

## Symposium Formatting and Sample Proposal

### Title Page

- See [Title Page Template](#) for instructions

### Body of the Proposal Document

- 750-word summary and 1,000 words for each component paper.
- References, tables, and figures do not count toward the limit, but appendices do count toward the limit.
- Please include a general introduction of the purpose/theme of the symposium, followed by summaries of each component paper. If a discussant is included, a summary of the discussant's comments is not needed at the time of submission
- Participants in a symposium should include a chair and three to five presenters (five only if no discussant is included).
- Please note that discussants cannot be an author on any of the papers in the symposium.
- Sessions may be 50 or 80 minutes long.
- Should not be prepared for blind review; however presenter bios should NOT be included.

## SUBMISSION TYPE

Symposium

## TITLE

Novel Approaches to Conducting Research on Workplace Affect

## SHORTENED TITLE

Novel Approaches to Researching Workplace Affect

## ABSTRACT

Scholarship on emotions continues to be a large area of organizational research. This symposium highlights ways that researchers can ‘think outside the box’ when investigating workplace emotions, including the use of event-level and continuous ratings, the use of physiological indicators of affect, and sampling from under researched occupations.

## CITATIONS

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Chandler, M. & Diefendorff, J. M. (2024). Experience sampling methods applied to affective spin and pulse.

Dimotakis, N., Goo, W., & Ilies, R. (2024). Physiological reactions to affective experience.

King, J. B. & Ashkanasy, N. M. (2024). Ability emotional intelligence moderates cortisol stress reactions to cyber-ostracism.

Gabriel, A. S. & Diefendorff, J. M. (2024). Utilizing continuous rating assessments to measure workplace emotions.

Thornton, M. A., Bielski-Boris, M., & Rupp, D. E. (2024). Multifoci justice and emotional labor in unionized contexts.

## WORD COUNT

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## Novel Approaches to Conducting Research on Workplace Affect

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Research on emotions has “become one of the most popular – and popularized – areas within organizational scholarship” (Elfenbein, 2007, p. 315). From affective events theory (Weiss & Cropanzano, 1996), to emotional labor (Hochschild, 1983), to work on the affect circumplex (Russell, 1980), researchers have sought new ways to assess the emotional experiences of employees. However, many scholars continue to use cross-sectional, self-report of affect-based constructs (i.e., surveys of typical affect or typical emotion regulation) to predict self-reported affective outcomes (e.g., emotional exhaustion, job satisfaction) in familiar populations (e.g., service workers, nurses, employed undergraduates). The papers in the proposed symposium present novel ways of measuring, operationalizing, and contextualizing affect as both an antecedent and outcome of organizational phenomena. Our primary objective is to present novel approaches to conducting emotions research so as to advance scholarship in organizational research on this topic.

The first paper in the proposed session highlights the use of experience sampling methodology to investigate variability in workplace affect as a substantive antecedent and outcome of organizational phenomena. Although experience sampled affect at work has become relatively commonplace in organizational research, Chandler and Diefendorff highlight how experience sampled emotions can be used to assess stable individual differences in affect variability around the affect circumplex (i.e., around the four quadrants created by the two dimensions of activation and hedonic tone; Russell, 1980). Results confirmed that variability around the circumplex (i.e., affect spin) is related to a variety of factors in organizational

contexts. This paper highlights not only the use of experience sampling to assess emotions at work, but also the ability of this measurement approach to represent and model within-person affect variability as a substantive construct.

The next two papers discuss the use of physiological measures to operationalize affective outcomes in organizational research. Dimotakis, Goo, and Ilies highlight the use of experience sampled physiological measures (diastolic blood pressure, systolic blood pressure, heart rate) to operationalize outcomes of momentary positive and negative affect at work. Utilizing polynomial regression, the authors found that cardiovascular activity increased as positive affect diverged from negative affect (i.e., as positive affect increased relative to negative affect). Thus, Dimotakis et al. demonstrated that the relationship between event-level affect and physiological responses is a complex and dynamic process.

In a second illustration of the use of physiological measures, King and Ashkanasy measured cortisol levels (i.e., a salivary secretion) to assess stress levels in an experimental context, with emotional intelligence (i.e., measured with the MSCEIT; Mayer, Salovey, & Caruso, 2002), task difficulty, and cyber-ostracism (i.e., negative electronic exchanges) as the antecedents. Also using polynomial regression, King and Ashkanasy found a three way interaction between the antecedents in predicting post-study cortisol levels, such that emotional intelligence mitigated the negative effects of cyber-ostracism on cortisol levels when task difficulty was low. This paper illustrates the use of cortisol as an indicator of stress levels in a laboratory context.

Extending experience sampling approaches, Gabriel and Diefendorff describe and provide an empirical example of the use of continuous ratings of affective processes to capture the real-time dynamics of emotional experience and regulation. Although experience sampling

represents an advancement in capturing emotion processes, each assessment captures only a “snapshot” of the underlying dynamics. In response, the authors argue for the use of continuous ratings (captured five or more times per second) to measure the time course, duration, and fluctuations of affective processes during specified performance intervals. The authors discuss the use of this rating technique in other areas of research and present some preliminary data showing the utility of this approach in organizational research on emotions.

Our final paper by Thornton, Bielski-Boris, and Rupp extends emotions research by considering a unique sample: union employees. To date, much of the research on emotions and related topics (e.g., emotional labor; Hochschild, 1983) has been conducted with service sector employees. Thornton et al. highlight that research on the emotional processes of unionized employees has been largely ignored, leaving a gap in our understanding of a large swath of the U.S. workforce. To illustrate their point, Thornton et al. integrate ideas from the justice literature (e.g., supervisor justice, union justice) with emotional labor to demonstrate how different forms of justice influence employees’ emotional labor. Their results indicate that felt justice from the union, and *not* from the supervisor, predicted emotional labor among unionized employees. Thus, unique samples, like unions, can have yield novel empirical effects that would not be observed in more commonly investigated occupations.

In lieu of a discussant, we will allow enough time for audience questions.

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## Experience Sampling Methods applied to Affective Spin and Pulse

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Research has consistently demonstrated affect's important role in organizational behavior, acting as an antecedent of various work behaviors and outcomes (e.g., absenteeism, turnover intentions; George & Jones, 1996; Pelled & Xin, 1999). However, much of the literature investigating the role of affect at work conceptualizes affect as the average or typical level of experienced affect (e.g., Fisher & Noble, 2004; Lee & Allen, 2002) and has neglected the role of everyday emotional experiences at work (Ashforth & Humphrey, 1995). Most existing research is cross-sectional in nature and is unable to address the dynamic nature of one's experienced affect. However, one's experienced affect is variable throughout the course of a day, and between-person analyses fail to capture this. The present investigation explores Kuppens et al.'s (2007) conceptualization of affect variability in an organizational setting.

### **Affect Variability**

Research examining momentary affect, through experience sampling methodologies (ESM), has enriched our understanding of the causes and consequences of affect in real-time and over changing circumstances; although these studies often acknowledge variability in affect, most do not operationalize it directly. Despite it being widely recognized that affect varies over time (e.g., Arvey et al., 1998; Chow et al., 2005; Larsen & Kasimatis, 1990), within-person variability in affect has not been the focus of much research in organizational psychology (see Ilies & Judge, 2002; Weiss et al., 1999 for exceptions).

Existing research on affect variability (often conceptualized as the intra-individual standard deviation of positive and negative affect; e.g., Eid & Diener, 1999; Gable & Nezlek, 1998; Kernis et al., 1993; McConville & Cooper, 1997; 1999) has found it to relate to psychological disorders (e.g., Russell et al., 2007) and other individual differences such as personality characteristics (e.g., Kuppens et al., 2007). However, previous methodologies used to analyze affect variability (e.g., intra-individual standard deviation, spectral analysis) often focus on how affect varies along one dimension over time. Recently, Kuppens et al. (2007) identified a new conceptualization of intra-individual affect variability around the two dimensions of the affect circumplex.

Kuppens et al. (2007) suggested that in order to gain a clearer picture of affect variability, researchers must assess an individual's 'core affect trajectory', or one's movement through the core affect space created by an affective circumplex. Specifically, Kuppens et al. (2007) suggested that researchers should not only look at the standard deviation around one's mean reported affect (Flux), but also at one's variability in the intensity of felt emotions (Pulse) and in the quality of the experienced emotions (Spin). With the center of the circumplex as the reference point, spin is the within-person variability of the angle of one's affect, representing variability in the quality of affect. A person with high spin experiences a variety of emotions around the circumplex (e.g., Person 1 in Figure 1), whereas a person with low spin experiences emotions from a smaller portion of the circumplex (e.g., Person 2 in Figure 1). Starting again at the center, pulse represents variability in the intensity of affect, regardless of the quality of the feeling. A person with high pulse experiences both intense and mild emotions over time (e.g., Person 2 in Figure 1), whereas one with low pulse primarily experiences emotions as either intense or mild (e.g., Person 1 in Figure 1).



Kuppens et al. (2007) demonstrated that spin was predicted by various personality characteristics and psychological adjustment (e.g., Extraversion, Neuroticism, Optimism, Pessimism), whereas pulse had few consistent relations. Thus, individual differences in the degree of movement around the circumplex were associated with stable personality traits and well-being. In addition, Beal and Gandour (2010) found that individuals with higher levels of spin were more reactive to affective events.

The current study investigated the role of intra-individual variability in affect in an organizational sample. Specifically, the present investigation demonstrated how various aspects of the job, social characteristics, and individual differences impact the variability of one's affective experience at work, and how this variability relates to organizational outcomes. Additionally, the present investigation strove to further confirm the new conceptualization of affect variability used by Kuppens et al. (2007) through the use of experience sampling methodology techniques and attempted to improve upon these operationalizations by testing key assumptions of the calculations used in Kuppens et al. (2007) and making modifications to the calculations as necessary.

## **Methods and Results**

Data were collected from sample of 99 office staff employees from a University in the Midwestern United States (88.4% female;  $M_{\text{age}} = 46.45$ ;  $M_{\text{JobTenure}} = 6.5$  years). Data collection was conducted in three phases: Training Session and Time 1 person-level pre-test surveys; data collection via personal digital assistants (PDA's); and Debriefing Session and Time 2 person-level post-test surveys. Each employee was signaled to complete surveys on a Palm Pilot 5 times per day for 10 working days. Employees received up to \$60 dependent on the number of surveys completed. For the current study 82% earned the full amount, with participants completing on

average 42 (of 50) event-level surveys. In all cases, either the full version or an abbreviated version of an established scale surveys was used.

The current study found that various aspects of one's work environment (i.e., role ambiguity, affect in others) and individual differences (i.e., BIS/BAS; Action-State Preoccupation) were related to the variability in one's affective experience at work. Additionally, the present study found that the variability of one's affective experiences, more specifically Spin, was significantly related to important work outcomes such as task performance, emotional exhaustion, and job satisfaction. These findings are important in that all of these may have financial costs to the organization in that emotional exhaustion and low job satisfaction may eventually lead to other withdrawal behaviors (e.g., turnover, absenteeism; Griffith et al., 2000; Lee & Ashforth, 1996) and even counter-productive behaviors (e.g., Lowery et al., 2002). Additionally, lower levels of performance will impact the organization's bottom line and overall effectiveness.

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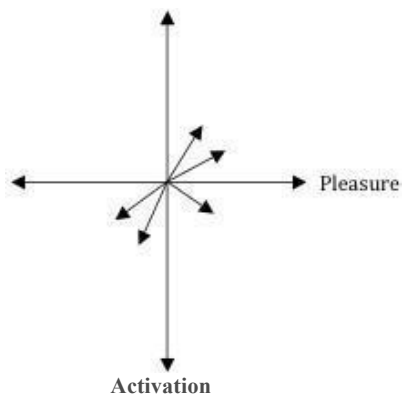
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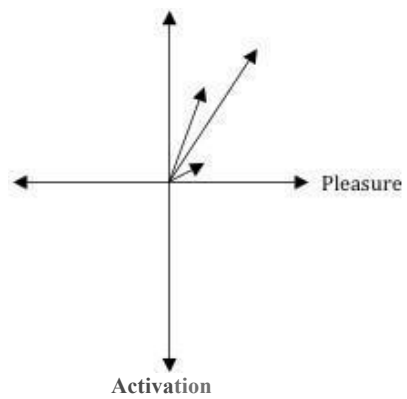
Figure 1

*Core Affect Variability*

Person 1



person 2



Displeasure Displeasure

Deactivation

Deactivation

## Physiological Reactions to Affective Experience

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Over the last three decades, the organizational literature has been focusing more and more on affect as an important predictor of workplace outcomes (see Brief & Weiss, 2002; Ashkanasy, Zerbe, & Härtel, 2005), as well as a major mediating process included in a variety of approaches (Weiss & Cropanzano, 1996; Spector & Fox, 2002; Schwarz & Clore, 1983). As a result of an increasingly mature literature, investigations have been focusing both on more basic questions (such as the basic structure of affect; Watson, Wiese, Vaidya, & Tellegen, 1999; Ilies, Dimotakis, & Watson, 2010), as well as more complex approaches that take into account the ways in which different components of affective experience can interact with one another to influence psychological and physiological outcomes (Fredrickson & Levenson, 1998; Dimotakis, Scott, & Koopman, 2011; Ilies et al., 2010). Importantly, some of this work is benefiting from methodological advances that allow for conducting measurement at the event level, using dynamic approaches that capture affect as it is experienced.

This paper aims to contribute to this literature by investigating the ways in which momentary experiences of different components of affect can interact to influence individuals' physiological responses. It also aims to provide a more general methodological contribution, by demonstrating a potential approach to integrating measurement of momentary affective states with objective physiological responses.

Individuals' affective experiences are thought to consist mainly of two generally independent dimensions, Positive and Negative Affect (Watson & Tellegen, 1985; see, however,

Russell & Carroll, 1999, Watson et al., 1999 for a wider discussion). Positive and Negative Affect have been linked to different activation systems, with Positive Affect (PA) relating to behavioral approach through the Behavioral Facilitation System (Carver & White, 1994; Watson et al., 1999), and Negative Affect (NA) being associated with the Behavioral Inhibition System (Gray, 1990). Both systems, however, can be seen to represent activated states, both of which are expected to manifest physiologically as well as psychologically, although the exact pattern of physiological activation has only recently begun to be investigated (Ilies et al., 2010).

Because the two affective responses operate independently to some degree, each could potentially affect how the other is processed and experienced, and thus indirectly influence the way that it operates. For example, the *undoing hypothesis* states that PA can act to undo the effects of negative affective experience (Fredrickson & Levenson, 1998; Fredrickson, Mancuso, Branigan, & Tugade, 2000). We investigate two extensions to existing interaffective interaction approaches; that either dimension can affect the way the other operates, and that their ultimate effects can operate non-linearly. Thus, we model the simultaneous effects of different levels of each affective experience on physiological responses, examining the cardiovascular manifestations of various levels of affective convergence and divergence, defined as affective experiences involving roughly equal or opposite in strength levels of PA and NA, respectively.

### **Methods and Results**

Data for this study was collected using an experience sampling approach, as part of a larger project investigating workplace experiences and well-being. Seventy-one participants were provided with Personal Digital Assistant devices as well as wrist-worn automatic cardiovascular measurement devices. For a period of ten working days, they were asked to complete a survey containing the PA and NA items (using the PANAS; Watson, Clark, & Tellegen, 1988) in

response to three signals given randomly during work, one signal at the end of work, and one signal provided randomly after work at home for a total of five daily responses. Prior to completing the survey, individuals were asked to measure their cardiovascular response levels using the provided monitor, which included measures of heart rate and systolic and diastolic blood pressure. Due to missed surveys and technological failures, our final dataset consisted of 1257 surveys collected from 66 individuals.

Due to the nested nature of the responses, Hierarchical Linear Modeling (HLM; Bryk & Raudenbusch, 1992) was used to analyze the data. Furthermore, we used a series of polynomial regression and response surface methodology (Edwards, 2007) to examine the effects of affective convergence and divergence on cardiovascular responses. In all models, variables were group-centered to avoid response biases and to focus the investigation at the within-person level.

Graphical representations of the polynomial regression results are presented in Figures 1-3. Analyses revealed a significant positive curvature of the surface along the affective divergence line for the diastolic blood pressure and heart rate models ( $\chi^2 = 9.83$ , d.f. = 1,  $p < .01$  and  $\chi^2 = 3.71$ , d.f. = 1,  $p = .05$ , respectively). That is, cardiovascular activation levels increased as PA level deviated from NA level in either direction. While this effect did not hold for systolic blood pressure, there was a significant slope among the convergence line ( $\chi^2 = 5.97$ , d.f. = 1,  $p < .05$ ),

indicating that this response was strongest as positive affect increased relative to negative affect.

## **Discussion**

The results of this study demonstrated how different dimensions of affective experience can interact to determine cardiovascular responses. Even though both PA and NA have been



conceptually and empirically linked to activation responses, we demonstrated that they can be linked to physiological responses in a more nuanced and complex manner. When individuals experience comparable levels of PA and NA, cardiovascular responses were found to be much more subdued compared to when individuals experience higher levels of one relative to the other (with the exception of systolic blood pressure).

These results can have theoretical, and methodological, and practical implications. Theoretically, our study can involve theories of affect by not only providing additional evidence for the distinctiveness of PA and NA, but by showing a more complete picture of how they jointly influence outcomes of interest. Empirically, this study can show how affective and physiological measurement can be combined to investigate phenomena of interest. Finally, as cardiovascular responses have clear implications for health, a better understanding of such phenomena can be of useful to enhance employee well-being as well as to help inform organizational policies and functioning.

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Figure 1

*Predicting Systolic Blood Pressure*

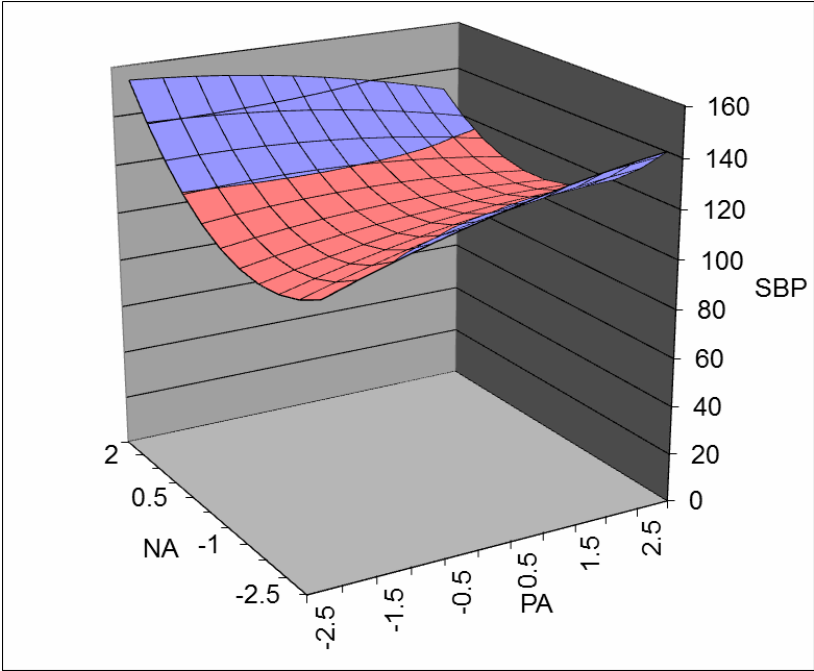


Figure 2

*Predicting Diastolic Blood Pressure*

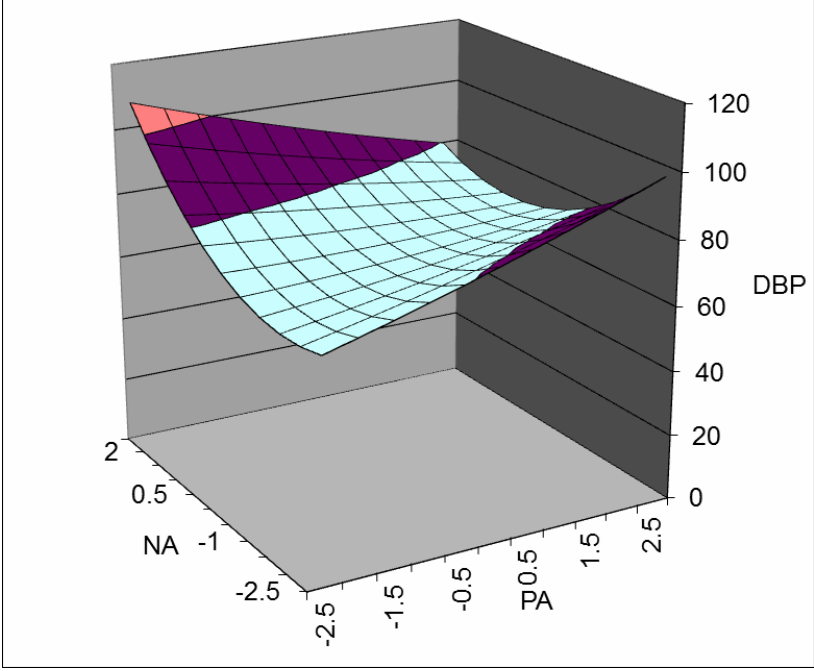
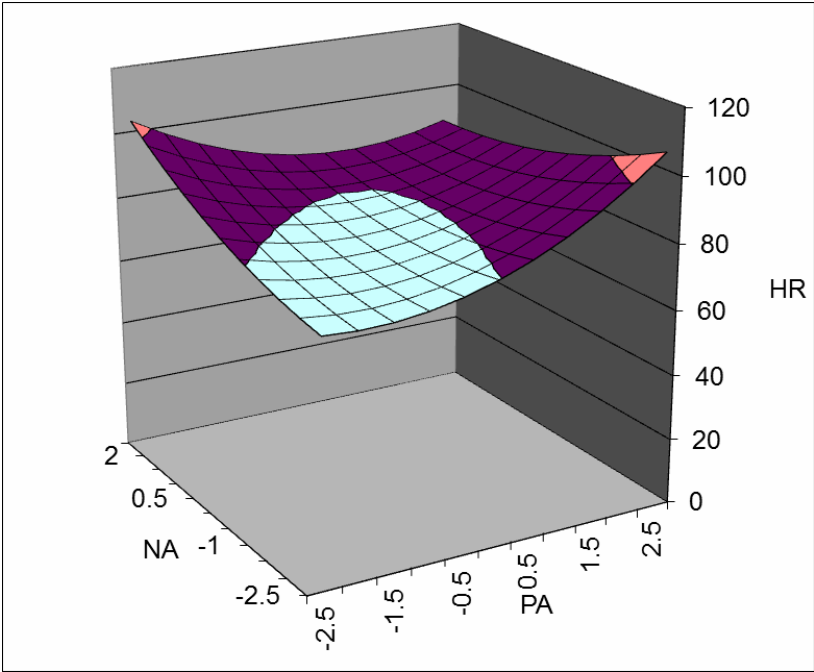


Figure 3

*Predicting Heart Rate*



## Ability Emotional Intelligence Moderates Cortisol Stress Reactions to Cyber-Ostracism

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Stress caused by cyber-ostracism is a pervasive problem in the workplace. For instance, a terse email from a colleague or non-response from an important client can activate the brain's evolutionary threat detection system resulting in cortisol secretion (a stress hormone, see Stroud, Salovey, & Epel, 2002). In modern workplaces, such stress reactions are typical, frequent, and accumulative, causing significant negative repercussions on employee health and wellbeing. For organizations, this translates into billions of dollars in sick pay, stress leave, and lost productivity (Lieber, 2010).

In this research, we set up a virtual team task in a laboratory setting where participants analyzed difficult versus easy business problems under conditions of inclusion versus ostracism. We adapted our scenario from Williams and Sommer's (1997) classic *Cyberball*, the virtual online ball-tossing game where participants are either included or ostracized. We also incorporated a chat-room function, similar to that used in *Cyberball* (Williams, 2009), as a means to simulate inclusion/ostracism more realistically. The object of our research was to examine variables that might serve to explain susceptibility to stress resulting from ostracism. We considered one exogenous variable: task difficulty; and one endogenous variable: emotional intelligence (EI).

With respect to task difficulty, Williams's (2009) *need-threat* model holds that, when an individual's self-esteem is threatened, s/he is likely to direct attention *away* from ostracizing stimuli; towards distracting and more self-affirming tasks (particularly tasks that are classified as difficult). According to need-threat theory, this helps the individual to re-establish a sense of

control, and therefore increases her or his perceived sense of worth, so counteracting ostracism and reducing stress. Thus, and counter-intuitively, task difficulty might serve to *reduce* the stress of ostracism in certain circumstances.

We argue that a key variable in this respect is emotional intelligence (EI), defined by Salovey and Mayer (1990) as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (p.189). According to these authors, EI should help individuals to regulate the experience of stress. Thus, EI should also serve to mitigate the effects of ostracism on stress. Moreover, combining with Williams’s (2009) need-threat model, we expected this effect to be strongest when task difficulty is low. To test this hypothesized three-way interaction, 232 Australian undergraduates (166 female, 128 male; mean age = 19.37), participated in a virtual team decision task under conditions of hard vs. easy task and team exclusion verses inclusion.

We wanted in particular to avoid the limitations of earlier research that had relied on self-report measures (Brackett et al., in press) and questionable levels of emotional awareness and self-insight (Mayer, Salovey, & Caruso, 2002). We therefore utilized a reliable and valid online ability test of EI, the MSCEIT (Mayer & Salovey, 2002). The MSCEIT comprises 141 items covering 4 “branches” of emotional intelligence (perception, assimilation, understanding, management), responded to in an IQ-style format, with correct answers determined by reverence to a general normative sample or an expert panel. For the present study, we used the expert reference panel. Our alpha was .87.

We also wanted to avoid problems associated with self-reports of stress experience in view of research (e.g., Gudjonsson, 1981; de Sousa, McDonald and Rushby, 2012) showing that self-reported stress measures are often at odds with physiological stress indicators. Therefore,

rather than relying on self-reports, we assessed participants' stress levels by taking pre- and post-test saliva samples to measure salivary cortisol level. Cortisol is secreted into the bloodstream and can be detected in saliva approximately three seconds after being exposed to a stressor. This method has been found to be a safe, non-invasive or anxiety inducing, and objective measure of stress, which mitigates self-report biases.

To execute our study, we asked participants first to complete the online MSCEIT and two weeks later to take part a virtual laboratory experiment designed to induce stress through cognitive task difficulty and social exclusion. Participants joined virtual teams to work collaboratively on a business case study. They were told that would be selected by the other team members based on the results of a series of puzzle tasks. During the task, participants interacted with fictitious team members who either included or rejected the participant in the team's deliberations. Additionally, they were required to complete the business case tasks with a chat function running with messages from team members that contained either inclusive or ostracizing (stress inducing) content.

We employed polynomial regression analysis to determine pre- and post-intervention change so as to mitigate reliability concerns associated with simple difference scores (Cronbach & Gleser, 1953, Edwards, 1994). Results indicated significant main effects for EI, task difficulty, and ostracism; and, in support of our hypothesis, a three-way interaction of all three IVs,  $F(1, 221) = 9.30, p < .01$  (see Figure 1), where EI moderated the effect of ostracism caused by cyber-stress, especially when task difficulty was low. Simple slope analysis revealed that ostracized low EI participants engaging in easy tasks experienced more stress (greater change in cortisol) than low EI participants  $t(224) = 5.89, p < .01$ .

Intuitively it would be expected that ostracized participants engaging in hard tasks (rather



than easy tasks) would exhibit higher levels of stress. But Williams's (2009) *need-threat* model predicts otherwise. In the present study, the easy tasks were not sufficiently distracting or self-affirming, so that participants were left with more attentional capacity (compared to the hard tasks) to read the negative ostracizing comments running in the chat function. This then led to increased stress. Our results support the notion that EI is an individual difference that can determine whether a participant will engage in distracting and attentional redirection behaviors to help regulate stress.

A particular strength of our research is that we avoided using self-reports for our focus variables. A limitation is that the study was conducted in a laboratory simulation setting. Nonetheless, our findings do support the idea that ability EI can help to reduce stress resulting from ostracism in low distraction (easy task) situations.

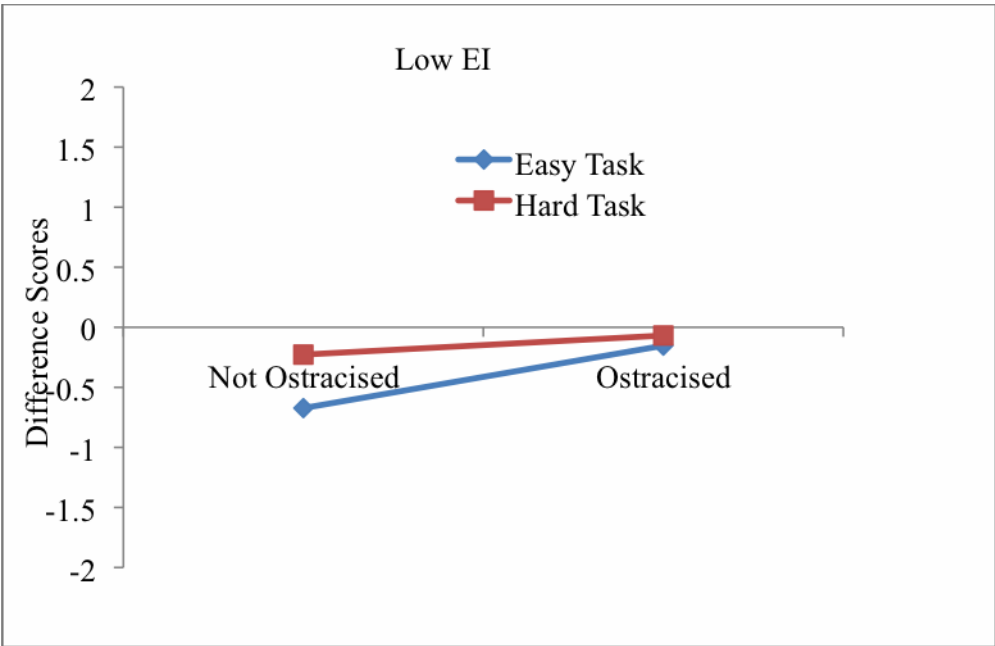
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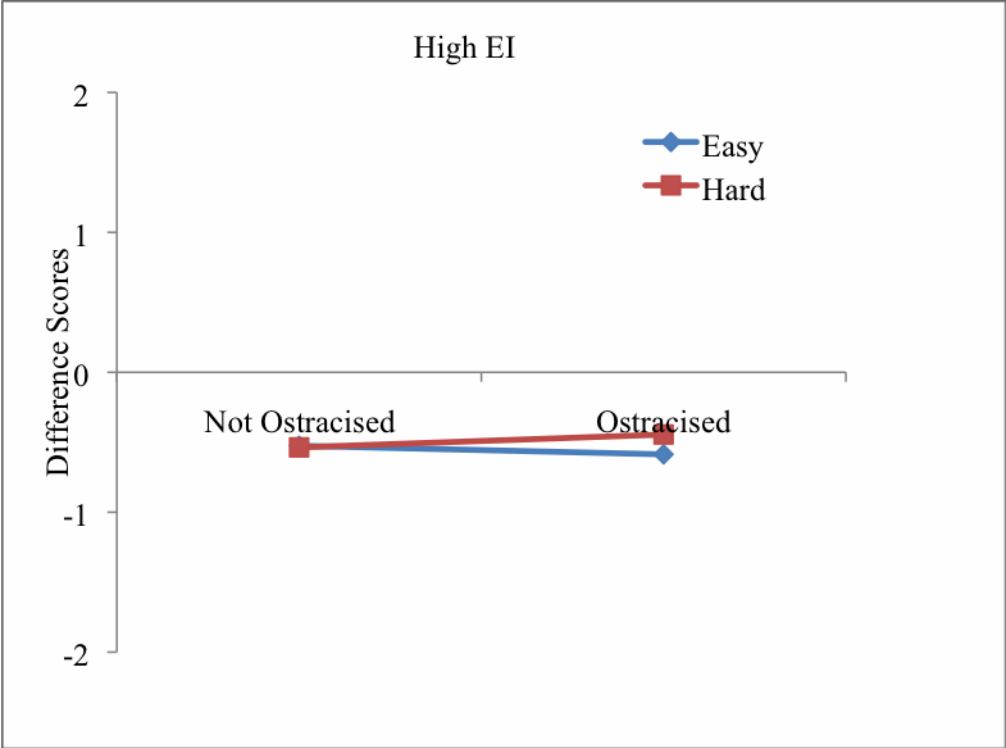
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Figure 1

Three-way interaction of EI, task difficulty, and inclusion/ostracism on stress (cortisol)





## Utilizing Continuous Rating Assessments to Measure Workplace Emotions

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Organizational researchers have begun to recognize that many constructs exhibit meaningful within-person variance (Dalal & Hulin, 2008). Indeed, within emotions research, constructs that were once viewed as stable (e.g., job satisfaction, affect, emotional labor) and measured using ‘in general’ or ‘on average’ instructions, have been shown to vary substantially within-persons over time. The primary strategy for capturing within-person variability has been to utilize daily diary or experience sampled measures in which participants respond to surveys one or more times per day for several days (e.g., Ilies, Wilson, & Wagner, 2009; Loi, Yang, & Diefendorff, 2009; Gabriel, Diefendorff, & Erickson, 2011; Scott, Barnes, & Wagner, 2012).

Although diary-based and experience sampling methods represent a clear advancement in modeling work life as it is lived, we contend that many affect-based phenomena likely operate at a faster time scale than can be captured by once-a-day or even five-times-a-day assessments (Lord & Levy, 1994). That is, while some affect-based constructs, like job satisfaction, may not exhibit meaningful variability between 8am and 10am on Monday morning, other constructs, such as momentary affect, emotion expression, or the use of emotion regulation strategies, may exhibit substantial within-person changes during that same time period. Further, we contend that much of the within-person dynamics may be tied to the unfolding of event-based processes, such as working on a particular task, interacting with specific individuals, and other distinct performance episodes (Basch & Fisher, 2000; Beal, Weiss, Barros, & Macdermid, 2005). Thus, a remaining question for researchers is whether event-based or day-level approaches meaningfully capture the variation implied by our theories and hypotheses.

In the current paper, we suggest that emotions researchers consider the use of measurement approaches aimed at assessing ‘in-vivo,’ continuous ratings (e.g., Ruef & Levenson, 2007). Utilizing continuous ratings would provide two unique opportunities for researchers: (a) the ability to capture responses to stimuli as they are unfolding within a given time frame (i.e., a performance episode, a single interaction) and (b) the ability to precisely model how emotion-based constructs change within-person over time and in response to dynamic changes in situations. To illustrate our point, we provide a review of continuous ratings and an example of how they can assess emotions at work.

### **An Overview of Continuous Ratings**

Larsen and Fredrickson (1999) reviewed a variety of emotion measures (e.g., self-report, physiological, observer coding of emotions) along with the advantages and shortcomings of each. Most applicable to the study of emotions in general is their critique of self-reports. Specifically, Larsen and Fredrickson made it clear that both single-item and multi-item measures of emotions that are assessed cross-sectionally are flawed in three ways: 1) global evaluations of emotions are subject to distortion and measurement error, 2) the act of making such static ratings can interrupt the ‘flow’ of the emotional experience, and 3) global assessments fail to address the duration of an emotion response (e.g., Fredrickson & Kahneman, 1993).

Accordingly, Larsen and Fredrickson (1999) proposed that a way to avoid these errors is to move towards “real-time ratings” in which data are collected “on a moment-by-moment basis, either *on-line* as the emotion is first experienced or *retrospectively* as the temporal dimension of the original episode is ‘replayed’ while real-time momentary self-report measures [are collected]” (p. 47). Larsen and Fredrickson suggest that researchers should adapt single-item measures by adding a continuous rating component, allowing respondents to adjust their ratings

as often as needed to capture their current emotional state in relation to an event they are experiencing. The resulting data present unique analytic opportunities to the researcher, allowing for both nomothetic data analysis (e.g., regression, correlation) and ideographic representation (e.g., charting emotion ratings throughout an experience; Ruef & Levenson, 2007).

### **Continuous Ratings Applied to Emotion Processes at Work**

To date, researchers have begun integrating continuous ratings into the study of marital satisfaction (Gottman & Levenson, 1985), social connectedness (Mauss et al., 2011), and physiological responses to affective stimuli (i.e., videos; Mauss et al., 2005). However, little to no work has utilized continuous ratings in an organizational application (see Naidoo & Lord, 2008, for an exception). To illustrate the applicability of this approach to workplace emotions, we are currently conducting a lab study exploring emotion regulation, affect, and emotion expression within a call center context. Emotion regulation is a key part of the emotional labor process (Grandey, Diefendorff, & Rupp, 2012) and involves employees utilizing *surface acting* or *deep acting* (Hochschild, 1983). Surface acting involves employees faking emotions that they are required to feel (Hochschild, 1983; Grandey, 2000) and often leads to negative employee and organizational outcomes (Brotheridge & Lee, 2002; Grandey, 2003; Hochschild, 1983; Rafaeli & Sutton, 1987). Deep acting involves effortful attempts to align internal feelings with external display requirements (Grandey, Diefendorff, & Rupp, 2012; Hochschild, 1983), and has often been viewed as the “better” regulation strategy (e.g., Brotheridge & Lee, 2002; Chi, Grandey, Diamond, Krimmel, 2011; Groth, Hennig-Thurau, & Walsh, 2009).

Continuous rating assessments of emotion regulation would allow researchers to test how, and in what combinations, surface acting and deep acting are used by employees. For example, researchers would be able to see if participants use surface acting and deep acting

simultaneously, or if they truly are polar opposites as the literature suggests (e.g., Mesmer-Magnus, DeChurch, & Wax, 2012), depending upon the call context (i.e., a pleasant caller versus a difficult caller). As a hypothetical depiction, in Figure 1, we show what a continuous emotion regulation profile for a participant could look like. In this instance, we see continuous ratings providing a richer emotion regulation ‘story’ as opposed to just looking at the average across a given situation: during a difficult call, the participant fluctuated greatly between different regulation strategies. Yet, during the easier call, the level of variability was lower, though it still occurred. Preliminary data will be available at the time of presentation to further demonstrate the unique contribution continuous ratings can provide to emotions research.

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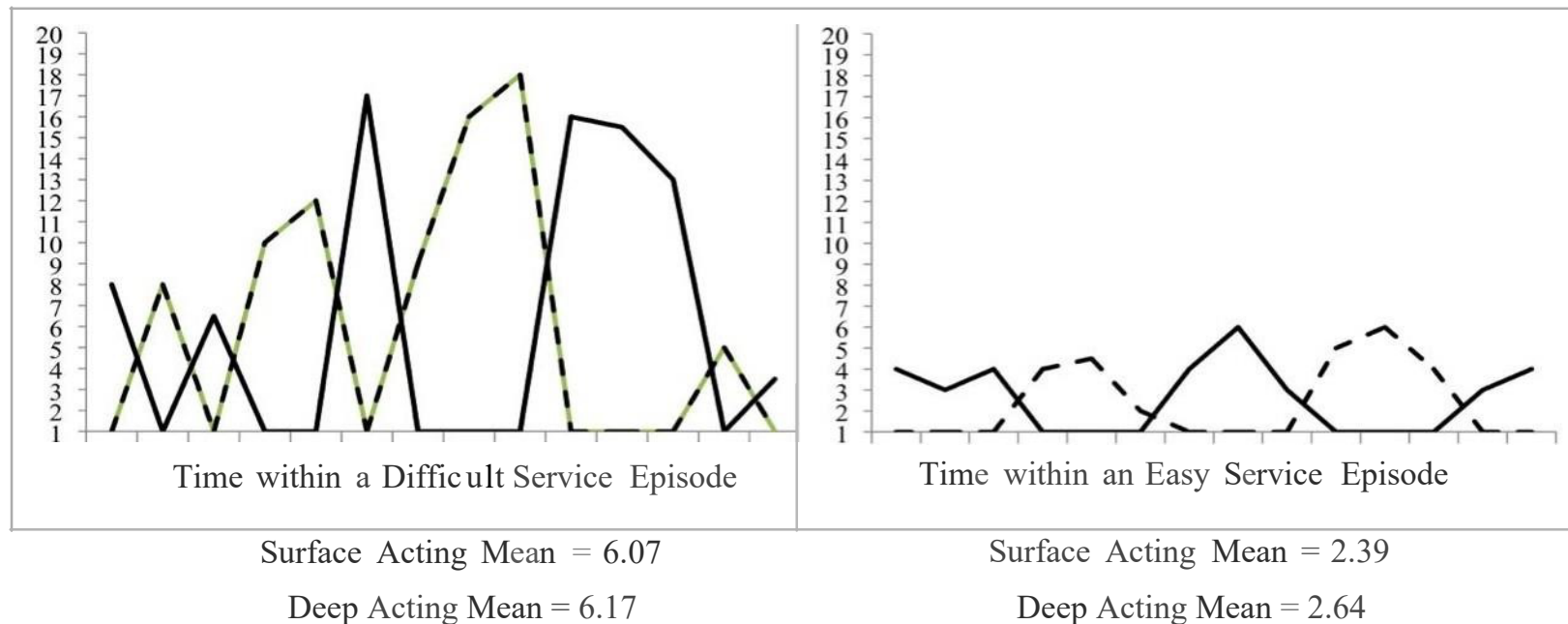
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Figure 1

*Hypothetical relationship between surface acting and deep acting across two service episodes (one difficult [left panel} and one easy fright panel})*



*Note.* Black line = deep acting; dashed line = surface acting. Hypothetical continuous ratings where surface acting and deep acting were rated on a continuous 20-point scale. Surface acting and deep acting are averaged across 14 within-episode data points. Y-axis on both graphs reflects levels of reported acting (either surface or deep acting).

Multifoci Justice and Emotional Labor in Unionized Contexts

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Recent years have witnessed an integration of the emotional labor and organizational justice literatures (Rupp, McCance, & Grandey, 2007). This is a natural marriage, given that a) the study of emotional labor began with deep explorations of how the challenging plights of employees (often experiences of injustice) strain their ability to comply with the emotional display rules set by their employer (Hochschild, 1983) and b) both classic and contemporary theories of justice discuss the emotional reactions experienced by employees as they form justice perceptions and react to them (Folger, 2001; Weiss & Cropanzano, 1996).

The lion's share of empirical research on justice and emotional labor has been conducted in customer service settings. This research has shown that employees who are treated unfairly by their customer, or observe their co-workers being treated unfairly, experience emotions such as anger and guilt (respectively), and that these emotional experiences limit individuals' ability to comply with emotional display rules (i.e., increase emotional labor; Rupp & Spencer, 2006; Skarlicki, van Jaarsveld, & Walker, 2008, Spencer & Rupp, 2009). This research has contributed to the "multifoci" perspective, which acknowledges that employees may receive unfair treatment from a variety of sources both internal and external to the organization, including supervisors, upper management, and customers. The "multifoci" perspective also argues that employees organize their experiences with fairness according to and differentially respond to these sources (Lavelle, Rupp, & Brockner, 2007; Tyler & Bies, 1990). The current study seeks to expand our knowledge of justice and emotional labor in two important ways.

First, we seek to move this dialogue beyond the customer service context and into an employment context that is under-represented in current organizational research: unionized work. Whereas early research on procedural justice dealt with labor issues such as pay equity (Adams, 1965), and issues of distributive and procedural justice are heavily discussed in the industrial and labor relations literatures (Fuller & Hester, 2007; Nurse & Devonish, 2007; Simpson & Varma, 2006; Leventhal, 1976; Thibaut & Walker, 1975), relatively little contemporary empirical research on either emotions or justice has explicitly explored labor issues (see Skarlicki & Latham, 1996, 1997, for exceptions). In this study, we extend these bodies of research by using the multifoci perspective to explore how employees' perceptions of fair treatment *by their union* influence their subsequent emotional labor.

Second, in addition to simply adding an additional source of justice to the mix (i.e., unions), we also consider theoretically and test empirically how justice stemming from various sources (i.e., supervisor justice vs. union justice) may be differentially weighted by employees in union contexts in predicting their emotional labor. Unions as organizations generate community among members and provide workers with opportunities to serve as leaders and to become politically engaged in the workplace and society. Union affiliation also leads to lower rates of employee turnover (Artz, 2011). Studies have also shown that unions can have a positive impact on employee satisfaction and commitment (Abraham, Friedman, & Thomas, 2004; Gunderson, 2005). The relationship between union members and their unions creates an added dimension, and studies of union commitment have demonstrated the important role this relationship plays in the formation of employee perceptions beyond the union involving the employer and the work (Snape & Redman, 2012; Bamberger, Kluger, & Suchard, R., 1999).

While there have not been studies examining the influence of unions on emotional labor, the impact of unions on employees in terms of job security, workplace voice, and economic rewards, points to a central role for unions in how workers perform their work and perceive it.

In this study, we compare the effects of union- vs. supervisor-focused interpersonal justice perceptions on the emotional labor of a sample of 354 unionized employees, working across a wide variety of United States industries including steel, aluminum and paper manufacturing, mining, and nursing. Nearly 100 individual organizations and union locals were represented in our sample. The results from our study show that, somewhat in contrast with the results from non-union samples (Lavelle et al., 2007), the effect of supervisor interpersonal justice has little effect on emotional labor. However, union-focused interpersonal justice has a significant effect on emotional labor. By providing workers mechanisms for voice, unions facilitate the expression and release of emotions at work and create heightened awareness of justice and fairness on the job. With less fear of employer retribution because of the grievance and arbitration process, unionized workers have been shown to speak more freely on a variety of issues (Liu, Guthrie, Flood, & MacCurtain, 2009). In addition, the centrality of collective bargaining between unions and employers as well as internal union procedures of democracy elevate the awareness of workplace justice among employees. The results have implications for the assessment of emotional labor and justice in union contexts, as well as source-specific effects of justice on emotional labor.

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