Emotional Suppression) to Releasing (Emotional Suffering)



### FIGURE 2: Faces of Enduring



### FIGURE 3: Faces of Transition



### FIGURE 4: Faces of Emotional Suffering